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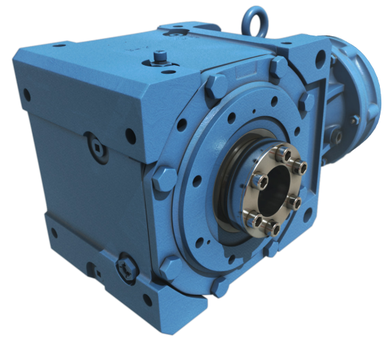
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Sumitomo Drive Technologies

Cyclo® BBB4 BEVEL BUDDYBOX® Reducers

Sumitomo Drive Technologies



Cyclo® BBB4
BEVEL BUDDYBOX®
Speed Reducers

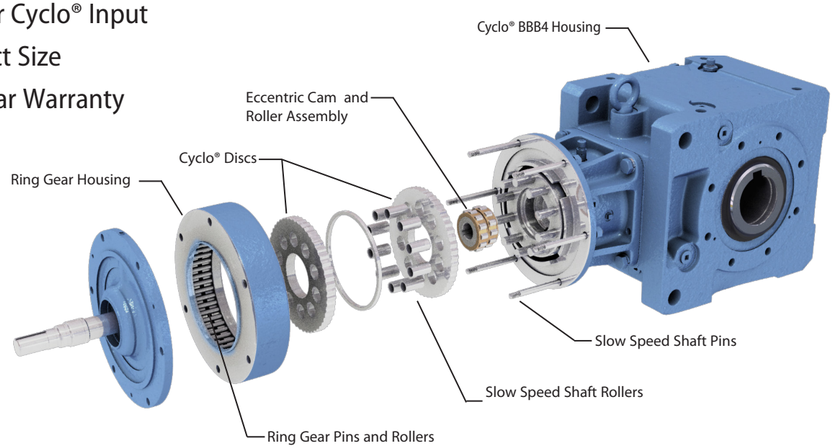
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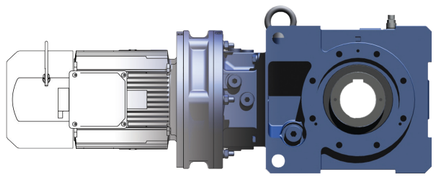
Cyclo® BBB4 Bevel Buddybox®

Sumitomo Drive Technologies

- Rugged Spiral Bevel Output
- Modular Cyclo® Input
- Compact Size
- Two-Year Warranty



Use our online product configurator to build a Cyclo® BBB4 to fit your application. See inside back cover for further details. Configure your Cyclo® BBB4 today at **www.sumitomodrive.com/configurator**



Configurator

To request a catalog, or for more information on any of our high quality products, please visit our website:

www.sumitomodrive.com



Cyclo®
Highly reliable, Torque Dense Cycloidal Speed Reducers and Gearmotors in 23 standard sizes.



Cyclo® BBB5
Right Angle, Spiral Bevel Gearbox with Cyclo® Reducer Input.



Hyponic®
Features all-steel hypoid gear design, maintenance-free grease lubrication and high efficiency operation.



Cyclo® HBB
Parallel Shaft, Helical Gearbox with Cyclo® Reducer Input; features keyless, steel Taper-Grip® Bushing for easy mounting.



HSM
Helical Shaft Mounted Speed Reducer available with CEMA Screw Conveyor Drive Option.



Paramax® 9000
Right Angle and Offset Parallel Industrial Gearboxes in Universal Housing.

Trying to select a drive? Need more technical specifications? Need pricing?

Configurator

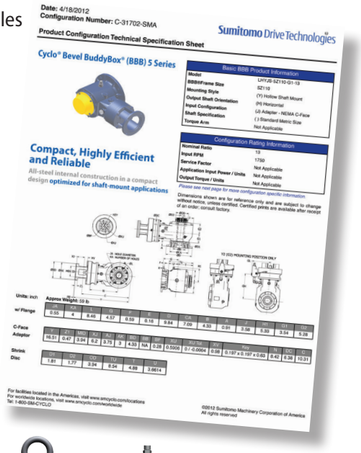
Sumitomo Drive Technologies' online product Configurator streamlines the selection process, enabling you to build our power transmission products for your specific application*.

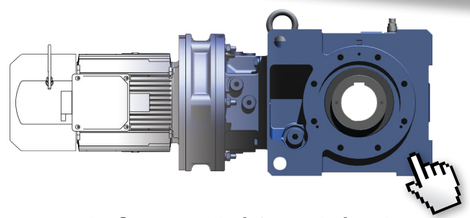
Available 24 hours a day, 7 days a week, registered users quickly receive results that include:

- Downloadable 2D and 3D CAD files
- Product literature
- Technical specification sheet
- Product ratings
- Request for quote**
- Quotations**

This unique interactive tool is one more reason Sumitomo Drive Technologies is the world's premier power transmission and control solutions provider.

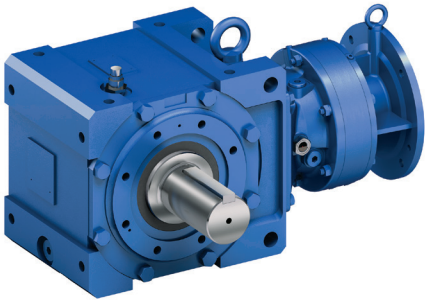
** Not all products are available for configuration*
*** Not available for all regions.*

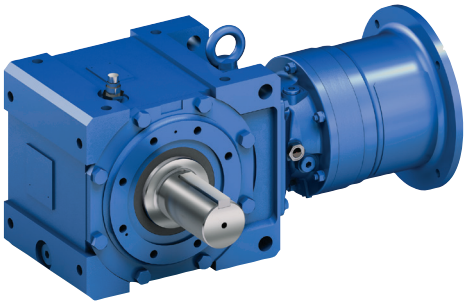




Configure your Cyclo® BBB4 today at www.sumitomodrive.com/Configurator

Explore the rest of the Sumitomo product line on www.sumitomodrive.com





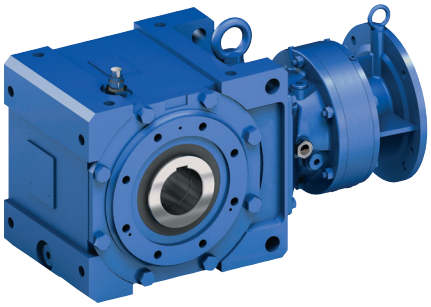


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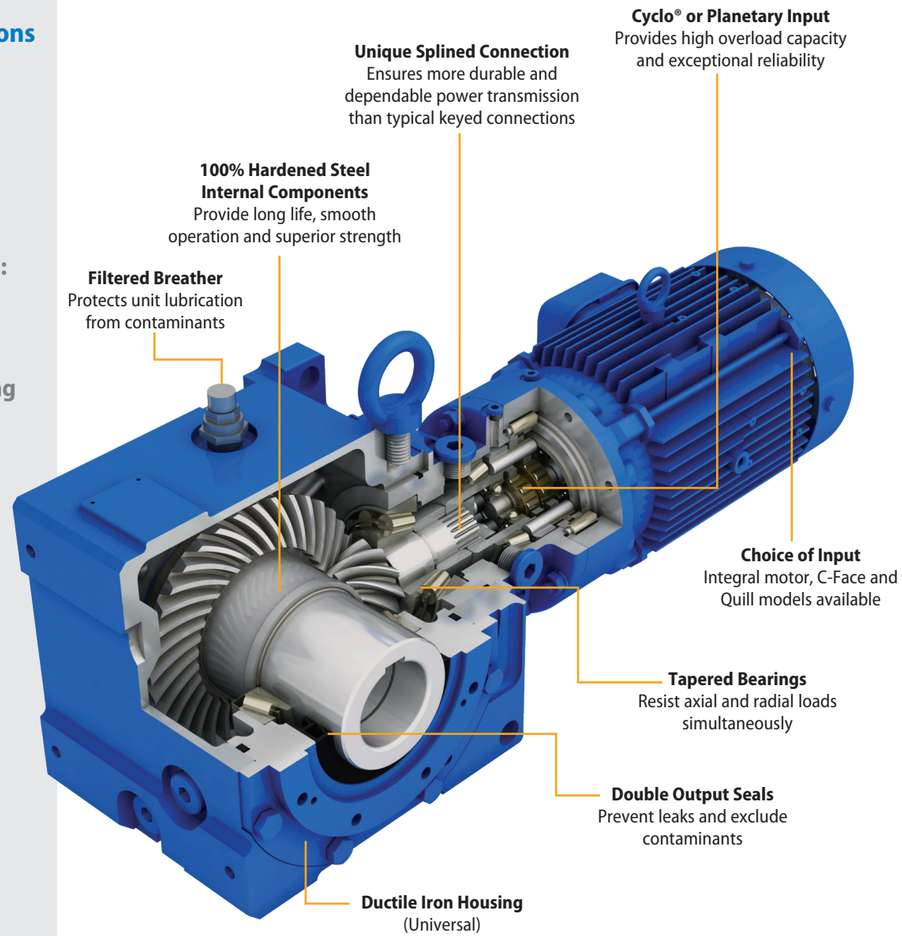


Cyclo® BBB4 Bevel Buddybox

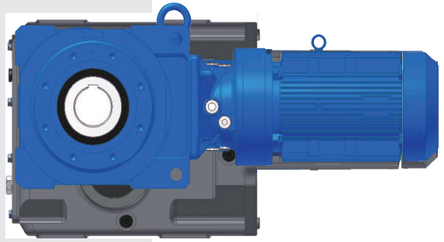
Right Angle Spiral Bevel Gearbox
with Cyclo® Reducer Input

Flexible configurations

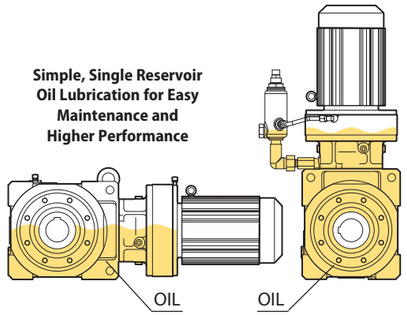
- Shaft Options:
  - Keyed Hollow
  - Shrink Disc
  - Solid Shaft
  - (Keyless) Taper-Grip® Bushing
- Mounting Options:
  - Flange
  - Foot
  - Shaft
  - Universal Housing



More Compact, Space-Saving Design Than Typical Right-Angle Gearboxes



Simple, Single Reservoir Oil Lubrication for Easy Maintenance and Higher Performance



Product Description

The Cyclo® Bevel Buddy Box 4 (Cyclo® BBB4) built by Sumitomo is a robust, state of the art mid-sized all steel family of speed reducers and gearmotors. Building on more than 75 years of successful Cyclo® experience in virtually every application and industry, The result is an extremely compact, efficient and reliable unit in a very power-dense package. The Cyclo® BBB4 is a unique combination of features that results in a highly reliable, efficient and durable gearbox. The all-steel internal construction, in conjunction with the Cyclo® or planetary gear inputs, and ductile iron housing provide unmatched ruggedness.

In addition, the full array of input accessories and output mounting styles provides an amazing ability to customize the product to fit nearly any requirement. These options include solid shaft, hollow bore, shrink disc, free input shaft, integral motor, and C-Face adapter.

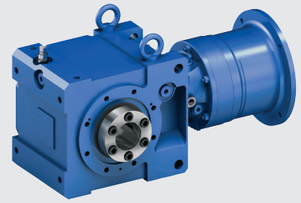
Features & Benefits

- **100% Hardened Steel Rotating Components**
  - ~ Provide high efficiency, long life and exceptional reliability
- **Cycloidal or Planetary Input**
  - ~Unmatched capability to handle overloads
- **Double Output Seals**
  - ~Four seal lips on every unit virtually eliminates the possibility of leaks
- **Dimensionally Interchangeable with BBB3**
  - ~ Simple, economical retrofits
- **Patented Taper-Grip® Bushing**
  - ~ Simple, keyless shaft mounting
- **Two year warranty**
  - ~ Not limited by hours of operation or duty cycles

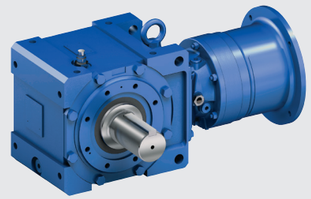
Specifications Summary

Ratios:	11:1 to 26,000:1 and greater
Torque Capacity:	159,983 in. lbs. *(17,400N•m)*
HP:	1/8 to 100 *(0.10 to 75 kW)*
Mounting:	Hollow Shaft, Foot, Flange, Face
Options:	Integral Motor, C-Face, Quill, Shrink Disc and Shovel Base
Motor Standards:	NEMA, IEC, JIS, UL, CSA, CE

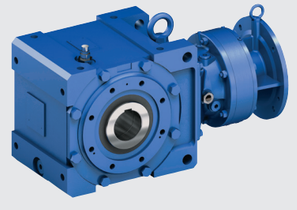
Popular Input and Output Options



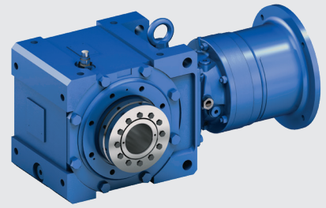
Taper-Grip® Bushing
Inch and Metric Sizes



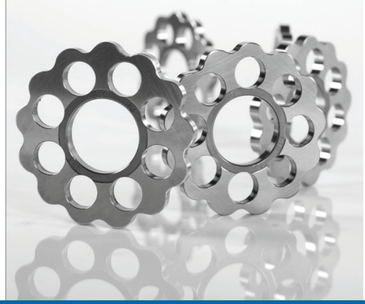
Solid Output Shaft
Inch and Metric Sizes



Keyed Hollow Bore
Inch and Metric Sizes



Shrink Disk
Inch and Metric Sizes



Cyclo® Quality and Reliability, Right Angle Design

- High performance steel input components deliver **up to 94% efficiency**
- Cycloidal technology offers **reliable operation, long life and high shock load capacity**



Product Range (Standard Motor and Reducer Combinations)

Reduction Ratios 11 - 417

Combinations with 1450 and 1750 RPM motor

Input Type	Planetary					Cyclo																				
Nominal Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	60	67	74	80	88	102	112	123	151	179	207	249	305	417
Actual Ratio	*	*	*	*	*	21	22.4	24.5	28	35.2	38.5	45.5	52.5	59.5	67.2	73.5	80	87.5	101.5	112	122.5	150.5	178.5	206.5	248.5	304.5	416.5
Actual Output RPM 50 Hz	138	113	104	90.6	82.9	69.0	64.7	59.2	51.8	41.2	37.7	31.9	27.6	24.4	21.6	19.7	18.1	16.6	14.3	12.9	11.8	9.63	8.12	7.02	5.84	4.76	3.48
Actual Output RPM 60 Hz	167	137	125	109	100	83.3	78.1	71.4	62.5	49.7	45.5	38.5	33.3	29.4	26.0	23.8	21.9	20.0	17.2	15.6	14.3	11.6	9.80	8.47	7.04	5.75	4.20
Motor Power HP (kW) 1/8 (0.1)																							●				●
1/4 (0.2)																							●	●	●	●	●
1/3 (0.25)																							●	●	●	●	●
1/2 (0.4)																				●	●	●	●	●	●	●	
3/4 (0.55)																	●	●	●	●	●	●	●	●	●	●	
1 (0.75)														●	●	●	●	●	●	●	●	●	●	●	●	●	
1.5 (1.1)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
2 (1.5)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
3 (2.2)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
5 (3.7)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
7.5 (5.5)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
10 (7.5)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	
15 (11)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		
20 (15)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●				
25 (18.5)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●					
30 (22)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●						
40 (30)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●									
50 (37)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●										
60 (45)	●	●	●	●	●	●	●	●	●	●	●	●	●	●													
75 (55)	●	●	●	●	●	●	●	●	●	●	●	●															

* Refer to the table shown at the bottom of this page

Reduction Rations 364 - 10658

Combinations with 1450 and 1750 RPM motor

Input Type	Cyclo																			
Nominal Ratio	364	424	501	578	683	809	956	1117	1320	1656	1957	2272	2559	2944	3511	4365	5177	6472	7228	8880	10658
Actual Ratio	364	423.5	500.5	577.5	682.5	808.5	955.5	1116.5	1319.5	1655.5	1956.5	2271.5	2558.5	2943.5	3510.5	4364.5	5176.5	6471.5	7227.5	8879.5	10657.5
Actual Output RPM 50 Hz	3.98	3.42	2.90	2.51	2.12	1.79	1.52	1.30	1.10	0.876	0.741	0.638	0.567	0.493	0.413	0.332	0.280	0.224	0.201	0.163	0.136
Actual Output RPM 60 Hz	4.81	4.13	3.50	3.03	2.56	2.16	1.83	1.57	1.33	1.06	0.894	0.770	0.684	0.595	0.499	0.401	0.338	0.270	0.242	0.197	0.164
Motor Power HP (kW) 1/8 (0.1)			○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
1/4 (0.2)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
1/3 (0.25)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
1/2 (0.4)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○		
3/4 (0.55)	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○				
1 (0.75)	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●						
1.5 (1.1)	●	●	●	●	●	●	●	●	●	●	●	●	●								
2 (1.5)	●	●	●	●	●	●	●	●	●	●	●										
3 (2.2)	●	●	●	●	●	●	●	●	●												
5 (3.7)	●	●	●	●	●	●															
7.5 (5.5)	●	●	●																		
10.5 (7.5)	●																				

○ Standard efficiency motor
● Premium efficiency or IE3 motor

* Planetary Actual Ratio

Nominal Ratio	BBB Frame Size											
	4A10	4A12	4A14	4B14	4B16	4C16	4D16	4D17	4E17	4E18	4F18	4E19	4F19
11	10.50		10.89		10.85					10.50		10.82	
13	12.99	12.80	12.95		12.80			13.09				13.01	
14	14.21	14.00	14.16		14.00			14.32				14.23	
16	15.36	15.65	16.00		16.26			16.17		15.63		15.47	
18	16.80	17.12	17.50		17.78			17.68		17.10		16.92	

FAQs

How do I select a Cyclo® BBB4 speed reducer or gearmotor?
Selection is based on the actual horsepower and/or torque requirements at the output shaft. The Cyclo® BBB4 speed reducer has particularly high efficiencies over a wide range of reduction ratios, which frequently permits the use of reduced input power requirements (smaller HP or *kW* motor) without sacrificing output shaft torque. The selection procedures in this catalog will guide you in choosing the most efficient reducer for your application.

What information do I need to get started in the selection process?
To select the proper reducer for your application, you will need to know:

- Application: type of driven machine
- Hours of operation per day
- Motor power (HP or *kW*) and speed (RPM)
- Mounting position
- Environmental conditions
- Ambient temperature range

If there are any special environmental factors or operation requirements, they must also be noted. This information will be important in determining the Service Factor of your application.

What is the difference between BBB4 and BBB5?
The BBB4 is more rugged by virtue of its stronger ductile iron housing, which has multiple mounting surfaces and is offered in numerous variants, including foot mount and solid shaft. The BBB5 is optimized for a minimal space envelope and shaft mounted applications.

What are Service Factors and how are they used?
In general, reducers and gearmotors are rated for the specific conditions and operating requirements of the application by the use of AGMA-defined Service Factors. There are three AGMA load classifications for reducers: uniform (U), moderate shock (M) and heavy shock (H) (page 2.6) and three AGMA load classifications for gearmotors: I, II and III (pages 3.6–3.7). The Service Factors are used in the product selection process to adjust for the specific conditions and operating requirements of your application.

What do I do if my application has particularly severe operating conditions?
The standard ratings for Cyclo® BBB4 are based on 10-hour daily service under conditions of uniform loads (equivalent to AGMA service factor 1.0). By following the product selection process, you will determine and apply the Service Factors to compensate for the severe operating conditions.

How can I be sure that the reducer can withstand periodic excessive overloads?
Cyclo® BBB4 Speed Reducers can provide solutions with extraordinary shock load capabilities. For applications with high shock loads, consult a Sumitomo Applications Engineer.

What are the standard input speeds?
In general terms, the speeds are 1750 and 1450 RPM. The selection tables in this catalog are based on 1750 RPM incrementally down to 50 RPM. When non-standard input speeds are used, the horsepower and torque ratings also vary.

What thermal capacity limitations does the Cyclo® BBB4 have?
The Cyclo® speed reducer, by virtue of its smooth, almost frictionless operation (unlike traditional helical gears), has a thermal rating that far exceeds its mechanical capacity and all but eliminates the conventional limitations due to heat.

What are the advantages of the Taper-Grip® bushing?
The Taper-Grip® bushing is integral to the Cyclo® BBB4 and provides for easy mounting and removal to and from the shaft of the driven machine. Because it requires no keyway, the shaft isn't weakened and maximum torque is transmitted.

What are the advantages of a shrink disc?
The shrink disc provides for easy mounting and removal to and from the shaft of the driven machine. Because it requires no keyway, the shaft isn't weakened and maximum torque is transmitted.

What kind of torque arm do I specify? At what position should I mount it?
The standard torque arm assembly supplied is a Turnbuckle type as shown on page 3.6. The torque arm should be mounted at 90 degrees to a line from the point of attachment to the reducer and the center of the output bore with up to 30 degrees plus or minus variance. A bracket type torque arm is also offered as a non-stock option.

Standard Specifications

Reducer

Reduction:	Combination of Cyclo® input and right angle spiral bevel gear output.
Lubrication:	In all mounting configurations except Y4, the Cyclo and Bevel portions are oil lubricated. For the Y4 mounting configuration, the Cyclo portion is grease lubricated and the bevel portion is oil lubricated.
Seals:	Nitrile material, dual lipped.
Material:	Rugged ductile cast iron housings in all sizes.
Paint Color:	Blue, Munsell color number 6.5PB 3.6/8.2
Bearings:	Tapered roller bearings on geared output of all sizes. Ball bearings on Cyclo® input.

Ambient Conditions

Installation Location:	Indoors (Minimal dust and humidity)
Ambient Temperature:	14°~104° F *(-10° ~ 40° C)*
Ambient Humidity:	Under 85%
Elevation:	Under 3,281 ft. *(1000 meters)*
Atmosphere:	Well ventilated location, free of corrosive gases, explosive gases, vapors and dust.

Shaft Rotation

On single reduction Cyclo® BBB4 speed reducers, ratios 11 through 417, the slow speed shaft rotates in a reverse direction to that of the high speed shaft.

On double reduction units, ratios 364 through 26,492, both the high speed and the slow speed shaft rotate in the same direction.

Input Speeds

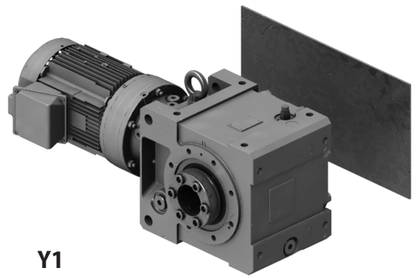
In general terms, the standard input speeds of single reduction units are 1750 and 1450 RPM. When non-standard input speeds are used, the power and torque ratings will also vary.

Thermal Capacity

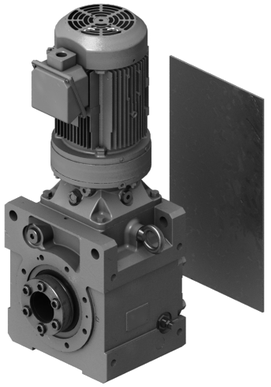
The Cyclo® BBB4 speed reducer's smooth, almost frictionless operation all but eliminates the conventional limitations due to heat. In all sizes, Cyclo® BBB4 speed reducers have thermal ratings that exceed their mechanical capacity.

Mounting Positions

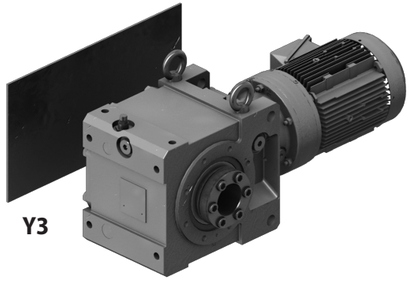
Note: 1. Mounting positions are shown with standard (Taper Grip Bushing) output option.
2. The plane of reference represents the location of customer's equipment.



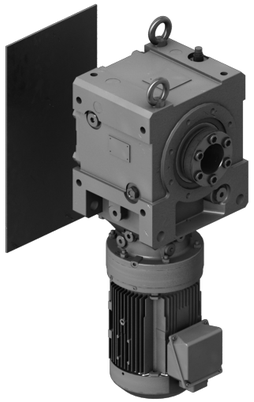
Y1



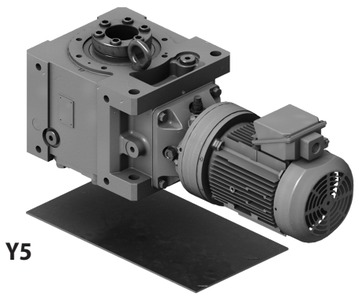
Y2



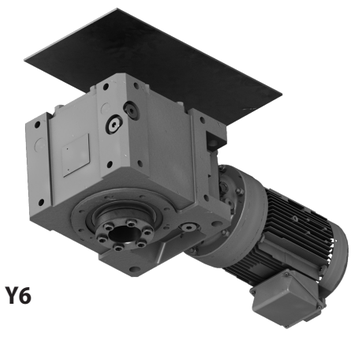
Y3



Y4



Y5



Y6

Optional Nominal and Exact Ratios

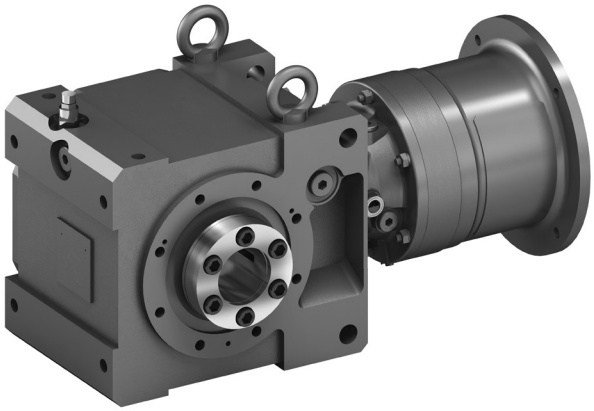
Single Reduction											
Nominal Ratio	Overall	19	26	42	48	54	93	138	163	189	227	278
	Input	6	8	13	15	17	29	43	51	59	71	87
Exact Ratio	Overall	19.2	25.6	41.6	48	54.4	92.8	137.6	163.2	188.8	227.2	278.4
	Output	3.2										
	Input	6	8	13	15	17	29	43	51	59	71	87

Double Reduction															
Nominal Ratio	Overall	387	403	420	435	441	458	476	525	528	538	541	557	588	598
	Input	121	126	120	136	126	143	136	150	165	168	169	174	168	187
Exact Ratio	Overall	387.2	403.2	420.0	435.2	441.0	457.6	476.0	525.0	528.0	537.6	540.8	556.8	588.0	598.4
	Output	3.2	3.2	3.5	3.2	3.5	3.2	3.5	3.5	3.2	3.2	3.2	3.2	3.5	3.2
	Input	(11 x 11)	(21 x 6)	(15 x 8)	(17 x 8)	(21 x 6)	(13 x 11)	(17 x 8)	(25 x 6)	(15 x 11)	(21 x 8)	(13 x 13)	(29 x 6)	(21 x 8)	(17 x 11)
Nominal Ratio	Overall	609	624	640	655	672	707	720	739	774	788	812	816	826	874
	Input	174	195	200	187	210	221	225	231	221	225	232	255	258	273
Exact Ratio	Overall	609.0	624.0	640.0	654.5	672.0	707.2	720.0	739.2	773.5	787.5	812.0	816.0	825.6	873.6
	Output	3.5	3.2	3.2	3.5	3.2	3.2	3.2	3.2	3.5	3.5	3.5	3.2	3.2	3.2
	Input	(29 x 6)	(15 x 13)	(25 x 8)	(17 x 11)	(35 x 6)	(17 x 13)	(15 x 15)	(21 x 11)	(17 x 13)	(15 x 15)	(29 x 8)	(17 x 15)	(43 x 6)	(21 x 13)
Nominal Ratio	Overall	893	896	903	925	963	980	1008	1012	1021	1040	1071	1103	1138	1142
	Input	255	280	258	289	275	280	315	289	319	325	306	315	325	357
Exact Ratio	Overall	892.5	896.0	903.0	924.8	962.5	980.0	1008.0	1011.5	1020.8	1040.0	1071.0	1102.5	1137.5	1142.4
	Output	3.5	3.2	3.5	3.2	3.5	3.5	3.2	3.5	3.2	3.2	3.5	3.5	3.5	3.2
	Input	(17 x 15)	(35 x 8)	(43 x 6)	(17 x 17)	(25 x 11)	(35 x 8)	(21 x 15)	(17 x 17)	(29 x 11)	(25 x 13)	(51 x 6)	(21 x 15)	(25 x 13)	(21 x 17)
Nominal Ratio	Overall	1200	1204	1206	1232	1239	1250	1306	1313	1348	1360	1392	1411	1428	1456
	Input	375	344	377	385	354	357	408	375	385	425	435	441	408	455
Exact Ratio	Overall	1200.0	1204.0	1206.4	1232.0	1239.0	1249.5	1305.6	1312.5	1347.5	1360.0	1392.0	1411.2	1428.0	1456.0
	Output	3.2	3.5	3.2	3.2	3.5	3.5	3.2	3.5	3.5	3.2	3.2	3.2	3.5	3.2
	Input	(25 x 15)	(43 x 8)	(29 x 13)	(35 x 11)	(59 x 6)	(21 x 17)	(51 x 8)	(25 x 15)	(35 x 11)	(25 x 17)	(29 x 15)	(21 x 21)	(51 x 8)	(35 x 13)
Nominal Ratio	Overall	1488	1510	1514	1523	1544	1578	1593	1652	1670	1680	1726	1789	1795	1818
	Input	425	472	473	435	441	493	455	472	522	525	493	559	561	568
Exact Ratio	Overall	1487.5	1510.4	1513.6	1522.5	1543.5	1577.6	1592.5	1652.0	1670.4	1680.0	1725.5	1788.8	1795.2	1817.6
	Output	3.5	3.2	3.2	3.5	3.5	3.2	3.5	3.5	3.2	3.2	3.5	3.2	3.2	3.2
	Input	(25 x 17)	(59 x 8)	(43 x 11)	(29 x 15)	(21 x 21)	(29 x 17)	(35 x 13)	(59 x 8)	(87 x 6)	(35 x 15)	(29 x 17)	(43 x 13)	(51 x 11)	(71 x 8)
Nominal Ratio	Overall	1827	1838	1904	1949	1964	1988	2000	2064	2077	2083	2132	2188	2227	2258
	Input	522	525	595	609	561	568	625	645	649	595	609	625	696	645
Exact Ratio	Overall	1827.0	1837.5	1904.0	1948.8	1963.5	1988.0	2000.0	2064.0	2076.8	2082.5	2131.5	2187.5	2227.2	2257.5
	Output	3.5	3.5	3.2	3.2	3.5	3.5	3.2	3.2	3.2	3.5	3.5	3.5	3.2	3.5
	Input	(87 x 6)	(35 x 15)	(35 x 17)	(29 x 21)	(51 x 11)	(71 x 8)	(25 x 25)	(43 x 15)	(59 x 11)	(35 x 17)	(29 x 21)	(25 x 25)	(87 x 8)	(43 x 15)
Nominal Ratio	Overall	2320	2339	2352	2436	2448	2454	2499	2538	2573	2678	2685	2691	2734	2774
	Input	725	731	735	696	765	767	781	725	735	765	767	841	781	867
Exact Ratio	Overall	2320.0	2339.2	2352.0	2436.0	2448.0	2454.4	2499.2	2537.5	2572.5	2677.5	2684.5	2691.2	2733.5	2774.4
	Output	3.2	3.2	3.2	3.5	3.2	3.2	3.2	3.5	3.5	3.5	3.5	3.2	3.5	3.2
	Input	(29 x 25)	(43 x 17)	(35 x 21)	(87 x 8)	(51 x 15)	(59 x 13)	(71 x 11)	(29 x 25)	(35 x 21)	(51 x 15)	(59 x 13)	(29 x 29)	(71 x 11)	(51 x 17)
Nominal Ratio	Overall	2800	2832	2890	2954	3035	3062	3063	3098	3161	3210	3231	3248	3350	3408
	Input	875	885	903	923	867	957	875	885	903	1003	923	1015	957	1065
Exact Ratio	Overall	2800.0	2832.0	2889.6	2953.6	3034.5	3062.4	3062.5	3097.5	3160.5	3209.6	3230.5	3248.0	3349.5	3408.0
	Output	3.2	3.2	3.2	3.2	3.5	3.2	3.5	3.5	3.5	3.2	3.5	3.2	3.5	3.2
	Input	(35 x 25)	(59 x 15)	(43 x 21)	(71 x 13)	(51 x 17)	(87 x 11)	(35 x 25)	(59 x 15)	(43 x 21)	(59 x 17)	(71 x 13)	(35 x 29)	(87 x 11)	(71 x 15)
Nominal Ratio	Overall	3427	3440	3553	3619	3728	3749	3763	3862	3920	3965	3990	4080	4176	4225
	Input	1071	1075	1015	1131	1065	1071	1075	1207	1225	1239	1247	1275	1305	1207
Exact Ratio	Overall	3427.2	3440.0	3552.5	3619.2	3727.5	3748.5	3762.5	3862.4	3920.0	3964.8	3990.4	4080.0	4176.0	4224.5
	Output	3.2	3.2	3.5	3.2	3.5	3.5	3.5	3.2	3.2	3.2	3.2	3.2	3.2	3.5
	Input	(51 x 21)	(43 x 25)	(35 x 29)	(87 x 13)	(71 x 15)	(51 x 21)	(43 x 25)	(71 x 17)	(35 x 35)	(59 x 21)	(43 x 29)	(51 x 25)	(87 x 15)	(71 x 17)
Nominal Ratio	Overall	4288	4337	4463	4568	4720	4771	4816	5163	5219	5268	5475	5680	5712	5846
	Input	1225	1239	1275	1305	1475	1491	1505	1475	1491	1505	1711	1775	1785	1827
Exact Ratio	Overall	4287.5	4336.5	4462.5	4567.5	4720.0	4771.2	4816.0	5162.5	5218.5	5267.5	5475.2	5680.0	5712.0	5846.4
	Output	3.5	3.5	3.5	3.5	3.2	3.2	3.2	3.5	3.5	3.5	3.2	3.2	3.2	3.2
	Input	(35 x 35)	(59 x 21)	(51 x 25)	(87 x 15)	(59 x 25)	(71 x 21)	(43 x 35)	(59 x 25)	(71 x 21)	(43 x 35)	(59 x 29)	(71 x 25)	(51 x 35)	(87 x 21)
Nominal Ratio	Overall	5917	5989	6213	6248	6395	6589	6608	6960	7018	7207	7613	7676	7952	8074
	Input	1849	1711	1775	1785	1827	2059	2065	2175	2193	2059	2175	2193	2485	2523
Exact Ratio	Overall	5916.8	5988.5	6212.5	6247.5	6394.5	6588.8	6608.0	6960.0	7017.6	7206.5	7612.5	7675.5	7952.0	8073.6
	Output	3.2	3.5	3.5	3.5	3.5	3.2	3.2	3.2	3.2	3.5	3.5	3.5	3.2	3.2
	Input	(43 x 43)	(59 x 29)	(71 x 25)	(51 x 35)	(87 x 21)	(71 x 29)	(59 x 35)	(87 x 25)	(51 x 43)	(71 x 29)	(87 x 25)	(51 x 43)	(71 x 35)	(87 x 29)
Nominal Ratio	Overall	8118	8323	8698	8831	9104	9629	9744	9770	10532	10686	11139	11587	11971	
	Input	2537	2601	2485	2523	2601	3009	3045	3053	3009	3053	3481	3621	3741	
Exact Ratio	Overall	8118.4	8323.2	8697.5	8830.5	9103.5	9628.8	9744.0	9769.6	10531.5	10685.5	11139.2	11587.2	11971.2	
	Output	3.2	3.2	3.5	3.5	3.5	3.2	3.2	3.2	3.5	3.5	3.2	3.2	3.2	
	Input	(59 x 43)	(51 x 51)	(71 x 35)	(87 x 29)	(51 x 51)	(59 x 51)	(87 x 35)	(71 x 43)	(59 x 51)	(71 x 43)	(59 x 59)	(71 x 51)	(87 x 43)	
Nominal Ratio	Overall	12674	13094	13405	14198	14662	16131	16426	17644	19766	24221				
	Input	3621	3741	4189	4437	4189	5041	5133	5041	6177	7569				
Exact Ratio	Overall	12673.5	13093.5	13404.8	14198.4	14661.5	16131.2	16425.6	17643.5	19766.4	24220.8				
	Output	3.5	3.5	3.2	3.2	3.5	3.2	3.2	3.5	3.2	3.2				
	Input	(71 x 51)	(87 x 43)	(71 x 59)	(87 x 51)	(71 x 59)	(71 x 71)	(87 x 59)	(71 x 71)	(87 x 71)	(87 x 87)				

All ratios listed include double reduction Cyclo® inputs. Consult factory for available frame sizes and ratings.

2

Speed Reducers



How to select a Speed Reducer

Step 1: Collect data about your application

Before starting you need to know the:

- **Application (e.g. Conveyor, Mixer, etc.)**
- **Hours of Operation per day**
- **Motor Power (HP or kW) and Speed (RPM)**
- **Desired Output Speed**
- **Mounting Position and Style**
- **Overhung or Thrust Loads**
- **Bore Dimensions (inch or metric)**

Step 2: Choose a Mounting Position

Find the correct Mounting Position from the *Mounting Positions Table* on the right.

Step 3: Select a Frame Size

3A: Find the **Load Classification** of your application in the *AGMA Load Classification Table* on page 2.6.

3B: Find the recommended Service Factor using the *Recommended Reducer Service Factor Table* on the right.

3C: Determine the **Selection Power** (HP or kW) by multiplying the Motor Power (HP or kW) by the Service Factor.

3D: Select a **Frame size** from the Reducer Selection Tables on pages 2.8–2.115 by matching both the Selection Power (HP or kW) and Desired Output Speed (RPMs) to a frame size model number.
Note: For Mounting Positions Y1, Y2, Y3, Y5, and Y6 see pages 2.8–2.103.
For Mounting Positions Y4 see pages 2.104–2.127.
For all Double Reduction Mounting Positions see pages 2.128–2.155.

Step 4: Verify Dimensions

Use the Dimensions information on pages 2.156–2.177 to verify that the selected Frame Size is appropriate.

Step 5: Choose an Output Connection Method

Select solid shaft, keyed hollow bore, shrink disc or Taper-Grip® Bushing, and the associated bore size. For Taper-Grip® Bushing select a Bore Size from the *Stock Bushing Bore Size Table.*

Step 6: Choose Options

The following options may apply:
Washdown Modification
Breather
Please refer to our online Product Configurator at www. sumitomodrive.com/configurator for available modifications.

Step 7: Configure a Model Number

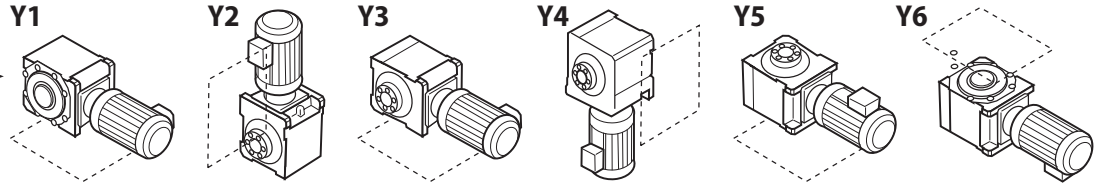
Go to page 2.4 to configure a model number.
Note: You will use the information you gather from the procedure on this page to Configure a Model Number.

STOCK BUSHING BORE SIZE

Size	Stock Bushing Bores Inch	*(mm)*	Minimum Bores Inch	*(mm)*
4A	1 15/16, 2 3/16	*(50, 55)*	1 1/16	*(35)*
4B	2 3/16, 2 7/16	*(60, 65)*	1 15/16	*(45)*
4C	2 7/16, 2 15/16	*(65, 75)*	2 3/16	*(50)*
4D	2 15/16, 3 7/16	*(75, 85)*	2 7/16	*(60)*
4E	3 7/16, 3 15/16	*(90, 100)*	2 15/16	*(75)*
4F	3 15/16, 4 7/16, 4 15/16	*(110, 120)*	3 1/2	*(90)*



Mounting Positions



Primary Reducer Service Factors Classifications:

		AGMA Load Classifications		
		Uniform (U)	**Moderate Shock (M)**	**Heavy Shock (H)**
Duration of Service [1]	**1/2 hr. per day** (Occasional)	0.50[2]	0.80[2]	1.25
	3 hrs. per day (Intermittent)	0.80[2]	1.00	1.50
	Up to 10 hrs. per day	1.00	1.25	1.75
	24 hrs. per day	1.20	1.50	2.00

Note: [1] For applications involving greater than 10 starts/stop per hour, consider Modifications for Frequent Starts (Special Specification Code YB51)

Note: [2] Maximum momentary or starting load must not exceed 200% of gear reducer rating (rating meaning service factor of 1.0). Time specified for occasional and intermittent service refers to total operating time per day.

Alternative Method for Selecting Reducer Service Factors - Based on Application Inertia:
If the application does not match an existing AGMA Load Classification, and application inertia is known, this alternative method may be used to select the recommended service factor. For starts greater than 10x per hour, check the appropriate motor Thermal Capacity for frequent starts.

Calculate the Ratio of Moment of Inertia

$$\text{Ratio of Moment of Inertia } (WR^2) = \frac{\text{Total Application + Reducer Moment of Inertia } (WR^2) \text{ as seen from motor shaft}}{\text{Moment of Inertia } (WR^2) \text{ of motor}}$$

I = Ratio of Moment of Inertia $(WR^2) \leq 0.3$
II = Ratio of Moment of Inertia (WR^2) $0.3 < WR^2 \leq 3.0$
III = Ratio of Moment of Inertia (WR^2) $3.0 < WR^2 \leq 10$

Number of starts	**~10 hours/day**			**~24 hours/day**		
(Times/hour)	**I**	**II**	**III**	**I**	**II**	**III**
~10	1.00	1.15	1.50	1.20	1.30	1.65
~200	1.10	1.35	1.65	1.30	1.50	1.85
~500	1.15	1.50	1.80	1.40	1.65	2.00

Determine Selection Power (HP or kW)

Motor Power (HP or kW) X Service Factor = Selection Power (HP or kW)

Example: **10 Motor HP X 1.25 Service Factor = 12.5 Selection HP**
11 kW X 1.25 Service Factor = 13.75 Selection kW

Select a Frame Size

1 **Match your OUTPUT RPM (or RATIO)...**

Output RPM	**159.1**	**134.6**	**125.0**	**109.4**	**97.2**	**83.3**	**79.5**	**70.0**	**62.5**	**50.0**	**44.9**	**38.0**	**33.0**	**Frame Size**
Ratio	**11**	**13**	**14**		**18**	**21**	**23**	**25**	**28**	**35**	**39**	**46**	**53**	
Input Power HP *(kW)*	**3.15** *(2.35)*	**3.15** *(2.35)*	**3.15** *(2.35)*	**3.15** *(2.35)*					**3.15** *(2.35)*	**3.15** *(2.35)*	**3.15** *(2.35)*	**3.15** *(2.35)*	**3.15** *(2.35)*	
Output Torque in•lbs *(N•m)*	1095 *(124)*	1335 *(151)*	1460 *(165)*	1670 *(189)*	*(207)*	*(248)*	—	—	2925 *(331)*	3680 *(416)*	4025 *(455)*	4750 *(537)*	5485 *(620)*	
Hollow Shaft OHL lbs *(N)*	3705 *(16500)*	3930 *(17500)*	4020 *(17900)*	4155 *(18500)*	4270 *(19000)*	4470 *(19900)*	— —	— —	4785 *(21300)*	5055 *(22500)*	5170 *(23000)*	5350 *(23800)*	5530 *(24600)*	4A100
Solid Shaft OHL lbs *(N)*	3350 *(14900)*	3350 *(14900)*	3350 *(14900)*	3350 *(14900)*	3350 *(14900)*	3480 *(15470)*	— —	— —	3980 *(17700)*	4350 *(19340)*	4510 *(20060)*	4550 *(20230)*	4580 *(20370)*	

2 **...to your SELECTION HP *(kW)***

3 **...to find your FRAME SIZE**

If Overhung Load (OHL) is present, it must be checked against the capacity of the selection.

For special circumstances in selecting a **Frame Size** such as:

- Overhung Load (OHL)
- Thrust Loads
- Radial Loads
- Shock Loading

Consult Appendix, pages 4.2–4.18.

Configure a Model Number

Output Shaft Orientation

Type	Prefix
Horizontal	H
Vertical	V
Vertical	W

Mounting Style

Type	Prefix
Shaft Mount (Hollow Shaft)	Y
Housing Mount (Solid Shaft)	U
Flange (Solid Shaft)	F
Foot (Solid Shaft)	H

Input Connection

Input Connection	Prefix	
	Reducer	Motor
Free Input Shaft		
Input Motor Adapter	J	JM
W/Input Motor Flange & Hollow Bore	X	XM

Modification

	Prefix
Unit build with special modifications	S
Shrink Disc	S
No special modifications applied	

Motor Power (HP or kW)

(if supplied and/or mounted by Sumitomo; applies only to 1750 RPM)

HP	*(kW)*	Prefix
1/8	*(0.1)*	01
1/4	*(0.2)*	02
1/3	*(0.25)*	03
1/2	*(0.4)*	05
3/4	*(0.55)*	08
1	*(0.75)*	1
1 1/2	*(1.1)*	1H
2	*(1.5)*	2
3	*(2.2)*	3
5	*(3.7)*	5
7 1/2	*(5.5)*	8
10	*(7.5)*	10
15	*(11)*	15
20	*(15)*	20
25	*(18.5)*	25
30	*(22)*	30
40	*(30)*	40
50	*(37)*	50
60	*(45)*	60
75	*(55)*	75

When ordering, the following information should be included:

- NEMA frame size for C-face adapter
- Motor Specification if supplied and/or mounted by Sumitomo (230/460 VAC 60 Hz is supplied in the United States, unless otherwise specified)
- Bushing Bore size must be supplied

Optional conduit box positions must be specified, otherwise Y1 is supplied.

Frame Size

Single Reduction			
4A100	4B125	4C170	4E175
4A105	4B140	4C175	4E180
4A110	4B145	4D160	4E185
4A115	4B160	4D165	4E190
4A120	4B165	4D170	4E195
4A125	4C140	4D175	4F180
4A140	4C145	4D180	4F185
4A145	4C160	4D185	4F190
4B120	4C165	4E170	4F195

Double Reduction			
4A10DA	4B16DA	4C17DC	4E17DC
4A12DA	4B16DB	4D16DA	4E18DA
4A12DB	4B16DC	4D16DB	4E18DB
4A14DA	4C14DA	4D16DC	4E19DA
4A14DB	4C14DB	4D17DA	4E19DB
4A14DC	4C14DC	4D17DB	4F18DA
4B12DA	4C16DA	4D17DC	4F18DB
4B12DB	4C16DB	4D18DA	4F19DA
4B14DA	4C16DC	4D18DB	4F19DB
4B14DB	4C17DA	4E17DA	
4B14DC	4C17DB	4E17DB	

Reducer Specifications

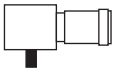
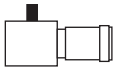
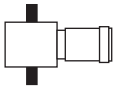
Specification	Suffix
Standard	
Shovel Base	SB
Torque Limiter	TL

L H Y J S [ ] - 4A105 [ ] Y [ ] - [ ] Y1 [ ] - 207

- L: **Cyclo® BBB4** product code (always "L")
- H: Output shaft orientation
- Y: Mounting style
- J: Input connection
- S: Modification (Special feature)
- [ ]: Motor Power Symbol (1750 rpm)
- 4A105: Frame size
- [ ]: Output shaft direction (shafted model only)
- Y: Shaft specification
- [ ]: Reducer Specifications
- Y1: Mounting position and optional specification (as required)
- [ ]:
- 207: Ratio

Nomenclature

Driven Shaft Direction (Shafted Model Only)

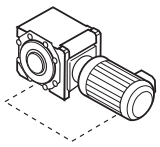
Projects to Left Side	**L**	
Projects to Right Side	**R**	
Projects to Both Left/Right Sides	**T**	

Shaft Specifications

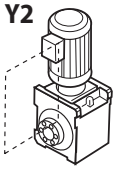
Input Shaft	OUTPUT SHAFT		Suffix
	Hollow	Solid	
mm	Key (mm)	mm	
Inch	Key (Inch)	Inch	K
mm	Taper-Grip®		M
Inch	Taper-Grip®		Y

Mounting Positions

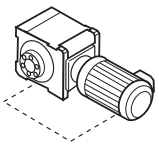
Y1



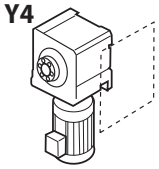
Y2



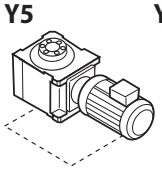
Y3



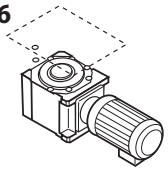
Y4



Y5



Y6



Nominal Ratio

BBB4 with Planetary Input
Overall Nominal Ratio
11
13
14
16
18

BBB4 with Cyclo Input	
Single Reduction Input	Double Reduction Input
Overall Nominal Ratio	Overall Nominal Ratio
21	364
22	424
25	501
28	578
35	683
39	809
46	956
53	1117
60	1320
67	1656
74	1957
80	2272
88	2559
102	2944
112	3511
123	4365
151	5177
179	6472
207	7228
249	8880
305	10658
417	12184

Nomenclature Example:

LHYJS – 4A105Y – Y1 – 207

L – Cyclo® Bevel Buddybox
H – Horizontal Output Shaft
Y – Shaft Mount (Hollow Shaft)
J – C-Face Input
S – Modification (Special feature)

4A105 – Frame Size
Y – Taper-Grip®Bushing output, inch shaft input
Y1 – Installation Position
207 – Ratio

AGMA Load Classifications

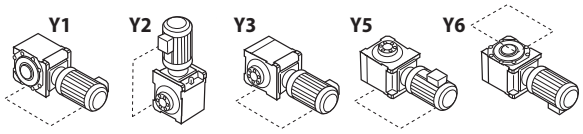
TYPE OF APPLICATION	TYPE OF LOAD
Agitators	
Pure liquids	U
Liquids and solids	M
Variable-density liquids	M
Blowers	
Centrifugal	U
Lobe	M
Vane	U
Brewing and Distilling	
Bottling machinery	U
Brew kettles, cont. duty	U
Cookers, cont. duty	U
Mash tubs, cont. duty	U
Scale hopper, frequent starts	M
Can Filling Machines	U
Cane Knives	M
Car Dumpers	H
Car Pullers	M
Clarifiers	U
Classifiers	M
Clay Working Machinery	
Brick press	H
Briquette machine	H
Clay working machinery	M
Pug mill	M
Compressors	
Centrifugal	U
Lobe	M
Reciprocating, multi-cylinder	M
Reciprocating, single-cylinder	H
Conveyors — Uniformly Loaded or Fed	
Apron	U
Assembly	U
Belt	U
Bucket	U
Chain	U
Flight	U
Oven	U
Screw	U
Conveyors — Heavy Duty, Not Uniformly Fed	
Apron	M
Assembly	M
Belt	M
Bucket	M
Chain	M
Flight	M
Live roll oven	M
Reciprocating	H
Screw	M
Shaker	H
Cranes (Except for Dry Dock Cranes)	
Main hoists	U
Bridge travel	S
Trolley travel	S
Crusher	
Ore	H
Stone	H
Sugar	M
Dredges	
Cable reels	M
Conveyors	M
Cutter head drives	H
Jig drives	H
Maneuvering winches	M
Pumps	M
Screen drive	H
Stackers	M
Utility winches	M
Dry Dock Cranes	S
Elevators	
Bucket, uniform load	U
Bucket, heavy load	M
Bucket, cont.	U
Centrifugal discharge	U
Escalators	U
Freight	M
Gravity discharge	U
Man lifts	S
Passenger	S
Extruders (Plastics)	
Blow molders	M
Coating	U
Film	U
Pipe	U
Pre-plasticizers	M
Rods	U
Sheet	U
Tubing	U
Fans	
Centrifugal	U
Cooling towers	S
Forced draft	S
Induced draft	M
Large (mine, etc.)	M
Large (industrial)	M
Light (small diameter)	U
Feeders	
Apron	M
Belt	M
Disc	U
Reciprocating	H
Screw	M
Food Industry	
Beet slicer	M
Cereal cooker	U
Dough mixer	M
Meat grinders	M
Generators (Not Welding)	U
Hammer Mills	H
Hoists	
Heavy duty	H
Medium duty	M
Skip	M
Laundry Washers — Reversing	M
Laundry Tumblers	M
Line Shaft	
Drive processing equipment	M
Light	U
Other line shafts	U
Lumber Industry	
Barkers — hydraulic and mechanical	S
Burner conveyor	M
Chain Saw and Drag Saw	H
Chain transfer	H
Craneway transfer	H
De-barking drum	S
Edger feed	H
Gang feed	M
Geen chain	M
Live rolls	H
Log haul-lockline	H
Log turning device	H
Main log conveyor	H
Off bearing rolls	M
Planer feed chains	M
Planer floor chains	M
Planer tilting hoist	M
Re-saw merry-go-round conveyor	M
Roll cases	H
Slab conveyor	H
Small waste-conveyor-belt	U
Small waste-conveyor-chain	M
Sorting table	M
Tipple hoist conveyor	M
Tipple hoist drive	M
Transfer conveyors	M
Transfer rolls	M
Tray drive	M
Trimmer feed	M
Waste conveyor	M
Machine Tools	
Bending roll	M
Notching press, belt driven	S
Plate planer	H
Punch press, gear driven	H
Tapping machine	H
Other machine tools	
Main drives	M
Auxiliary drives	U
Metal Mills	
Draw bench carriage and main drive	M
Forming machines	H
Pinch, dryer and scrubber rolls, reversing	S
Slitters	M
Table conveyors, nonreversing	
Group drives	M
Individual drives	H
Table conveyors, reversing	S
Wire drawing and flattening machine	M
Wire winding machine	M
Mills, Rotary Type	
Ball	M
Cement kilns	M
Dryers and coolers	M
Kilns	M
Pebble	M
Rod, plain and wedge bar	M
Tumbling barrels	H
Mixers	
Concrete mixers, cont.	M
Concrete mixers, intermittent	M
Constant density	U
Variable density	M
Oil Industry	
Chillers	M
Oil well pumps	S
Paraffin filter press	M
Rotary kilns	M
Paper Mills	
Agitators (mixers)	M
Barker, hydraulic	S
Barker, mechanical	S
Barking drum	S
Beater and pulper	M
Bleacher	U
Calenders	M
Calenders, super	H
Converting machine (except cutters, platers)	M
Conveyors	U
Couch	M
Cutters, platers	H
Cylinders	M
Dryers	M
Felt stretcher	M
Felt whipper	H
Jordans	H
Log haul	H
Presses	U
Pulp machine reel	M
Stock chest	M
Suction roll	U
Washers and thickeners	M
Winders	U
Printing Presses	S
Pullers, Barge Haul	H
Pumps	
Centrifugal	U
Proportioning	M
Reciprocating	
Single acting, 3 or more cylinders	M
Double acting, 2 or more cylinders	M
Rotary-gear type	U
Rubber and Plastics Industries	
Crackers	H
Laboratory equipment	M
Mixing mills	H
Refiners	M
Rubber calenders	M
Rubber mill (2 on line)	M
Rubber mill (3 on line)	U
Sheeter	M
Tire building machines	S
Tire and tube press openers	S
Tubers and strainers	M
Warming mills	M
Sand Muller	M
Screens	
Air washing	U
Rotary, stone or gravel	M
Traveling water intake	U
Sewage Disposal Equipment	
Bar screens	U
Chemical fenders	U
Collectors, circuline or straightline	U
Dewatering screens	M
Grit collectors	U
Scum breakers	M
Slow or rapid mixers	M
Sludge collectors	U
Thickeners	M
Vacuum filters	M
Slab Pushers	M
Steering Gear	S
Stokers	U
Sugar Industry	
Cane knives	M
Crushers	M
Mills	H
Textile Industry	
Batchers	M
Calenders	M
Cards	M
Dry cans	M
Dryers	M
Dyeing machinery	M
Knitting machines	S
Looms	M
Mangles	M
Nappers	M
Pads	M
Range drives	S
Slashers	M
Soapers	M
Spinners	M
Tenter frames	M
Washers	M
Winders	M
Windlass	S

U = Uniform Load
M = Moderate Shock
H = Heavy Shock
S = Contact Sumitomo

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Frame Size Selection Tables 60 Hz, 1750 RPM

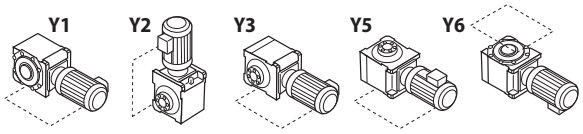
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	159	135	125	109	97.2	83.3	79.5	70.0	62.5	50.0	44.9	38.0	33.0	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	**3.15**	**3.15**	**3.15**	**3.15**	**3.15**	**3.15**	—	—	**3.15**	**3.15**	**3.15**	**3.15**	**3.15**	
(kW)	***(2.35)***	***(2.35)***	***(2.35)***	***(2.35)***	***(2.35)***	***(2.35)***	—	—	***(2.35)***	***(2.35)***	***(2.35)***	***(2.35)***	***(2.35)***	
Output Torque in•lbs	1095	1335	1460	1670	1830	2190	—	—	2925	3680	4025	4750	5485	
(N•m)	*(124)*	*(151)*	*(165)*	*(189)*	*(207)*	*(248)*	—	—	*(331)*	*(416)*	*(455)*	*(537)*	*(620)*	**4A100**
Hollow Shaft OHL lbs	3705	3930	4020	4155	4270	4470	—	—	4785	5055	5170	5350	5530	
(N)	*(16500)*	*(17500)*	*(17900)*	*(18500)*	*(19000)*	*(19900)*	—	—	*(21300)*	*(22500)*	*(23000)*	*(23800)*	*(24600)*	
Solid Shaft OHL lbs	3350	3350	3350	3350	3350	3480	—	—	3980	4350	4510	4550	4580	
(N)	*(14900)*	*(14900)*	*(14900)*	*(14900)*	*(14900)*	*(15470)*	—	—	*(17700)*	*(19340)*	*(20060)*	*(20230)*	*(20370)*	
Input Power HP	**4.26**	**4.26**	**4.26**	**4.26**	**4.26**	**4.26**	**—**	**—**	**4.26**	**4.26**	**4.26**	**4.26**	**4.26**	
(kW)	***(3.18)***	***(3.18)***	***(3.18)***	***(3.18)***	***(3.18)***	***(3.18)***	**—**	**—**	***(3.18)***	***(3.18)***	***(3.18)***	***(3.18)***	***(3.18)***	
Output Torque in•lbs	1485	1810	1980	2265	2475	2970	—	—	3960	4980	5450	6440	7430	
(N•m)	*(168)*	*(205)*	*(224)*	*(256)*	*(280)*	*(336)*	—	—	*(448)*	*(563)*	*(616)*	*(728)*	*(840)*	**4A105**
Hollow Shaft OHL lbs	3660	3865	3955	4065	4180	4360	—	—	4650	4875	4965	5125	5100	
(N)	*(16300)*	*(17200)*	*(17600)*	*(18100)*	*(18600)*	*(19400)*	—	—	*(20700)*	*(21700)*	*(22100)*	*(22800)*	*(22700)*	
Solid Shaft OHL lbs	3350	3350	3350	3350	3350	3480	—	—	3980	4350	4510	4550	4580	
(N)	*(14900)*	*(14900)*	*(14900)*	*(14900)*	*(14900)*	*(15470)*	—	—	*(17700)*	*(19340)*	*(20060)*	*(20230)*	*(20370)*	
Input Power HP	**—**	**—**	**—**	**—**	**—**	**4.76**	**—**	**—**	**4.76**	**4.76**	**4.76**	**4.76**	**4.76**	
(kW)	**—**	**—**	**—**	**—**	**—**	***(3.55)***	**—**	**—**	***(3.55)***	***(3.55)***	***(3.55)***	***(3.55)***	***(3.55)***	
Output Torque in•lbs	—	—	—	—	—	3315	—	—	4420	5565	6085	7190	8300	
(N•m)	—	—	—	—	—	*(375)*	—	—	*(500)*	*(629)*	*(688)*	*(813)*	*(938)*	**4A110**
Hollow Shaft OHL lbs	—	—	—	—	—	4315	—	—	4585	4785	4875	5010	4785	
(N)	—	—	—	—	—	*(19200)*	—	—	*(20400)*	*(21300)*	*(21700)*	*(22300)*	*(21300)*	
Solid Shaft OHL lbs	—	—	—	—	—	3480	—	—	3980	4350	4510	4550	4580	
(N)	—	—	—	—	—	*(15470)*	—	—	*(17700)*	*(19340)*	*(20060)*	*(20230)*	*(20370)*	
Input Power HP	**—**	**—**	**—**	**—**	**—**	**5.26**	**—**	**—**	**5.26**	**5.26**	**5.26**	**5.23**	**5.23**	
(kW)	**—**	**—**	**—**	**—**	**—**	***(3.92)***	**—**	**—**	***(3.92)***	***(3.92)***	***(3.92)***	***(3.9)***	***(3.9)***	
Output Torque in•lbs	—	—	—	—	—	3660	—	—	4880	6140	6715	7900	9115	
(N•m)	—	—	—	—	—	*(414)*	—	—	*(552)*	*(694)*	*(759)*	*(893)*	*(1030)*	**4A115**
Hollow Shaft OHL lbs	—	—	—	—	—	4270	—	—	4515	4720	4785	4920	4470	
(N)	—	—	—	—	—	*(19000)*	—	—	*(20100)*	*(21000)*	*(21300)*	*(21900)*	*(19900)*	
Solid Shaft OHL lbs	—	—	—	—	—	3480	—	—	3980	4350	4510	4550	4580	
(N)	—	—	—	—	—	*(15470)*	—	—	*(17700)*	*(19340)*	*(20060)*	*(20230)*	*(20370)*	
Input Power HP	**12.9**	**12.9**	**12.9**	**12.9**	**12.87**	**8.77**	**8.77**	**8.77**	**8.77**	**6.80**	**6.80**	**6.26**	**5.43**	
(kW)	***(9.6)***	***(9.6)***	***(9.6)***	***(9.6)***	***(9.6)***	***(6.54)***	***(6.54)***	***(6.54)***	***(6.54)***	***(5.07)***	***(5.07)***	***(4.67)***	***(4.05)***	
Output Torque in•lbs	4485	5465	5980	6840	7475	6115	6520	7130	8150	7945	8690	9465	9465	
(N•m)	*(507)*	*(618)*	*(676)*	*(773)*	*(845)*	*(691)*	*(737)*	*(806)*	*(921)*	*(898)*	*(982)*	*(1070)*	*(1070)*	**4A120**
Hollow Shaft OHL lbs	3255	3345	3390	3435	3480	3930	3955	4000	4065	4470	4515	4315	4315	
(N)	*(14500)*	*(14900)*	*(15100)*	*(15300)*	*(15500)*	*(17500)*	*(17600)*	*(17800)*	*(18100)*	*(19900)*	*(20100)*	*(19200)*	*(19200)*	
Solid Shaft OHL lbs	3350	3350	3350	3350	3350	3480	3550	3780	3980	4350	4510	4550	4580	
(N)	*(14900)*	*(14900)*	*(14900)*	*(14900)*	*(14900)*	*(15470)*	*(15790)*	*(16810)*	*(17700)*	*(19340)*	*(20060)*	*(20230)*	*(20370)*	
Input Power HP	**14.8**	**14.8**	**14.8**	**14.8**	**14.75**	**10.07**	**10.07**	**10.07**	**10.07**	**7.94**	**7.40**	**6.26**	**5.43**	
(kW)	***(11)***	***(11)***	***(11)***	***(11)***	***(11)***	***(7.51)***	***(7.51)***	***(7.51)***	***(7.51)***	***(5.92)***	***(5.52)***	***(4.67)***	***(4.05)***	
Output Torque in•lbs	5140	6265	6855	7840	8575	7015	7485	8185	9380	9290	9465	9465	9465	
(N•m)	*(581)*	*(708)*	*(775)*	*(886)*	*(969)*	*(793)*	*(846)*	*(925)*	*(1060)*	*(1050)*	*(1070)*	*(1070)*	*(1070)*	**4A125**
Hollow Shaft OHL lbs	3165	3235	3280	3300	3325	3795	3820	3865	3910	4270	4315	4315	4315	
(N)	*(14100)*	*(14400)*	*(14600)*	*(14700)*	*(14800)*	*(16900)*	*(17000)*	*(17200)*	*(17400)*	*(19000)*	*(19200)*	*(19200)*	*(19200)*	
Solid Shaft OHL lbs	3350	3350	3350	3350	3350	3480	3550	3780	3980	4350	4510	4550	4580	
(N)	*(14900)*	*(14900)*	*(14900)*	*(14900)*	*(14900)*	*(15470)*	*(15790)*	*(16810)*	*(17700)*	*(19340)*	*(20060)*	*(20230)*	*(20370)*	

Frame Size Selection Tables 60 Hz, 1750 RPM



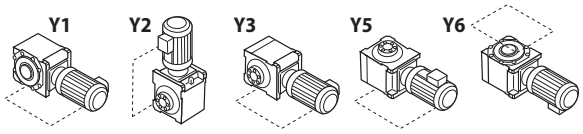
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	29.2	26.1	23.6	21.9	19.9	17.2	15.6	14.2	11.6	9.78	8.45	7.03	5.74	4.20	Frame Size
Ratio	**60**	**67**	**74**	**80**	**88**	**102**	**112**	**123**	**151**	**179**	**207**	**249**	**305**	**417**	
Input Power HP	**2.67**	**2.59**	**2.59**	**1.70**	**1.70**	**1.62**	**1.31**	**1.31**	**1.05**	**0.751**	**0.692**	**0.585**	**0.581**	**0.282**	
(kW)	***(1.99)***	***(1.93)***	***(1.93)***	***(1.27)***	***(1.27)***	***(1.21)***	***(0.975)***	***(0.975)***	***(0.780)***	***(0.560)***	***(0.516)***	***(0.436)***	***(0.433)***	***(0.21)***	
Output Torque in•lbs	5255	5760	6300	4520	4945	5465	4855	5315	5230	4450	4740	4820	5875	3890	
(N•m)	*(594)*	*(651)*	*(712)*	*(511)*	*(559)*	*(618)*	*(549)*	*(601)*	*(591)*	*(503)*	*(536)*	*(545)*	*(664)*	*(440)*	**4A100**
Hollow Shaft OHL lbs	5640	5530	5415	5775	5710	5595	5730	5640	5640	5800	5755	5730	5505	5890	
(N)	*(25100)*	*(24600)*	*(24100)*	*(25700)*	*(25400)*	*(24900)*	*(25500)*	*(25100)*	*(25100)*	*(25800)*	*(25600)*	*(25500)*	*(24500)*	*(26200)*	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	4540	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	
Input Power HP	**3.30**	**3.14**	**3.14**	**2.24**	**2.24**	**2.13**	**1.61**	**1.61**	**1.45**	**1.04**	**0.949**	**0.752**	**0.758**	**0.384**	
(kW)	***(2.46)***	***(2.34)***	***(2.34)***	***(1.67)***	***(1.67)***	***(1.59)***	***(1.20)***	***(1.20)***	***(1.08)***	***(0.776)***	***(0.708)***	***(0.561)***	***(0.565)***	***(0.286)***	
Output Torque in•lbs	6500	6990	7645	5955	6510	7185	5970	6530	7270	6165	6510	6210	7660	5305	
(N•m)	*(735)*	*(790)*	*(864)*	*(673)*	*(736)*	*(812)*	*(675)*	*(738)*	*(822)*	*(697)*	*(736)*	*(702)*	*(866)*	*(600)*	**4A105**
Hollow Shaft OHL lbs	5350	5235	5035	5485	5350	5170	5485	5350	5145	5440	5350	5440	5010	5640	
(N)	*(23800)*	*(23300)*	*(22400)*	*(24400)*	*(23800)*	*(23000)*	*(24400)*	*(23800)*	*(22900)*	*(24200)*	*(23800)*	*(24200)*	*(22300)*	*(25100)*	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	4540	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	
Input Power HP	**4.26**	**3.65**	**3.65**	**2.56**	**2.56**	**2.55**	**2.01**	**2.01**	**1.74**	**1.27**	**1.15**	**0.897**	**0.886**	**—**	
(kW)	***(3.18)***	***(2.72)***	***(2.72)***	***(1.91)***	***(1.91)***	***(1.90)***	***(1.50)***	***(1.50)***	***(1.30)***	***(0.944)***	***(0.859)***	***(0.669)***	***(0.661)***	**—**	
Output Torque in•lbs	8415	8150	8935	6810	7450	8600	7495	8190	8705	7495	7900	7395	8935	—	
(N•m)	*(951)*	*(921)*	*(1010)*	*(770)*	*(842)*	*(972)*	*(847)*	*(926)*	*(984)*	*(847)*	*(893)*	*(836)*	*(1010)*	—	**4A110**
Hollow Shaft OHL lbs	4740	4855	4560	5280	5080	4675	5080	4830	4630	5080	4945	5100	4540	—	
(N)	*(21100)*	*(21600)*	*(20300)*	*(23500)*	*(22600)*	*(20800)*	*(22600)*	*(21500)*	*(20600)*	*(22600)*	*(22000)*	*(22700)*	*(20200)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	—	
Input Power HP	**4.79**	**4.17**	**3.88**	**2.98**	**2.98**	**2.80**	**2.43**	**2.32**	**1.89**	**1.49**	**1.35**	**1.02**	**0.936**	**—**	
(kW)	***(3.57)***	***(3.11)***	***(2.89)***	***(2.22)***	***(2.22)***	***(2.09)***	***(1.81)***	***(1.73)***	***(1.41)***	***(1.11)***	***(1.01)***	***(0.758)***	***(0.698)***	**—**	
Output Torque in•lbs	9465	9290	9465	7910	8650	9465	9025	9465	9465	8830	9290	8380	9465	—	
(N•m)	*(1070)*	*(1050)*	*(1070)*	*(894)*	*(978)*	*(1070)*	*(1020)*	*(1070)*	*(1070)*	*(998)*	*(1050)*	*(947)*	*(1070)*	—	**4A115**
Hollow Shaft OHL lbs	4315	4380	4315	4945	4650	4315	4515	4315	4315	4585	4380	4765	4315	—	
(N)	*(19200)*	*(19500)*	*(19200)*	*(22000)*	*(20700)*	*(19200)*	*(20100)*	*(19200)*	*(19200)*	*(20400)*	*(19500)*	*(21200)*	*(19200)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	—	
Input Power HP	**4.79**	**4.24**	**3.88**	**3.57**	**3.26**	**2.80**	**2.55**	**2.32**	**1.89**	**1.60**	**1.38**	**1.15**	**0.936**	**—**	
(kW)	***(3.57)***	***(3.16)***	***(2.89)***	***(2.66)***	***(2.43)***	***(2.09)***	***(1.90)***	***(1.73)***	***(1.41)***	***(1.19)***	***(1.03)***	***(0.855)***	***(0.698)***	**—**	
Output Torque in•lbs	9465	9465	9465	9465	9465	9465	9465	9465	9465	9465	9465	9465	9465	—	
(N•m)	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	—	**4A120**
Hollow Shaft OHL lbs	4315	4315	4315	4315	4315	4315	4315	4315	4315	4315	4315	4315	4315	—	
(N)	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	—	
Input Power HP	**4.79**	**4.24**	**3.88**	**3.57**	**3.26**	**2.80**	**2.55**	**2.32**	**1.89**	**1.60**	**1.38**	**1.15**	**0.936**	**—**	
(kW)	***(3.57)***	***(3.16)***	***(2.89)***	***(2.66)***	***(2.43)***	***(2.09)***	***(1.90)***	***(1.73)***	***(1.41)***	***(1.19)***	***(1.03)***	***(0.855)***	***(0.698)***	**—**	
Output Torque in•lbs	9465	9465	9465	9465	9465	9465	9465	9465	9465	9465	9465	9465	9465	—	
(N•m)	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	—	**4A125**
Hollow Shaft OHL lbs	4315	4315	4315	4315	4315	4315	4315	4315	4315	4315	4315	4315	4315	—	
(N)	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	—	

Frame Size Selection Tables 60 Hz, 1750 RPM

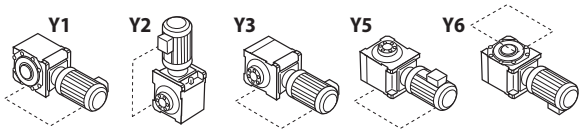
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	159	135	125	109	97.2	83.3	79.5	70.0	62.5	50.0	44.9	38.0	33.0	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	**25.5**	**22.3**	**20.4**	**17.8**	**16.2**	**13.5**	**12.7**	**11.6**	**10.2**	**8.10**	**7.40**	**6.26**	**5.43**	4A140
(kW)	***(19.0)***	***(16.6)***	***(15.2)***	***(13.3)***	***(12.1)***	***(10.1)***	***(9.48)***	***(8.67)***	***(7.59)***	***(6.04)***	***(5.52)***	***(4.67)***	***(4.05)***	
Output Torque in•lbs	8845	9465	9465	9465	9465	9465	9465	9465	9465	9465	9465	9465	9465	
(N•m)	*(1000)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	
Hollow Shaft OHL lbs	2650	2810	2920	3075	3210	3460	3550	3685	3885	4245	4315	4315	4315	
(N)	*(11800)*	*(12500)*	*(13000)*	*(13700)*	*(14300)*	*(15400)*	*(15800)*	*(16400)*	*(17300)*	*(18900)*	*(19200)*	*(19200)*	*(19200)*	
Solid Shaft OHL lbs	3350	3350	3350	3350	3350	3480	3550	3780	3980	4350	4510	4550	4580	
(N)	*(14900)*	*(14900)*	*(14900)*	*(14900)*	*(14900)*	*(15470)*	*(15790)*	*(16810)*	*(17700)*	*(19340)*	*(20060)*	*(20230)*	*(20370)*	
Input Power HP	**27.1**	**22.3**	**20.4**	**17.8**	**16.2**	**13.5**	**12.7**	**11.6**	**10.2**	**8.10**	**7.40**	**6.26**	**5.43**	4A145
(kW)	***(20.2)***	***(16.6)***	***(15.2)***	***(13.3)***	***(12.1)***	***(10.1)***	***(9.48)***	***(8.67)***	***(7.59)***	***(6.04)***	***(5.52)***	***(4.67)***	***(4.05)***	
Output Torque in•lbs	9465	9465	9465	9465	9465	9465	9465	9465	9465	9465	9465	9465	9465	
(N•m)	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	
Hollow Shaft OHL lbs	2560	2810	2920	3075	3210	3460	3550	3685	3885	4245	4315	4315	4315	
(N)	*(11400)*	*(12500)*	*(13000)*	*(13700)*	*(14300)*	*(15400)*	*(15800)*	*(16400)*	*(17300)*	*(18900)*	*(19200)*	*(19200)*	*(19200)*	
Solid Shaft OHL lbs	3350	3350	3350	3350	3350	3480	3550	3780	3980	4350	4510	4550	4580	
(N)	*(14900)*	*(14900)*	*(14900)*	*(14900)*	*(14900)*	*(15470)*	*(15790)*	*(16810)*	*(17700)*	*(19340)*	*(20060)*	*(20230)*	*(20370)*	
Input Power HP	**12.9**	**12.9**	**12.9**	**12.9**	**12.9**	**8.77**	**8.77**	**8.77**	**8.77**	**6.80**	**6.80**	**6.80**	**6.80**	4B120
(kW)	***(9.60)***	***(9.60)***	***(9.60)***	***(9.60)***	***(9.60)***	***(6.54)***	***(6.54)***	***(6.54)***	***(6.54)***	***(5.07)***	***(5.07)***	***(5.07)***	***(5.07)***	
Output Torque in•lbs	4485	5465	5980	6840	7475	6115	6520	7130	8150	7945	8690	10265	11855	
(N•m)	*(507)*	*(618)*	*(676)*	*(773)*	*(845)*	*(691)*	*(737)*	*(806)*	*(921)*	*(898)*	*(982)*	*(1160)*	*(1340)*	
Hollow Shaft OHL lbs	4740	4945	5035	5170	5280	5775	5845	5955	6135	6630	6765	6990	7170	
(N)	*(21100)*	*(22000)*	*(22400)*	*(23000)*	*(23500)*	*(25700)*	*(26000)*	*(26500)*	*(27300)*	*(29500)*	*(30100)*	*(31100)*	*(31900)*	
Solid Shaft OHL lbs	3490	3490	3490	3490	3490	3670	3770	4070	4320	4860	5120	5590	5970	
(N)	*(15520)*	*(15520)*	*(15520)*	*(15520)*	*(15520)*	*(16320)*	*(16760)*	*(18100)*	*(19210)*	*(21610)*	*(22770)*	*(24860)*	*(26550)*	
Input Power HP	**14.8**	**14.8**	**14.8**	**14.8**	**14.8**	**10.1**	**10.1**	**10.1**	**10.1**	**7.94**	**7.94**	**7.94**	**7.94**	4B125
(kW)	***(11.0)***	***(11.0)***	***(11.0)***	***(11.0)***	***(11.0)***	***(7.51)***	***(7.51)***	***(7.51)***	***(7.51)***	***(5.92)***	***(5.92)***	***(5.92)***	***(5.92)***	
Output Torque in•lbs	5140	6265	6855	7840	8575	7015	7485	8185	9380	9290	10175	12035	13805	
(N•m)	*(581)*	*(708)*	*(775)*	*(886)*	*(969)*	*(793)*	*(846)*	*(925)*	*(1060)*	*(1050)*	*(1150)*	*(1360)*	*(1560)*	
Hollow Shaft OHL lbs	4675	4855	4945	5080	5170	5665	5730	5845	6000	6495	6605	6810	6965	
(N)	*(20800)*	*(21600)*	*(22000)*	*(22600)*	*(23000)*	*(25200)*	*(25500)*	*(26000)*	*(26700)*	*(28900)*	*(29400)*	*(30300)*	*(31000)*	
Solid Shaft OHL lbs	3490	3490	3490	3490	3490	3670	3770	4070	4320	4860	5120	5590	5970	
(N)	*(15520)*	*(15520)*	*(15520)*	*(15520)*	*(15520)*	*(16320)*	*(16760)*	*(18100)*	*(19210)*	*(21610)*	*(22770)*	*(24860)*	*(26550)*	
Input Power HP	**25.5**	**25.5**	**25.5**	**25.5**	**25.5**	**17.4**	**17.4**	**17.4**	**17.4**	**16.1**	**14.8**	**12.5**	**10.8**	4B140
(kW)	***(19.0)***	***(19.0)***	***(19.0)***	***(19.0)***	***(19.0)***	***(13.0)***	***(13.0)***	***(13.0)***	***(13.0)***	***(12.0)***	***(11.0)***	***(9.30)***	***(8.06)***	
Output Torque in•lbs	8845	10795	11855	13535	14775	12210	13005	14245	16190	18845	18845	18845	18845	
(N•m)	*(1000)*	*(1220)*	*(1340)*	*(1530)*	*(1670)*	*(1380)*	*(1470)*	*(1610)*	*(1830)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	
Hollow Shaft OHL lbs	4270	4360	4405	4450	4495	5100	5145	5190	5260	5460	5665	6065	6425	
(N)	*(19000)*	*(19400)*	*(19600)*	*(19800)*	*(20000)*	*(22700)*	*(22900)*	*(23100)*	*(23400)*	*(24300)*	*(25200)*	*(27000)*	*(28600)*	
Solid Shaft OHL lbs	3490	3490	3490	3490	3490	3670	3770	4070	4320	4860	5120	5590	5970	
(N)	*(15520)*	*(15520)*	*(15520)*	*(15520)*	*(15520)*	*(16320)*	*(16760)*	*(18100)*	*(19210)*	*(21610)*	*(22770)*	*(24860)*	*(26550)*	
Input Power HP	**29.5**	**29.5**	**29.5**	**29.5**	**29.5**	**20.2**	**20.2**	**20.2**	**20.2**	**16.1**	**14.8**	**12.5**	**10.8**	4B145
(kW)	***(22.0)***	***(22.0)***	***(22.0)***	***(22.0)***	***(22.0)***	***(15.1)***	***(15.1)***	***(15.1)***	***(15.1)***	***(12.0)***	***(11.0)***	***(9.30)***	***(8.06)***	
Output Torque in•lbs	10265	12565	13715	15660	17165	14155	15130	16545	18845	18845	18845	18845	18845	
(N•m)	*(1160)*	*(1420)*	*(1550)*	*(1770)*	*(1940)*	*(1600)*	*(1710)*	*(1870)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	
Hollow Shaft OHL lbs	4110	4180	4200	4225	4225	4900	4900	4945	4965	5460	5665	6065	6425	
(N)	*(18300)*	*(18600)*	*(18700)*	*(18800)*	*(18800)*	*(21800)*	*(21800)*	*(22000)*	*(22100)*	*(24300)*	*(25200)*	*(27000)*	*(28600)*	
Solid Shaft OHL lbs	3490	3490	3490	3490	3490	3670	3770	4070	4320	4860	5120	5590	5970	
(N)	*(15520)*	*(15520)*	*(15520)*	*(15520)*	*(15520)*	*(16320)*	*(16760)*	*(18100)*	*(19210)*	*(21610)*	*(22770)*	*(24860)*	*(26550)*	

Frame Size Selection Tables 60 Hz, 1750 RPM



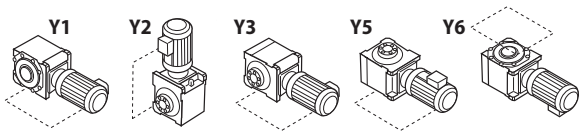
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	29.2	26.1	23.6	21.9	19.9	17.2	15.6	14.2	11.6	9.78	8.45	7.03	5.74	4.20	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	**4.79**	**4.24**	**3.88**	**3.57**	**3.26**	**2.80**	**2.55**	**2.32**	**1.89**	**1.60**	**1.38**	**1.15**	**0.936**	—	4A140
(kW)	***(3.57)***	***(3.16)***	***(2.89)***	***(2.66)***	***(2.43)***	***(2.09)***	***(1.9)***	***(1.73)***	***(1.41)***	***(1.19)***	***(1.03)***	***(0.855)***	***(0.698)***	—	
Output Torque in•lbs	9465	9465	9465	9465	9465	9465	9465	9465	9465	9465	9465	9465	9465	—	
(N•m)	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	—	
Hollow Shaft OHL lbs	4315	4315	4315	4315	4315	4315	4315	4315	4315	4315	4315	4315	4315	—	
(N)	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*		
Input Power HP	**4.79**	**4.24**	**3.88**	**3.57**	**3.26**	**2.80**	**2.55**	**2.32**	**1.89**	**1.60**	**1.38**	**1.15**	**0.936**	—	4A145
(kW)	***(3.57)***	***(3.16)***	***(2.89)***	***(2.66)***	***(2.43)***	***(2.09)***	***(1.9)***	***(1.73)***	***(1.41)***	***(1.19)***	***(1.03)***	***(0.855)***	***(0.698)***	—	
Output Torque in•lbs	9465	9465	9465	9465	9465	9465	9465	9465	9465	9465	9465	9465	9465	—	
(N•m)	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	*(1070)*	—	
Hollow Shaft OHL lbs	4315	4315	4315	4315	4315	4315	4315	4315	4315	4315	4315	4315	4315	—	
(N)	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	—	
Input Power HP	**6.80**	**5.31**	**5.31**	**4.14**	**4.14**	**4.01**	**3.34**	**3.34**	**2.56**	**2.31**	**1.74**	**1.283**	**1.266**	—	4B120
(kW)	***(5.07)***	***(3.96)***	***(3.96)***	***(3.09)***	***(3.09)***	***(2.99)***	***(2.49)***	***(2.49)***	***(1.91)***	***(1.72)***	***(1.30)***	***(0.957)***	***(0.944)***	—	
Output Torque in•lbs	13450	11855	12920	10970	12035	13535	12475	13625	12830	13625	12035	10615	12830	—	
(N•m)	*(1520)*	*(1340)*	*(1460)*	*(1240)*	*(1360)*	*(1530)*	*(1410)*	*(1540)*	*(1450)*	*(1540)*	*(1360)*	*(1200)*	*(1450)*	—	
Hollow Shaft OHL lbs	7325	7820	7955	8405	8565	8765	8965	8745	8900	8745	9055	9280	8900	—	
(N)	*(32600)*	*(34800)*	*(35400)*	*(37400)*	*(38100)*	*(39000)*	*(39900)*	*(38900)*	*(39600)*	*(38900)*	*(40300)*	*(41300)*	*(39600)*	—	
Solid Shaft OHL lbs	6330	6650	6920	7110	7320	7400	7450	7490	7580	7600	7470	7320	7190	—	
(N)	*(28150)*	*(29570)*	*(30780)*	*(31620)*	*(32550)*	*(32910)*	*(33130)*	*(33310)*	*(33710)*	*(33800)*	*(33220)*	*(32550)*	*(31980)*	—	
Input Power HP	**7.59**	**6.54**	**6.54**	**5.31**	**5.31**	**5.06**	**4.26**	**4.26**	**3.19**	**3.06**	**2.17**	**1.61**	**1.515**	—	4B125
(kW)	***(5.66)***	***(4.88)***	***(4.88)***	***(3.96)***	***(3.96)***	***(3.77)***	***(3.18)***	***(3.18)***	***(2.38)***	***(2.28)***	***(1.62)***	***(1.20)***	***(1.13)***	—	
Output Torque in•lbs	14955	14600	16015	14070	15395	16990	15840	17345	15925	18140	14865	13270	15305	—	
(N•m)	*(1690)*	*(1650)*	*(1810)*	*(1590)*	*(1740)*	*(1920)*	*(1790)*	*(1960)*	*(1800)*	*(2050)*	*(1680)*	*(1500)*	*(1730)*	—	
Hollow Shaft OHL lbs	7170	7530	7640	8070	8205	7910	8225	7820	8205	7595	8475	8810	8360	—	
(N)	*(31900)*	*(33500)*	*(34000)*	*(35900)*	*(36500)*	*(35200)*	*(36600)*	*(34800)*	*(36500)*	*(33800)*	*(37700)*	*(39200)*	*(37200)*	—	
Solid Shaft OHL lbs	6330	6650	6920	7110	7320	7400	7450	7490	7580	7600	7470	7320	7190	—	
(N)	*(28150)*	*(29570)*	*(30780)*	*(31620)*	*(32550)*	*(32910)*	*(33130)*	*(33310)*	*(33710)*	*(33800)*	*(33220)*	*(32550)*	*(31980)*	—	
Input Power HP	**9.53**	**8.45**	**7.72**	**7.09**	**6.49**	**5.59**	**5.07**	**4.63**	**3.77**	**3.18**	**2.75**	**2.28**	**1.86**	—	4B140
(kW)	***(7.11)***	***(6.30)***	***(5.76)***	***(5.29)***	***(4.84)***	***(4.17)***	***(3.78)***	***(3.45)***	***(2.81)***	***(2.37)***	***(2.05)***	***(1.70)***	***(1.39)***	—	
Output Torque in•lbs	18845	18845	18845	18845	18845	18845	18845	18845	18845	18845	18845	18845	18845	—	
(N•m)	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	—	
Hollow Shaft OHL lbs	6740	7055	7325	7350	7350	7350	7350	7350	7350	7350	7350	7350	7350	—	
(N)	*(30000)*	*(31400)*	*(32600)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	—	
Solid Shaft OHL lbs	6330	6650	6920	7110	7320	7400	7450	7490	7580	7600	7470	7320	7190	—	
(N)	*(28150)*	*(29570)*	*(30780)*	*(31620)*	*(32550)*	*(32910)*	*(33130)*	*(33310)*	*(33710)*	*(33800)*	*(33220)*	*(32550)*	*(31980)*	—	
Input Power HP	**9.53**	**8.45**	**7.72**	**7.09**	**6.49**	**5.59**	**5.07**	**4.63**	**3.77**	**3.18**	**2.75**	**2.28**	**1.86**	—	4B145
(kW)	***(7.11)***	***(6.30)***	***(5.76)***	***(5.29)***	***(4.84)***	***(4.17)***	***(3.78)***	***(3.45)***	***(2.81)***	***(2.37)***	***(2.05)***	***(1.70)***	***(1.39)***	—	
Output Torque in•lbs	18845	18845	18845	18845	18845	18845	18845	18845	18845	18845	18845	18845	18845	—	
(N•m)	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	—	
Hollow Shaft OHL lbs	6740	7055	7325	7350	7350	7350	7350	7350	7350	7350	7350	7350	7350	—	
(N)	*(30000)*	*(31400)*	*(32600)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	—	
Solid Shaft OHL lbs	6330	6650	6920	7110	7320	7400	7450	7490	7580	7600	7470	7320	7190	—	
(N)	*(28150)*	*(29570)*	*(30780)*	*(31620)*	*(32550)*	*(32910)*	*(33130)*	*(33310)*	*(33710)*	*(33800)*	*(33220)*	*(32550)*	*(31980)*	—	

Frame Size Selection Tables 60 Hz, 1750 RPM

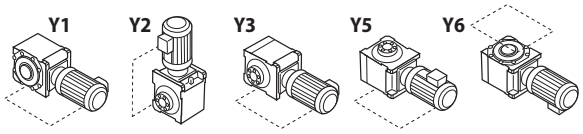
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	159	135	125	109	97.2	83.3	79.5	70.0	62.5	50.0	44.9	38.0	33.0	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	**33.9**	**33.9**	**33.9**	**33.9**	**32.5**	**27.1**	**25.3**	**23.2**	**20.2**	**16.1**	**14.8**	**12.5**	**10.81**	4B160
(kW)	***(25.3)***	***(25.3)***	***(25.3)***	***(25.3)***	***(24.2)***	***(20.2)***	***(18.9)***	***(17.3)***	***(15.1)***	***(12.0)***	***(11.0)***	***(9.30)***	***(8.06)***	
Output Torque in•lbs	11855	14420	15750	18050	18845	18845	18845	18845	18845	18845	18845	18845	18845	
(N•m)	*(1340)*	*(1630)*	*(1780)*	*(2040)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	
Hollow Shaft OHL lbs	3930	3975	3975	3955	4045	4380	4495	4695	4965	5460	5665	6065	6425	
(N)	*(17500)*	*(17700)*	*(17700)*	*(17600)*	*(18000)*	*(19500)*	*(20000)*	*(20900)*	*(22100)*	*(24300)*	*(25200)*	*(27000)*	*(28600)*	
Solid Shaft OHL lbs	3490	3490	3490	3490	3490	3670	3770	4070	4320	4860	5120	5590	5970	
(N)	*(15520)*	*(15520)*	*(15520)*	*(15520)*	*(15520)*	*(16320)*	*(16760)*	*(18100)*	*(19210)*	*(21610)*	*(22770)*	*(24860)*	*(26550)*	
Input Power HP	**38.9**	**38.9**	**38.9**	**35.5**	**32.5**	**27.1**	**25.3**	**23.2**	**20.2**	**16.1**	**14.8**	**12.5**	**10.81**	4B165
(kW)	***(29)***	***(29)***	***(29)***	***(26.5)***	***(24.2)***	***(20.2)***	***(18.9)***	***(17.3)***	***(15.1)***	***(12.0)***	***(11.0)***	***(9.30)***	***(8.06)***	
Output Torque in•lbs	13535	16545	18050	18845	18845	18845	18845	18845	18845	18845	18845	18845	18845	
(N•m)	*(1530)*	*(1870)*	*(2040)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	
Hollow Shaft OHL lbs	3750	3750	3730	3865	4045	4380	4495	4695	4965	5460	5665	6065	6425	
(N)	*(16700)*	*(16700)*	*(16600)*	*(17200)*	*(18000)*	*(19500)*	*(20000)*	*(20900)*	*(22100)*	*(24300)*	*(25200)*	*(27000)*	*(28600)*	
Solid Shaft OHL lbs	3490	3490	3490	3490	3490	3670	3770	4070	4320	4860	5120	5590	5970	
(N)	*(15520)*	*(15520)*	*(15520)*	*(15520)*	*(15520)*	*(16320)*	*(16760)*	*(18100)*	*(19210)*	*(21610)*	*(22770)*	*(24860)*	*(26550)*	
Input Power HP	**25.5**	**25.5**	**25.5**	**25.5**	**25.5**	**17.4**	**17.4**	**17.4**	**17.4**	**17.4**	**17.4**	**17.4**	**16.1**	4C140
(kW)	***(19.0)***	***(19.0)***	***(19.0)***	***(19.0)***	***(19.0)***	***(13.0)***	***(13.0)***	***(13.0)***	***(13.0)***	***(13.0)***	***(13.0)***	***(13.0)***	***(12.0)***	
Output Torque in•lbs	8845	10795	11855	13535	14775	12210	13005	14245	16190	20440	22300	26370	28050	
(N•m)	*(1000)*	*(1220)*	*(1340)*	*(1530)*	*(1670)*	*(1380)*	*(1470)*	*(1610)*	*(1830)*	*(2310)*	*(2520)*	*(2980)*	*(3170)*	
Hollow Shaft OHL lbs	6335	6585	6695	6855	6965	7685	7755	7910	8090	8360	8475	8630	8965	
(N)	*(28200)*	*(29300)*	*(29800)*	*(30500)*	*(31000)*	*(34200)*	*(34500)*	*(35200)*	*(36000)*	*(37200)*	*(37700)*	*(38400)*	*(39900)*	
Solid Shaft OHL lbs	4590	4590	4590	4590	4590	4820	4950	5350	5720	6460	6850	7500	8030	
(N)	*(20410)*	*(20410)*	*(20410)*	*(20410)*	*(20410)*	*(21430)*	*(22010)*	*(23790)*	*(25440)*	*(28730)*	*(30460)*	*(33360)*	*(35710)*	
Input Power HP	**29.5**	**29.5**	**29.5**	**29.5**	**29.5**	**20.2**	**20.2**	**20.2**	**20.2**	**20.2**	**20.2**	**20.2**	**19.6**	4C145
(kW)	***(22.0)***	***(22.0)***	***(22.0)***	***(22.0)***	***(22.0)***	***(15.1)***	***(15.1)***	***(15.1)***	***(15.1)***	***(15.1)***	***(15.1)***	***(15.1)***	***(14.6)***	
Output Torque in•lbs	10265	12565	13715	15660	17165	14155	15130	16545	18845	23715	25925	30530	34070	
(N•m)	*(1160)*	*(1420)*	*(1550)*	*(1770)*	*(1940)*	*(1600)*	*(1710)*	*(1870)*	*(2130)*	*(2680)*	*(2930)*	*(3450)*	*(3850)*	
Hollow Shaft OHL lbs	6200	6405	6515	6650	6740	7485	7550	7685	7845	8045	8135	8250	8405	
(N)	*(27600)*	*(28500)*	*(29000)*	*(29600)*	*(30000)*	*(33300)*	*(33600)*	*(34200)*	*(34900)*	*(35800)*	*(36200)*	*(36700)*	*(37400)*	
Solid Shaft OHL lbs	4590	4590	4590	4590	4590	4820	4950	5350	5720	6460	6850	7500	8030	
(N)	*(20410)*	*(20410)*	*(20410)*	*(20410)*	*(20410)*	*(21430)*	*(22010)*	*(23790)*	*(25440)*	*(28730)*	*(30460)*	*(33360)*	*(35710)*	
Input Power HP	**33.9**	**33.9**	**33.9**	**33.9**	**33.9**	**33.9**	**27.2**	**27.2**	**26.4**	**26.4**	**26.4**	**24.9**	**21.6**	4C160
(kW)	***(25.3)***	***(25.3)***	***(25.3)***	***(25.3)***	***(25.3)***	***(25.3)***	***(20.3)***	***(20.3)***	***(19.7)***	***(19.7)***	***(19.7)***	***(18.6)***	***(16.1)***	
Output Torque in•lbs	11855	14420	15750	18050	19730	23625	20265	22120	24510	30885	33805	37695	37695	
(N•m)	*(1340)*	*(1630)*	*(1780)*	*(2040)*	*(2230)*	*(2670)*	*(2290)*	*(2500)*	*(2770)*	*(3490)*	*(3820)*	*(4260)*	*(4260)*	
Hollow Shaft OHL lbs	6045	6225	6315	6425	6495	6585	7080	7145	7305	7370	7395	7575	8045	
(N)	*(26900)*	*(27700)*	*(28100)*	*(28600)*	*(28900)*	*(29300)*	*(31500)*	*(31800)*	*(32500)*	*(32800)*	*(32900)*	*(33700)*	*(35800)*	
Solid Shaft OHL lbs	4590	4590	4590	4590	4590	4820	4950	5350	5720	6460	6850	7500	8030	
(N)	*(20410)*	*(20410)*	*(20410)*	*(20410)*	*(20410)*	*(21430)*	*(22010)*	*(23790)*	*(25440)*	*(28730)*	*(30460)*	*(33360)*	*(35710)*	
Input Power HP	**40.2**	**40.2**	**40.2**	**40.2**	**40.2**	**40.2**	**32.3**	**32.3**	**32.3**	**32.2**	**29.5**	**24.9**	**21.6**	4C165
(kW)	***(30.0)***	***(30.0)***	***(30.0)***	***(30.0)***	***(30.0)***	***(30.0)***	***(24.1)***	***(24.1)***	***(24.1)***	***(24.0)***	***(22.0)***	***(18.6)***	***(16.1)***	
Output Torque in•lbs	13980	17075	18670	21415	23360	28050	23980	26190	30000	37695	37695	37695	37695	
(N•m)	*(1580)*	*(1930)*	*(2110)*	*(2420)*	*(2640)*	*(3170)*	*(2710)*	*(2960)*	*(3390)*	*(4260)*	*(4260)*	*(4260)*	*(4260)*	
Hollow Shaft OHL lbs	5845	5975	6045	6090	6135	6180	6720	6765	6785	6720	7010	7575	8045	
(N)	*(26000)*	*(26600)*	*(26900)*	*(27100)*	*(27300)*	*(27500)*	*(29900)*	*(30100)*	*(30200)*	*(29900)*	*(31200)*	*(33700)*	*(35800)*	
Solid Shaft OHL lbs	4590	4590	4590	4590	4590	4820	4950	5350	5720	6460	6850	7500	8030	
(N)	*(20410)*	*(20410)*	*(20410)*	*(20410)*	*(20410)*	*(21430)*	*(22010)*	*(23790)*	*(25440)*	*(28730)*	*(30460)*	*(33360)*	*(35710)*	

Frame Size Selection Tables 60 Hz, 1750 RPM



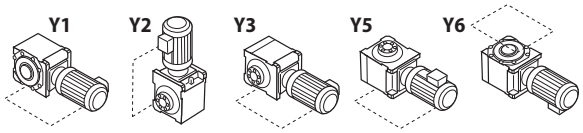
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	29.2	26.1	23.6	21.9	19.9	17.2	15.6	14.2	11.6	9.78	8.45	7.03	5.74	4.20	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	**9.53**	**8.45**	**7.72**	**7.09**	**6.49**	**5.59**	**5.07**	**4.63**	**3.77**	**3.18**	**2.75**	**2.28**	**1.86**	—	4B160
(kW)	***(7.11)***	***(6.30)***	***(5.76)***	***(5.29)***	***(4.84)***	***(4.17)***	***(3.78)***	***(3.45)***	***(2.81)***	***(2.37)***	***(2.05)***	***(1.70)***	***(1.39)***	—	
Output Torque in•lbs	18845	18845	18845	18845	18845	18845	18845	18845	18845	18845	18845	18845	18845	—	
(N•m)	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	—	
Hollow Shaft OHL lbs	6740	7055	7325	7350	7350	7350	7350	7350	7350	7350	7350	7350	7350	—	
(N)	*(30000)*	*(31400)*	*(32600)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	—	
Solid Shaft OHL lbs	6330	6650	6920	7110	7320	7400	7450	7490	7580	7600	7470	7320	7190	—	
(N)	*(28150)*	*(29570)*	*(30780)*	*(31620)*	*(32550)*	*(32910)*	*(33130)*	*(33310)*	*(33710)*	*(33800)*	*(33220)*	*(32550)*	*(31980)*	—	
Input Power HP	**9.53**	**8.45**	**7.72**	**7.09**	**6.49**	**5.59**	**5.07**	**4.63**	**3.77**	**3.18**	**2.75**	**2.28**	**1.86**	—	4B165
(kW)	***(7.11)***	***(6.30)***	***(5.76)***	***(5.29)***	***(4.84)***	***(4.17)***	***(3.78)***	***(3.45)***	***(2.81)***	***(2.37)***	***(2.05)***	***(1.70)***	***(1.39)***	—	
Output Torque in•lbs	18845	18845	18845	18845	18845	18845	18845	18845	18845	18845	18845	18845	18845	—	
(N•m)	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	—	
Hollow Shaft OHL lbs	6740	7055	7325	7350	7350	7350	7350	7350	7350	7350	7350	7350	7350	—	
(N)	*(30000)*	*(31400)*	*(32600)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	—	
Solid Shaft OHL lbs	6330	6650	6920	7110	7320	7400	7450	7490	7580	7600	7470	7320	7190	—	
(N)	*(28150)*	*(29570)*	*(30780)*	*(31620)*	*(32550)*	*(32910)*	*(33130)*	*(33310)*	*(33710)*	*(33800)*	*(33220)*	*(32550)*	*(31980)*	—	
Input Power HP	**13.5**	**11.6**	**11.6**	**9.24**	**9.24**	**7.98**	**6.99**	**6.99**	**5.28**	**4.60**	**3.97**	**3.26**	**2.66**	—	4C140
(kW)	***(10.1)***	***(8.66)***	***(8.66)***	***(6.89)***	***(6.89)***	***(5.95)***	***(5.21)***	***(5.21)***	***(3.94)***	***(3.43)***	***(2.96)***	***(2.43)***	***(1.98)***	—	
Output Torque in•lbs	26635	25925	28315	24510	26810	26900	25925	28405	26460	27255	27255	26900	26810	—	
(N•m)	*(3010)*	*(2930)*	*(3200)*	*(2770)*	*(3030)*	*(3040)*	*(2930)*	*(3210)*	*(2990)*	*(3080)*	*(3080)*	*(3040)*	*(3030)*	—	
Hollow Shaft OHL lbs	9550	10045	10180	10855	11015	11620	12115	12295	13440	14095	14115	14160	14160	—	
(N)	*(42500)*	*(44700)*	*(45300)*	*(48300)*	*(49000)*	*(51700)*	*(53900)*	*(54700)*	*(59800)*	*(62700)*	*(62800)*	*(63000)*	*(63000)*	—	
Solid Shaft OHL lbs	8540	9080	9510	9830	10190	10920	11330	11700	12410	12820	12750	12660	12590	—	
(N)	*(37980)*	*(40380)*	*(42300)*	*(43720)*	*(45320)*	*(48570)*	*(50390)*	*(52040)*	*(55190)*	*(57020)*	*(56710)*	*(56310)*	*(56000)*	—	
Input Power HP	**16.1**	**14.75**	**14.75**	**10.6**	**10.6**	**10.1**	**10.1**	**9.27**	**7.23**	**5.66**	**4.89**	**4.06**	**3.33**	—	4C145
(kW)	***(12.0)***	***(11.0)***	***(11.0)***	***(7.91)***	***(7.91)***	***(7.53)***	***(7.53)***	***(6.91)***	***(5.39)***	***(4.22)***	***(3.65)***	***(3.03)***	***(2.48)***	—	
Output Torque in•lbs	31770	32740	35840	28140	30795	34070	37610	37695	36105	33535	33625	33535	33625	—	
(N•m)	*(3590)*	*(3700)*	*(4050)*	*(3180)*	*(3480)*	*(3850)*	*(4250)*	*(4260)*	*(4080)*	*(3790)*	*(3800)*	*(3790)*	*(3800)*	—	
Hollow Shaft OHL lbs	9055	9395	9460	10495	10630	10945	11015	11420	12340	12925	12925	12945	12925	—	
(N)	*(40300)*	*(41800)*	*(42100)*	*(46700)*	*(47300)*	*(48700)*	*(49000)*	*(50800)*	*(54900)*	*(57500)*	*(57500)*	*(57600)*	*(57500)*	—	
Solid Shaft OHL lbs	8540	9080	9510	9830	10190	10920	11330	11700	12410	12820	12750	12660	12590	—	
(N)	*(37980)*	*(40380)*	*(42300)*	*(43720)*	*(45320)*	*(48570)*	*(50390)*	*(52040)*	*(55190)*	*(57020)*	*(56710)*	*(56310)*	*(56000)*	—	
Input Power HP	**17.6**	**16.9**	**15.4**	**13.2**	**13.0**	**11.2**	**10.1**	**9.27**	**7.54**	**6.36**	**5.50**	**4.57**	**3.73**	—	4C160
(kW)	***(13.1)***	***(12.6)***	***(11.5)***	***(9.86)***	***(9.67)***	***(8.34)***	***(7.56)***	***(6.91)***	***(5.62)***	***(4.74)***	***(4.10)***	***(3.41)***	***(2.78)***	—	
Output Torque in•lbs	34600	37695	37695	35130	37695	37695	37695	37695	37695	37695	37695	37695	37695	—	
(N•m)	*(3910)*	*(4260)*	*(4260)*	*(3970)*	*(4260)*	*(4260)*	*(4260)*	*(4260)*	*(4260)*	*(4260)*	*(4260)*	*(4260)*	*(4260)*	—	
Hollow Shaft OHL lbs	8790	8920	9280	9845	9980	10585	10990	11420	11935	11935	11935	11935	11935	—	
(N)	*(39100)*	*(39700)*	*(41300)*	*(43800)*	*(44400)*	*(47100)*	*(48900)*	*(50800)*	*(53100)*	*(53100)*	*(53100)*	*(53100)*	*(53100)*	—	
Solid Shaft OHL lbs	8540	9080	9510	9830	10190	10920	11330	11700	12410	12820	12750	12660	12590	—	
(N)	*(37980)*	*(40380)*	*(42300)*	*(43720)*	*(45320)*	*(48570)*	*(50390)*	*(52040)*	*(55190)*	*(57020)*	*(56710)*	*(56310)*	*(56000)*	—	
Input Power HP	**19.0**	**16.9**	**15.4**	**14.2**	**13.0**	**11.2**	**10.1**	**9.27**	**7.54**	**6.36**	**5.50**	**4.57**	**3.73**	—	4C165
(kW)	***(14.2)***	***(12.6)***	***(11.5)***	***(10.6)***	***(9.67)***	***(8.34)***	***(7.56)***	***(6.91)***	***(5.62)***	***(4.74)***	***(4.10)***	***(3.41)***	***(2.78)***	—	
Output Torque in•lbs	37695	37695	37695	37695	37695	37695	37695	37695	37695	37695	37695	37695	37695	—	
(N•m)	*(4260)*	*(4260)*	*(4260)*	*(4260)*	*(4260)*	*(4260)*	*(4260)*	*(4260)*	*(4260)*	*(4260)*	*(4260)*	*(4260)*	*(4260)*	—	
Hollow Shaft OHL lbs	8495	8920	9280	9595	9980	10585	10990	11420	11935	11935	11935	11935	11935	—	
(N)	*(37800)*	*(39700)*	*(41300)*	*(42700)*	*(44400)*	*(47100)*	*(48900)*	*(50800)*	*(53100)*	*(53100)*	*(53100)*	*(53100)*	*(53100)*	—	
Solid Shaft OHL lbs	8540	9080	9510	9830	10190	10920	11330	11700	12410	12820	12750	12660	12590	—	
(N)	*(37980)*	*(40380)*	*(42300)*	*(43720)*	*(45320)*	*(48570)*	*(50390)*	*(52040)*	*(55190)*	*(57020)*	*(56710)*	*(56310)*	*(56000)*	—	

Frame Size Selection Tables 60 Hz, 1750 RPM

Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions [1]

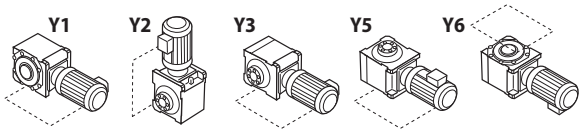


Dimensions on pages 2.156 - 2.166

Output RPM	159	135	125	109	97.2	83.3	79.5	70.0	62.5	50.0	44.9	38.0	33.0	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	**55.7**	**55.7**	**55.7**	**55.7**	**55.7**	**45.5**	**45.5**	**45.5**	**40.5**	**32.2**	**29.5**	**24.9**	**21.6**	
(kW)	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(33.9)***	***(33.9)***	***(33.9)***	***(30.2)***	***(24.0)***	***(22.0)***	***(18.6)***	***(16.1)***	
Output Torque in•lbs	19380	23630	25840	29560	32305	31680	33805	36990	37695	37695	37695	37695	37695	
(N•m)	*(2190)*	*(2670)*	*(2920)*	*(3340)*	*(3650)*	*(3580)*	*(3820)*	*(4180)*	*(4260)*	*(4260)*	*(4260)*	*(4260)*	*(4260)*	**4C170**
Hollow Shaft OHL lbs	5325	5370	5370	5325	5305	5820	5775	5755	6045	6720	7010	7575	8045	
(N)	*(23700)*	*(23900)*	*(23900)*	*(23700)*	*(23600)*	*(25900)*	*(25700)*	*(25600)*	*(26900)*	*(29900)*	*(31200)*	*(33700)*	*(35800)*	
Solid Shaft OHL lbs	4405	4445	4445	4405	4390	4820	4950	5350	5720	6460	6850	7500	8030	
(N)	*(19605)*	*(19770)*	*(19770)*	*(19605)*	*(19525)*	*(21430)*	*(22010)*	*(23790)*	*(25440)*	*(28730)*	*(30460)*	*(33360)*	*(35710)*	
Input Power HP	**60.3**	**60.3**	**60.3**	**60.3**	**60.3**	**48.3**	**48.3**	**46.3**	**40.5**	**32.2**	**29.5**	**24.9**	**21.6**	
(kW)	***(45.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(36.0)***	***(36.0)***	***(34.5)***	***(30.2)***	***(24.0)***	***(22.0)***	***(18.6)***	***(16.1)***	
Output Torque in•lbs	21060	25665	28055	32035	35045	33630	35930	37700	37695	37695	37695	37695	37695	
(N•m)	*(2380)*	*(2900)*	*(3170)*	*(3620)*	*(3960)*	*(3800)*	*(4060)*	*(4260)*	*(4260)*	*(4260)*	*(4260)*	*(4260)*	*(4260)*	**4C175**
Hollow Shaft OHL lbs	5170	5170	5170	5100	5035	5640	5595	5685	6045	6720	7010	7575	8045	
(N)	*(23000)*	*(23000)*	*(23000)*	*(22700)*	*(22400)*	*(25100)*	*(24900)*	*(25300)*	*(26900)*	*(29900)*	*(31200)*	*(33700)*	*(35800)*	
Solid Shaft OHL lbs	4410	4410	4410	4355	4300	4815	4945	5345	5720	6460	6850	7500	8030	
(N)	*(19635)*	*(19635)*	*(19635)*	*(19380)*	*(19125)*	*(21430)*	*(22010)*	*(23790)*	*(25440)*	*(28730)*	*(30460)*	*(33360)*	*(35710)*	
Input Power HP	**—**	**—**	**—**	**—**	**—**	**33.9**	**27.2**	**27.2**	**26.4**	**26.4**	**26.4**	**26.4**	**25.1**	
(kW)	**—**	**—**	**—**	**—**	**—**	***(25.3)***	***(20.3)***	***(20.3)***	***(19.7)***	***(19.7)***	***(19.7)***	***(19.7)***	***(18.7)***	
Output Torque in•lbs	—	—	—	—	—	23625	20265	22120	24510	30885	33805	39910	43805	
(N•m)	—	—	—	—	—	*(2670)*	*(2290)*	*(2500)*	*(2770)*	*(3490)*	*(3820)*	*(4510)*	*(4950)*	**4D160**
Hollow Shaft OHL lbs	—	—	—	—	—	10835	11350	11575	11910	12385	12565	12855	13260	
(N)	—	—	—	—	—	*(48200)*	*(50500)*	*(51500)*	*(53000)*	*(55100)*	*(55900)*	*(57200)*	*(59000)*	
Solid Shaft OHL lbs	—	—	—	—	—	6830	7030	7620	8140	9230	9770	10710	11480	
(N)	—	—	—	—	—	*(30370)*	*(31260)*	*(33890)*	*(36200)*	*(41050)*	*(43450)*	*(47630)*	*(51060)*	
Input Power HP	**—**	**—**	**—**	**—**	**—**	**40.2**	**32.3**	**32.3**	**32.3**	**32.3**	**32.3**	**30.3**	**30.3**	
(kW)	**—**	**—**	**—**	**—**	**—**	***(30.0)***	***(24.1)***	***(24.1)***	***(24.1)***	***(24.1)***	***(24.1)***	***(22.6)***	***(22.6)***	
Output Torque in•lbs	—	—	—	—	—	28050	23980	26190	30000	37695	41235	45750	52830	
(N•m)	—	—	—	—	—	*(3170)*	*(2710)*	*(2960)*	*(3390)*	*(4260)*	*(4660)*	*(5170)*	*(5970)*	**4D165**
Hollow Shaft OHL lbs	—	—	—	—	—	10495	11060	11240	11485	11825	11980	12385	12520	
(N)	—	—	—	—	—	*(46700)*	*(49200)*	*(50000)*	*(51100)*	*(52600)*	*(53300)*	*(55100)*	*(55700)*	
Solid Shaft OHL lbs	—	—	—	—	—	6830	7030	7620	8140	9230	9770	10710	11480	
(N)	—	—	—	—	—	*(30370)*	*(31260)*	*(33890)*	*(36200)*	*(41050)*	*(43450)*	*(47630)*	*(51060)*	
Input Power HP	**55.7**	**55.7**	**55.7**	**55.7**	**55.7**	**45.5**	**45.5**	**45.5**	**45.5**	**37.0**	**37.0**	**36.6**	**34.2**	
(kW)	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(33.9)***	***(33.9)***	***(33.9)***	***(33.9)***	***(27.6)***	***(27.6)***	***(27.3)***	***(25.5)***	
Output Torque in•lbs	19380	23625	25840	29555	32300	31680	33805	36990	42300	43270	47345	55310	59645	
(N•m)	*(2190)*	*(2670)*	*(2920)*	*(3340)*	*(3650)*	*(3580)*	*(3820)*	*(4180)*	*(4780)*	*(4890)*	*(5350)*	*(6250)*	*(6740)*	**4D170**
Hollow Shaft OHL lbs	8790	9080	9215	9375	9460	10205	10250	10385	10495	11375	11485	11620	11980	
(N)	*(39100)*	*(40400)*	*(41000)*	*(41700)*	*(42100)*	*(45400)*	*(45600)*	*(46200)*	*(46700)*	*(50600)*	*(51100)*	*(51700)*	*(53300)*	
Solid Shaft OHL lbs	6480	6480	6480	6480	6480	6830	7030	7620	8140	9230	9770	10710	11480	
(N)	*(28820)*	*(28820)*	*(28820)*	*(28820)*	*(28820)*	*(30370)*	*(31260)*	*(33890)*	*(36200)*	*(41050)*	*(43450)*	*(47630)*	*(51060)*	
Input Power HP	**60.3**	**60.3**	**60.3**	**60.3**	**60.3**	**49.6**	**49.6**	**49.6**	**49.6**	**40.4**	**40.4**	**40.4**	**36.7**	
(kW)	***(45.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(37.0)***	***(37.0)***	***(37.0)***	***(37.0)***	***(30.1)***	***(30.1)***	***(30.1)***	***(27.4)***	
Output Torque in•lbs	21060	25660	28050	32035	35040	34600	36900	40350	46105	47165	51590	60970	63980	
(N•m)	*(2380)*	*(2900)*	*(3170)*	*(3620)*	*(3960)*	*(3910)*	*(4170)*	*(4560)*	*(5210)*	*(5330)*	*(5830)*	*(6890)*	*(7230)*	**4D175**
Hollow Shaft OHL lbs	8655	8925	9035	9170	9240	9955	10000	10090	10180	11060	11125	11170	11645	
(N)	*(38500)*	*(39700)*	*(40200)*	*(40800)*	*(41100)*	*(44300)*	*(44500)*	*(44900)*	*(45300)*	*(49200)*	*(49500)*	*(49700)*	*(51800)*	
Solid Shaft OHL lbs	6480	6480	6480	6480	6480	6830	7030	7620	8140	9230	9770	10710	11480	
(N)	*(28820)*	*(28820)*	*(28820)*	*(28820)*	*(28820)*	*(30370)*	*(31260)*	*(33890)*	*(36200)*	*(41050)*	*(43450)*	*(47630)*	*(51060)*	

Notes: [1] For selections noted with shade, the continuous duty thermal rating is up to 50HP and only when Y2 mounting, the additional duty cycle limit to be applied up to 75% Equivalent Duty (10 minute cycle time).

Frame Size Selection Tables 60 Hz, 1750 RPM



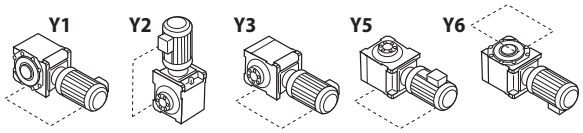
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	29.2	26.1	23.6	21.9	19.9	17.2	15.6	14.2	11.6	9.78	8.45	7.03	5.74	4.20	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP ***(kW)***	**19.0** ***(14.2)***	**16.9** ***(12.6)***	**15.4** ***(11.5)***	**14.2** ***(10.6)***	**13.0** ***(9.67)***	**11.2** ***(8.34)***	**10.1** ***(7.56)***	**9.27** ***(6.91)***	**7.54** ***(5.62)***	**6.36** ***(4.74)***	**5.50** ***(4.1)***	**4.57** ***(3.41)***	**3.73** ***(2.78)***	**—** **—**	**4C170**
Output Torque in•lbs *(N•m)*	37695 *(4260)*	37695 *(4260)*	37695 *(4260)*	37695 *(4260)*	37695 *(4260)*	37695 *(4260)*	37695 *(4260)*	37695 *(4260)*	37695 *(4260)*	37695 *(4260)*	37695 *(4260)*	37695 *(4260)*	37695 *(4260)*	— —	
Hollow Shaft OHL lbs *(N)*	8495 *(37800)*	8920 *(39700)*	9280 *(41300)*	9595 *(42700)*	9980 *(44400)*	10585 *(47100)*	10990 *(48900)*	11420 *(50800)*	11935 *(53100)*	11935 *(53100)*	11935 *(53100)*	11935 *(53100)*	11935 *(53100)*	— —	
Solid Shaft OHL lbs *(N)*	8540 *(37980)*	9080 *(40380)*	9510 *(42300)*	9830 *(43720)*	10190 *(45320)*	10920 *(48570)*	11330 *(50390)*	11700 *(52040)*	12410 *(55190)*	12820 *(57020)*	12750 *(56710)*	12660 *(56310)*	12590 *(56000)*	— —	
Input Power HP ***(kW)***	**19.0** ***(14.2)***	**16.9** ***(12.6)***	**15.4** ***(11.5)***	**14.2** ***(10.6)***	**13.0** ***(9.67)***	**11.2** ***(8.34)***	**10.1** ***(7.56)***	**9.27** ***(6.91)***	**7.54** ***(5.62)***	**6.36** ***(4.74)***	**5.50** ***(4.1)***	**4.57** ***(3.41)***	**3.73** ***(2.78)***	**—** **—**	**4C175**
Output Torque in•lbs *(N•m)*	37695 *(4260)*	37695 *(4260)*	37695 *(4260)*	37695 *(4260)*	37695 *(4260)*	37695 *(4260)*	37695 *(4260)*	37695 *(4260)*	37695 *(4260)*	37695 *(4260)*	37695 *(4260)*	37695 *(4260)*	37695 *(4260)*	— —	
Hollow Shaft OHL lbs *(N)*	8495 *(37800)*	8920 *(39700)*	9280 *(41300)*	9595 *(42700)*	9980 *(44400)*	10585 *(47100)*	10990 *(48900)*	11420 *(50800)*	11935 *(53100)*	11935 *(53100)*	11935 *(53100)*	11935 *(53100)*	11935 *(53100)*	— —	
Solid Shaft OHL lbs *(N)*	8540 *(37980)*	9080 *(40380)*	9510 *(42300)*	9830 *(43720)*	10190 *(45320)*	10920 *(48570)*	11330 *(50390)*	11700 *(52040)*	12410 *(55190)*	12820 *(57020)*	12750 *(56710)*	12660 *(56310)*	12590 *(56000)*	— —	
Input Power HP ***(kW)***	**17.6** ***(13.1)***	**17.3** ***(12.9)***	**17.3** ***(12.9)***	**13.2** ***(9.86)***	**13.2** ***(9.86)***	**14.1** ***(10.5)***	**13.0** ***(9.67)***	**13.0** ***(9.67)***	**9.99** ***(7.45)***	**7.71** ***(5.75)***	**5.93** ***(4.42)***	**4.65** ***(3.47)***	**4.65** ***(3.47)***	**—** **—**	**4D160**
Output Torque in•lbs *(N•m)*	34600 *(3910)*	38580 *(4360)*	42210 *(4770)*	35130 *(3970)*	38405 *(4340)*	47430 *(5360)*	48230 *(5450)*	52740 *(5960)*	49910 *(5640)*	45750 *(5170)*	40615 *(4590)*	38405 *(4340)*	47075 *(5320)*	— —	
Hollow Shaft OHL lbs *(N)*	14635 *(65100)*	14945 *(66500)*	15170 *(67500)*	16205 *(72100)*	16475 *(73300)*	16635 *(74000)*	17150 *(76300)*	17400 *(77400)*	18410 *(81900)*	19040 *(84700)*	19735 *(87800)*	20005 *(89000)*	18860 *(83900)*	— —	
Solid Shaft OHL lbs *(N)*	12230 *(54390)*	13000 *(57820)*	13630 *(60620)*	14090 *(62670)*	14590 *(64890)*	15170 *(67470)*	15500 *(68940)*	15790 *(70230)*	16360 *(72760)*	16690 *(74230)*	16660 *(74100)*	16620 *(73920)*	16590 *(73790)*	— —	
Input Power HP ***(kW)***	**25.2** ***(18.8)***	**21.6** ***(16.1)***	**21.6** ***(16.1)***	**20.2** ***(15.1)***	**20.2** ***(15.1)***	**15.3** ***(11.4)***	**15.3** ***(11.4)***	**15.3** ***(11.4)***	**10.6** ***(7.91)***	**10.1** ***(7.53)***	**7.71** ***(5.75)***	**7.58** ***(5.65)***	**5.23** ***(3.9)***	**—** **—**	**4D165**
Output Torque in•lbs *(N•m)*	49910 *(5640)*	48050 *(5430)*	52565 *(5940)*	53715 *(6070)*	58670 *(6630)*	51590 *(5830)*	56900 *(6430)*	62210 *(7030)*	53005 *(5990)*	59910 *(6770)*	52830 *(5970)*	62565 *(7070)*	52830 *(5970)*	— —	
Hollow Shaft OHL lbs *(N)*	13395 *(59600)*	14185 *(63100)*	14340 *(63800)*	14700 *(65400)*	14835 *(66000)*	16295 *(72500)*	16455 *(73200)*	15960 *(71000)*	17870 *(79500)*	16500 *(73400)*	17890 *(79600)*	15915 *(70800)*	17915 *(79700)*	— —	
Solid Shaft OHL lbs *(N)*	12230 *(54390)*	13000 *(57820)*	13630 *(60620)*	14090 *(62670)*	14590 *(64890)*	15170 *(67470)*	15500 *(68940)*	15790 *(70230)*	16360 *(72760)*	16690 *(74230)*	16660 *(74100)*	16620 *(73920)*	16590 *(73790)*	— —	
Input Power HP ***(kW)***	**26.4** ***(19.7)***	**26.1** ***(19.5)***	**26.1** ***(19.5)***	**21.2** ***(15.8)***	**21.2** ***(15.8)***	**18.9** ***(14.1)***	**16.1** ***(12)***	**15.7** ***(11.7)***	**12.8** ***(9.54)***	**10.8** ***(8.04)***	**9.32** ***(6.95)***	**7.75** ***(5.78)***	**6.33** ***(4.72)***	**—** **—**	**4D170**
Output Torque in•lbs *(N•m)*	52035 *(5880)*	58315 *(6590)*	63805 *(7210)*	56280 *(6360)*	61590 *(6960)*	63980 *(7230)*	59820 *(6760)*	63980 *(7230)*	63980 *(7230)*	63980 *(7230)*	63980 *(7230)*	63980 *(7230)*	63980 *(7230)*	— —	
Hollow Shaft OHL lbs *(N)*	13240 *(58900)*	13350 *(59400)*	13420 *(59700)*	14475 *(64400)*	14610 *(65000)*	15305 *(68100)*	16205 *(72100)*	15555 *(69200)*	15555 *(69200)*	15555 *(69200)*	15555 *(69200)*	15555 *(69200)*	15555 *(69200)*	— —	
Solid Shaft OHL lbs *(N)*	12230 *(54390)*	13000 *(57820)*	13630 *(60620)*	14090 *(62670)*	14590 *(64890)*	15170 *(67470)*	15500 *(68940)*	15790 *(70230)*	16360 *(72760)*	16690 *(74230)*	16660 *(74100)*	16620 *(73920)*	16590 *(73790)*	— —	
Input Power HP ***(kW)***	**32.3** ***(24.1)***	**28.7** ***(21.4)***	**26.1** ***(19.5)***	**24.0** ***(17.9)***	**22.0** ***(16.4)***	**18.9** ***(14.1)***	**17.2** ***(12.8)***	**15.7** ***(11.7)***	**12.8** ***(9.54)***	**10.8** ***(8.04)***	**9.32** ***(6.95)***	**7.75** ***(5.78)***	**6.33** ***(4.72)***	**—** **—**	**4D175**
Output Torque in•lbs *(N•m)*	63715 *(7200)*	63980 *(7230)*	63980 *(7230)*	63980 *(7230)*	63980 *(7230)*	63980 *(7230)*	63980 *(7230)*	63980 *(7230)*	63980 *(7230)*	63980 *(7230)*	63980 *(7230)*	63980 *(7230)*	63980 *(7230)*	— —	
Hollow Shaft OHL lbs *(N)*	12295 *(54700)*	12900 *(57400)*	13420 *(59700)*	13870 *(61700)*	14410 *(64100)*	15305 *(68100)*	15555 *(69200)*	15555 *(69200)*	15555 *(69200)*	15555 *(69200)*	15555 *(69200)*	15555 *(69200)*	15555 *(69200)*	— —	
Solid Shaft OHL lbs *(N)*	12230 *(54390)*	13000 *(57820)*	13630 *(60620)*	14090 *(62670)*	14590 *(64890)*	15170 *(67470)*	15500 *(68940)*	15790 *(70230)*	16360 *(72760)*	16690 *(74230)*	16660 *(74100)*	16620 *(73920)*	16590 *(73790)*	— —	

Frame Size Selection Tables 60 Hz, 1750 RPM

Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions [1]

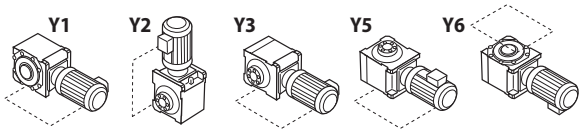


Dimensions on pages 2.156 - 2.166

Output RPM	159	135	125	109	97.2	83.3	79.5	70.0	62.5	50.0	44.9	38.0	33.0	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	**71.6**	**71.6**	**71.6**	**71.6**	**71.6**	**55.7**	**55.7**	**55.7**	**55.7**	**55.7**	**55.7**	**49.9**	**43.4**	
(kW)	***(53.4)***	***(53.4)***	***(53.4)***	***(53.4)***	***(53.4)***	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(37.2)***	***(32.4)***	
Output Torque in•lbs	24955	30440	33270	38050	41590	38760	41415	45305	51770	65050	71160	75405	75760	
(N•m)	*(2820)*	*(3440)*	*(3760)*	*(4300)*	*(4700)*	*(4380)*	*(4680)*	*(5120)*	*(5850)*	*(7350)*	*(8040)*	*(8520)*	*(8560)*	**4D180**
Hollow Shaft OHL lbs	8340	8540	8610	8675	8720	9620	9665	9710	9730	9640	9575	10000	10700	
(N)	*(37100)*	*(38000)*	*(38300)*	*(38600)*	*(38800)*	*(42800)*	*(43000)*	*(43200)*	*(43300)*	*(42900)*	*(42600)*	*(44500)*	*(47600)*	
Solid Shaft OHL lbs	6480	6480	6480	6480	6480	6830	7030	7620	8140	9230	9770	10710	11480	
(N)	*(28820)*	*(28820)*	*(28820)*	*(28820)*	*(28820)*	*(30370)*	*(31260)*	*(33890)*	*(36200)*	*(41050)*	*(43450)*	*(47630)*	*(51060)*	
Input Power HP	**80.5**	**80.5**	**80.5**	**80.5**	**80.5**	**60.3**	**60.3**	**60.3**	**60.3**	**60.3**	**56.1**	**49.9**	**44.3**	
(kW)	***(60.0)***	***(60.0)***	***(60.0)***	***(60.0)***	***(60.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(41.8)***	***(37.2)***	***(33.0)***	
Output Torque in•lbs	28050	34155	37430	42740	46725	42035	44865	49115	56105	70540	71690	75405	77175	
(N•m)	*(3170)*	*(3860)*	*(4230)*	*(4830)*	*(5280)*	*(4750)*	*(5070)*	*(5550)*	*(6340)*	*(7970)*	*(8100)*	*(8520)*	*(8720)*	**4D185**
Hollow Shaft OHL lbs	8090	8225	8270	8315	8315	9350	9375	9395	9375	9195	9530	10000	10565	
(N)	*(36000)*	*(36600)*	*(36800)*	*(37000)*	*(37000)*	*(37000)*	*(41700)*	*(41800)*	*(41700)*	*(40900)*	*(42400)*	*(44500)*	*(47000)*	
Solid Shaft OHL lbs	6480	6480	6480	6480	6480	6830	7030	7620	8140	9230	9770	10710	11480	
(N)	*(28820)*	*(28820)*	*(28820)*	*(28820)*	*(28820)*	*(30370)*	*(31260)*	*(33890)*	*(36200)*	*(41050)*	*(43450)*	*(47630)*	*(51060)*	
Input Power HP	**55.7**	**55.7**	**55.7**	**55.7**	**55.7**	**45.5**	**45.5**	**45.5**	**45.5**	**37.0**	**37.0**	**36.6**	**34.2**	
(kW)	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(33.9)***	***(33.9)***	***(33.9)***	***(33.9)***	***(27.6)***	***(27.6)***	***(27.3)***	***(25.5)***	
Output Torque in•lbs	19380	23625	25840	29555	32300	31680	33805	36990	42300	43270	47345	55310	59645	
(N•m)	*(2190)*	*(2670)*	*(2920)*	*(3340)*	*(3650)*	*(3580)*	*(3820)*	*(4180)*	*(4780)*	*(4890)*	*(5350)*	*(6250)*	*(6740)*	**4E170**
Hollow Shaft OHL lbs	11870	12360	12585	12900	13125	14025	14185	14430	14745	15915	16160	16590	17175	
(N)	*(52800)*	*(55000)*	*(56000)*	*(57400)*	*(58400)*	*(62400)*	*(63100)*	*(64200)*	*(65600)*	*(70800)*	*(71900)*	*(73800)*	*(76400)*	
Solid Shaft OHL lbs	9770	9770	9770	9770	9770	10220	10480	11230	11890	13300	14030	15220	16200	
(N)	*(43450)*	*(43450)*	*(43450)*	*(43450)*	*(43450)*	*(45450)*	*(46610)*	*(49950)*	*(52880)*	*(59150)*	*(62400)*	*(67690)*	*(72050)*	
Input Power HP	**60.3**	**60.3**	**60.3**	**60.3**	**60.3**	**49.6**	**49.6**	**49.6**	**49.6**	**40.4**	**40.4**	**40.4**	**40.4**	
(kW)	***(45.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(37.0)***	***(37.0)***	***(37.0)***	***(37.0)***	***(30.1)***	***(30.1)***	***(30.1)***	***(30.1)***	
Output Torque in•lbs	21060	25660	28050	32035	35040	34600	36900	40350	46105	47165	51590	60970	70440	
(N•m)	*(2380)*	*(2900)*	*(3170)*	*(3620)*	*(3960)*	*(3910)*	*(4170)*	*(4560)*	*(5210)*	*(5330)*	*(5830)*	*(6890)*	*(7960)*	**4E175**
Hollow Shaft OHL lbs	11755	12230	12430	12720	12925	13825	13960	14185	14455	15620	15845	16160	16365	
(N)	*(52300)*	*(54400)*	*(55300)*	*(56600)*	*(57500)*	*(61500)*	*(62100)*	*(63100)*	*(64300)*	*(69500)*	*(70500)*	*(71900)*	*(72800)*	
Solid Shaft OHL lbs	9770	9770	9770	9770	9770	10220	10480	11230	11890	13300	14030	15220	16200	
(N)	*(43450)*	*(43450)*	*(43450)*	*(43450)*	*(43450)*	*(45450)*	*(46610)*	*(49950)*	*(52880)*	*(59150)*	*(62400)*	*(67690)*	*(72050)*	
Input Power HP	**71.6**	**71.6**	**71.6**	**71.6**	**71.6**	**55.7**	**55.7**	**55.7**	**55.7**	**55.7**	**55.7**	**55.7**	**43.4**	
(kW)	***(53.4)***	***(53.4)***	***(53.4)***	***(53.4)***	***(53.4)***	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(32.4)***	
Output Torque in•lbs	24955	30440	33270	38050	41590	38760	41415	45305	51770	65040	71150	84070	75750	
(N•m)	*(2820)*	*(3440)*	*(3760)*	*(4300)*	*(4700)*	*(4380)*	*(4680)*	*(5120)*	*(5850)*	*(7350)*	*(8040)*	*(9500)*	*(8560)*	**4E180**
Hollow Shaft OHL lbs	11465	11870	12050	12295	12430	13510	13645	13825	14050	14320	14410	14475	15980	
(N)	*(51000)*	*(52800)*	*(53600)*	*(54700)*	*(55300)*	*(60100)*	*(60700)*	*(61500)*	*(62500)*	*(63700)*	*(64100)*	*(64400)*	*(71100)*	
Solid Shaft OHL lbs	9770	9770	9770	9770	9770	10220	10480	11230	11890	13300	14030	15220	16200	
(N)	*(43450)*	*(43450)*	*(43450)*	*(43450)*	*(43450)*	*(45450)*	*(46610)*	*(49950)*	*(52880)*	*(59150)*	*(62400)*	*(67690)*	*(72050)*	
Input Power HP	**80.5**	**80.5**	**80.5**	**80.5**	**80.5**	**60.3**	**60.3**	**60.3**	**60.3**	**60.3**	**60.3**	**60.3**	**52.3**	
(kW)	***(60.0)***	***(60.0)***	***(60.0)***	***(60.0)***	***(60.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(39.0)***	
Output Torque in•lbs	28050	34155	37430	42740	46725	42035	44865	49115	56105	70530	77165	91160	91160	
(N•m)	*(3170)*	*(3860)*	*(4230)*	*(4830)*	*(5280)*	*(4750)*	*(5070)*	*(5550)*	*(6340)*	*(7970)*	*(8720)*	*(10300)*	*(10300)*	**4E185**
Hollow Shaft OHL lbs	11240	11600	11755	11935	12070	13285	13400	13530	13710	13935	13960	13935	14860	
(N)	*(50000)*	*(51600)*	*(52300)*	*(53100)*	*(53700)*	*(59100)*	*(59600)*	*(60200)*	*(61000)*	*(62000)*	*(62100)*	*(62000)*	*(66100)*	
Solid Shaft OHL lbs	9770	9770	9770	9770	9770	10220	10480	11230	11890	13300	14030	15220	16200	
(N)	*(43450)*	*(43450)*	*(43450)*	*(43450)*	*(43450)*	*(45450)*	*(46610)*	*(49950)*	*(52880)*	*(59150)*	*(62400)*	*(67690)*	*(72050)*	

Notes: [1] For selections noted with shade, the continuous duty thermal rating is up to 50HP and only when Y2 mounting, the additional duty cycle limit to be applied up to 75% Equivalent Duty (10 minute cycle time).

Frame Size Selection Tables 60 Hz, 1750 RPM



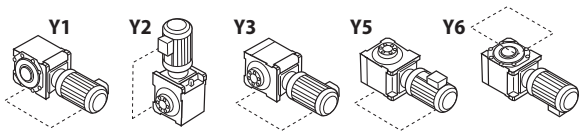
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	29.2	26.1	23.6	21.9	19.9	17.2	15.6	14.2	11.6	9.78	8.45	7.03	5.74	4.20	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	**39.0**	**34.6**	**31.6**	**29.1**	**26.6**	**22.9**	**20.8**	**18.9**	**15.4**	**13.0**	**11.3**	**9.35**	**7.63**	—	4D180
(kW)	***(29.1)***	***(25.8)***	***(23.6)***	***(21.7)***	***(19.8)***	***(17.1)***	***(15.5)***	***(14.1)***	***(11.5)***	***(9.71)***	***(8.39)***	***(6.97)***	***(5.69)***	—	
Output Torque in•lbs	77175	77175	77175	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	—	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	—	
Hollow Shaft OHL lbs	11215	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	—	
(N)	*(49900)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	—	
Solid Shaft OHL lbs	12230	13000	13630	14090	14590	15170	15500	15790	16360	16690	16660	16620	16590	—	
(N)	*(54390)*	*(57820)*	*(60620)*	*(62670)*	*(64890)*	*(67470)*	*(68940)*	*(70230)*	*(72760)*	*(74230)*	*(74100)*	*(73920)*	*(73790)*	—	
Input Power HP	**39.0**	**34.6**	**31.6**	**29.1**	**26.6**	**22.9**	**20.8**	**18.9**	**15.4**	**13.0**	**11.3**	**9.35**	**7.63**	—	4D185
(kW)	***(29.1)***	***(25.8)***	***(23.6)***	***(21.7)***	***(19.8)***	***(17.1)***	***(15.5)***	***(14.1)***	***(11.5)***	***(9.71)***	***(8.39)***	***(6.97)***	***(5.69)***	—	
Output Torque in•lbs	77175	77175	77175	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	—	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	—	
Hollow Shaft OHL lbs	11215	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	—	
(N)	*(49900)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	—	
Solid Shaft OHL lbs	12230	13000	13630	14090	14590	15170	15500	15790	16360	16690	16660	16620	16590	—	
(N)	*(54390)*	*(57820)*	*(60620)*	*(62670)*	*(64890)*	*(67470)*	*(68940)*	*(70230)*	*(72760)*	*(74230)*	*(74100)*	*(73920)*	*(73790)*	—	
Input Power HP	**26.4**	**26.1**	**26.1**	**21.2**	**21.2**	**19.2**	**16.1**	**16.1**	**13.1**	**11.3**	**9.59**	**7.94**	**6.45**	—	4E170
(kW)	***(19.7)***	***(19.5)***	***(19.5)***	***(15.8)***	***(15.8)***	***(14.3)***	***(12)***	***(12)***	***(9.75)***	***(8.39)***	***(7.15)***	***(5.92)***	***(4.81)***	—	
Output Torque in•lbs	52035	58315	63805	56280	61590	64600	59820	65485	65310	66725	65750	65485	65220	—	
(N•m)	*(5880)*	*(6590)*	*(7210)*	*(6360)*	*(6960)*	*(7300)*	*(6760)*	*(7400)*	*(7380)*	*(7540)*	*(7430)*	*(7400)*	*(7370)*	—	
Hollow Shaft OHL lbs	18545	18880	19150	20275	20590	20525	20770	20480	20500	20435	20480	20480	20500	—	
(N)	*(82500)*	*(84000)*	*(85200)*	*(90200)*	*(91600)*	*(91300)*	*(92400)*	*(91100)*	*(91200)*	*(90900)*	*(91100)*	*(91100)*	*(91200)*	—	
Solid Shaft OHL lbs	17180	18190	19010	19590	20230	20610	20820	21020	21380	21620	21700	21790	21870	—	
(N)	*(76410)*	*(80900)*	*(84550)*	*(87130)*	*(89980)*	*(91670)*	*(92600)*	*(93490)*	*(95090)*	*(96160)*	*(96520)*	*(96920)*	*(97270)*	—	
Input Power HP	**32.3**	**32.3**	**29.5**	**26.1**	**24.8**	**21.3**	**20.2**	**20.2**	**15.2**	**14.4**	**11.1**	**9.59**	**7.54**	—	4E175
(kW)	***(24.1)***	***(24.1)***	***(22)***	***(19.5)***	***(18.5)***	***(15.9)***	***(15.1)***	***(15.1)***	***(11.3)***	***(10.7)***	***(8.29)***	***(7.15)***	***(5.62)***	—	
Output Torque in•lbs	63715	71945	72035	69465	72035	72035	75130	82210	75750	85040	76195	79115	76195	—	
(N•m)	*(7200)*	*(8130)*	*(8140)*	*(7850)*	*(8140)*	*(8140)*	*(8490)*	*(9290)*	*(8560)*	*(9610)*	*(8610)*	*(8940)*	*(8610)*	—	
Hollow Shaft OHL lbs	17690	17890	18545	19310	19825	20140	19985	19625	19960	19490	19940	19805	19940	—	
(N)	*(78700)*	*(79600)*	*(82500)*	*(85900)*	*(88200)*	*(89600)*	*(88900)*	*(87300)*	*(88800)*	*(86700)*	*(88700)*	*(88100)*	*(88700)*	—	
Solid Shaft OHL lbs	17180	18190	19010	19590	20230	20610	20820	21020	21380	21620	21700	21790	21870	—	
(N)	*(76410)*	*(80900)*	*(84550)*	*(87130)*	*(89980)*	*(91670)*	*(92600)*	*(93490)*	*(95090)*	*(96160)*	*(96520)*	*(96920)*	*(97270)*	—	
Input Power HP	**41.0**	**40.2**	**40.2**	**32.3**	**32.3**	**26.1**	**25.2**	**25.2**	**20.2**	**16.1**	**13.1**	**11.8**	**9.59**	—	4E180
(kW)	***(30.6)***	***(30.0)***	***(30.0)***	***(24.1)***	***(24.1)***	***(19.5)***	***(18.8)***	***(18.8)***	***(15.1)***	***(12)***	***(9.75)***	***(8.8)***	***(7.15)***	—	
Output Torque in•lbs	81060	89390	98240	85840	93815	88150	93805	102665	100885	95575	89380	97345	97345	—	
(N•m)	*(9160)*	*(10100)*	*(11100)*	*(9700)*	*(10600)*	*(9960)*	*(10600)*	*(11600)*	*(11400)*	*(10800)*	*(10100)*	*(11000)*	*(11000)*	—	
Hollow Shaft OHL lbs	16430	16610	16635	18165	18230	19330	19060	18455	18680	18970	19265	18860	18880	—	
(N)	*(73100)*	*(73900)*	*(74000)*	*(80800)*	*(81100)*	*(86000)*	*(84800)*	*(82100)*	*(83100)*	*(84400)*	*(85700)*	*(83900)*	*(84000)*	—	
Solid Shaft OHL lbs	17180	18190	19010	19590	20230	20610	20820	21020	21380	21620	21700	21790	21870	—	
(N)	*(76410)*	*(80900)*	*(84550)*	*(87130)*	*(89980)*	*(91670)*	*(92600)*	*(93490)*	*(95090)*	*(96160)*	*(96520)*	*(96920)*	*(97270)*	—	
Input Power HP	**51.9**	**46.0**	**42.1**	**38.6**	**35.3**	**30.4**	**27.6**	**25.2**	**20.5**	**17.3**	**15.0**	**12.4**	**10.2**	—	4E185
(kW)	***(38.7)***	***(34.3)***	***(31.4)***	***(28.8)***	***(26.3)***	***(22.7)***	***(20.6)***	***(18.8)***	***(15.3)***	***(12.9)***	***(11.2)***	***(9.28)***	***(7.57)***	—	
Output Torque in•lbs	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	
Hollow Shaft OHL lbs	14835	15665	16905	16905	17580	18430	18430	18430	18430	18430	18430	18430	18430	—	
(N)	*(66000)*	*(69700)*	*(72500)*	*(75200)*	*(78200)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	17180	18190	19010	19590	20230	20610	20820	21020	21380	21620	21700	21790	21870	—	
(N)	*(76410)*	*(80900)*	*(84550)*	*(87130)*	*(89980)*	*(91670)*	*(92600)*	*(93490)*	*(95090)*	*(96160)*	*(96520)*	*(96920)*	*(97270)*	—	

Frame Size Selection Tables 60 Hz, 1750 RPM

Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions [1]

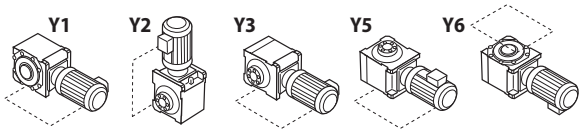


Dimensions on pages 2.156 - 2.166

Output RPM	159	135	125	109	97.2	83.3	79.5	70.0	62.5	50.0	44.9	38.0	33.0	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	**91.7**	**91.7**	**91.7**	**91.7**	**91.7**	**67.9**	**67.9**	**67.9**	**67.9**	**67.9**	**67.9**	**65.6**	**58.9**	
(kW)	***(68.4)***	***(68.4)***	***(68.4)***	***(68.4)***	***(68.4)***	***(50.6)***	***(50.6)***	***(50.6)***	***(50.6)***	***(50.6)***	***(50.6)***	***(48.9)***	***(43.9)***	
Output Torque in•lbs	31945	39025	42655	48760	53270	47345	50440	55220	63095	79300	86735	99125	102665	
(N•m)	*(3610)*	*(4410)*	*(4820)*	*(5510)*	*(6020)*	*(5350)*	*(5700)*	*(6240)*	*(7130)*	*(8960)*	*(9800)*	*(11200)*	*(11600)*	4E190
Hollow Shaft OHL lbs	10945	11240	11350	11510	11575	12900	12970	13080	13215	13285	13260	13375	14005	
(N)	*(48700)*	*(50000)*	*(50500)*	*(51200)*	*(51500)*	*(57400)*	*(57700)*	*(58200)*	*(58800)*	*(59100)*	*(59000)*	*(59500)*	*(62300)*	
Solid Shaft OHL lbs	9770	9770	9770	9770	9770	10220	10480	11230	11890	13300	14030	15220	16200	
(N)	*(43450)*	*(43450)*	*(43450)*	*(43450)*	*(43450)*	*(45450)*	*(46610)*	*(49950)*	*(52880)*	*(59150)*	*(62400)*	*(67690)*	*(72050)*	
Input Power HP	**101**	**101**	**101**	**101**	**101**	**73.8**	**73.8**	**73.8**	**73.8**	**73.8**	**73.6**	**65.6**	**58.9**	
(kW)	***(75.0)***	***(75.0)***	***(75.0)***	***(75.0)***	***(75.0)***	***(55.0)***	***(55.0)***	***(55.0)***	***(55.0)***	***(55.0)***	***(54.9)***	***(48.9)***	***(43.9)***	
Output Torque in•lbs	35040	42740	46725	53450	58405	51415	54865	60000	68580	86205	93815	99125	102665	
(N•m)	*(3960)*	*(4830)*	*(5280)*	*(6040)*	*(6600)*	*(5810)*	*(6200)*	*(6780)*	*(7750)*	*(9740)*	*(10600)*	*(11200)*	*(11600)*	4E195
Hollow Shaft OHL lbs	10720	10970	11060	11150	11215	12585	12655	12745	12810	12765	12720	13375	14005	
(N)	*(47700)*	*(48800)*	*(49200)*	*(49600)*	*(49900)*	*(56000)*	*(56300)*	*(56700)*	*(57000)*	*(56800)*	*(56600)*	*(59500)*	*(62300)*	
Solid Shaft OHL lbs	9770	9770	9770	9770	9770	10220	10480	11230	11890	13300	14030	15220	16200	
(N)	*(43450)*	*(43450)*	*(43450)*	*(43450)*	*(43450)*	*(45450)*	*(46610)*	*(49950)*	*(52880)*	*(59150)*	*(62400)*	*(67690)*	*(72050)*	
Input Power HP	**71.6**	**71.6**	**71.6**	**71.6**	**71.6**	**55.7**	**55.7**	**55.7**	**55.7**	**55.7**	**55.7**	**55.7**	**43.4**	
(kW)	***(53.4)***	***(53.4)***	***(53.4)***	***(53.4)***	***(53.4)***	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(32.4)***	
Output Torque in•lbs	24955	30440	33270	38050	41590	38760	41415	45305	51770	65040	71160	84080	75760	
(N•m)	*(2820)*	*(3440)*	*(3760)*	*(4300)*	*(4700)*	*(4380)*	*(4680)*	*(5120)*	*(5850)*	*(7350)*	*(8040)*	*(9500)*	*(8560)*	4F180
Hollow Shaft OHL lbs	20345	21310	21780	22410	22930	24500	24950	25400	26075	27200	27875	28550	29000	
(N)	*(90500)*	*(94800)*	*(96900)*	*(99700)*	*(102000)*	*(109000)*	*(111000)*	*(113000)*	*(116000)*	*(121000)*	*(124000)*	*(127000)*	*(129000)*	
Solid Shaft OHL lbs	17510	17510	17510	17510	17510	18260	18680	19930	21040	23340	24520	26590	28060	
(N)	*(77880)*	*(77880)*	*(77880)*	*(77880)*	*(77880)*	*(81220)*	*(83080)*	*(88640)*	*(93580)*	*(103810)*	*(109060)*	*(118270)*	*(124810)*	
Input Power HP	**80.5**	**80.5**	**80.5**	**80.5**	**80.5**	**60.3**	**60.3**	**60.3**	**60.3**	**60.3**	**60.3**	**60.3**	**52.3**	
(kW)	***(60.0)***	***(60.0)***	***(60.0)***	***(60.0)***	***(60.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(39.0)***	
Output Torque in•lbs	28050	34155	37430	42740	46725	42035	44865	49115	56105	70530	77165	91150	91150	
(N•m)	*(3170)*	*(3860)*	*(4230)*	*(4830)*	*(5280)*	*(4750)*	*(5070)*	*(5550)*	*(6340)*	*(7970)*	*(8720)*	*(10300)*	*(10300)*	4F185
Hollow Shaft OHL lbs	20140	21060	21510	22095	22480	24275	24500	25175	25850	26975	27425	28100	28325	
(N)	*(89600)*	*(93700)*	*(95700)*	*(98300)*	*(100000)*	*(108000)*	*(109000)*	*(112000)*	*(115000)*	*(120000)*	*(122000)*	*(125000)*	*(126000)*	
Solid Shaft OHL lbs	17510	17510	17510	17510	17510	18260	18680	19930	21040	23340	24520	26590	28060	
(N)	*(77880)*	*(77880)*	*(77880)*	*(77880)*	*(77880)*	*(81220)*	*(83080)*	*(88640)*	*(93580)*	*(103810)*	*(109060)*	*(118270)*	*(124810)*	
Input Power HP	**91.7**	**91.7**	**91.7**	**91.7**	**91.7**	**67.9**	**67.9**	**67.9**	**67.9**	**67.9**	**67.9**	**67.9**	**67.9**	
(kW)	***(68.4)***	***(68.4)***	***(68.4)***	***(68.4)***	***(68.4)***	***(50.6)***	***(50.6)***	***(50.6)***	***(50.6)***	***(50.6)***	***(50.6)***	***(50.6)***	***(50.6)***	
Output Torque in•lbs	31945	39025	42655	48760	53270	47345	50440	55220	63095	79290	86725	102665	118580	
(N•m)	*(3610)*	*(4410)*	*(4820)*	*(5510)*	*(6020)*	*(5350)*	*(5700)*	*(6240)*	*(7130)*	*(8960)*	*(9800)*	*(11600)*	*(13400)*	4F190
Hollow Shaft OHL lbs	19870	20745	21150	21715	22120	24050	24275	24725	25400	26300	26750	27425	26975	
(N)	*(88400)*	*(92300)*	*(94100)*	*(96600)*	*(98400)*	*(107000)*	*(108000)*	*(110000)*	*(113000)*	*(117000)*	*(119000)*	*(122000)*	*(120000)*	
Solid Shaft OHL lbs	17510	17510	17510	17510	17510	18260	18680	19930	21040	23340	24520	26590	28060	
(N)	*(77880)*	*(77880)*	*(77880)*	*(77880)*	*(77880)*	*(81220)*	*(83080)*	*(88640)*	*(93580)*	*(103810)*	*(109060)*	*(118270)*	*(124810)*	
Input Power HP	**101**	**101**	**101**	**101**	**101**	**73.8**	**73.8**	**73.8**	**73.8**	**73.8**	**73.8**	**73.8**	**73.8**	
(kW)	***(75.0)***	***(75.0)***	***(75.0)***	***(75.0)***	***(75.0)***	***(55.0)***	***(55.0)***	***(55.0)***	***(55.0)***	***(55.0)***	***(55.0)***	***(55.0)***	***(55.0)***	
Output Torque in•lbs	35040	42740	46725	53450	58405	51415	54865	60000	68580	86195	94690	111500	128315	
(N•m)	*(3960)*	*(4830)*	*(5280)*	*(6040)*	*(6600)*	*(5810)*	*(6200)*	*(6780)*	*(7750)*	*(9740)*	*(10700)*	*(12600)*	*(14500)*	4F195
Hollow Shaft OHL lbs	19670	20500	20880	21400	21780	23605	24050	24500	24950	25850	26300	26750	26525	
(N)	*(87500)*	*(91200)*	*(92900)*	*(95200)*	*(96900)*	*(105000)*	*(107000)*	*(109000)*	*(111000)*	*(115000)*	*(117000)*	*(119000)*	*(118000)*	
Solid Shaft OHL lbs	17510	17510	17510	17510	17510	18260	18680	19930	21040	23340	24520	26590	28060	
(N)	*(77880)*	*(77880)*	*(77880)*	*(77880)*	*(77880)*	*(81220)*	*(83080)*	*(88640)*	*(93580)*	*(103810)*	*(109060)*	*(118270)*	*(124810)*	

Notes: [1] For selections noted with shade, the continuous duty thermal rating for 618# input is up to 50HP, 619# input is up to 75HP, and only when Y2 mounting, the additional duty cycle limit to be applied up to 75% Equivalent Duty (10 minute cycle time).

Frame Size Selection Tables 60 Hz, 1750 RPM



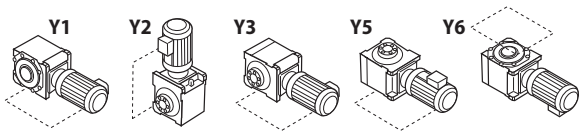
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	29.2	26.1	23.6	21.9	19.9	17.2	15.6	14.2	11.6	9.78	8.45	7.03	5.74	4.20	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	**51.9**	**46.0**	**42.1**	**38.6**	**35.3**	**30.4**	**27.6**	**25.2**	**20.5**	**17.3**	**15.0**	**12.4**	**10.2**	—	4E190
(kW)	***(38.7)***	***(34.3)***	***(31.4)***	***(28.8)***	***(26.3)***	***(22.7)***	***(20.6)***	***(18.8)***	***(15.3)***	***(12.9)***	***(11.2)***	***(9.28)***	***(7.57)***	—	
Output Torque in•lbs	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	
Hollow Shaft OHL lbs	15665	15665	16300	16905	17580	18430	18430	18430	18430	18430	18430	18430	18430	—	
(N)	*(66000)*	*(69700)*	*(72500)*	*(75200)*	*(78200)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	17180	18190	19010	19590	20230	20610	20820	21020	21380	21620	21700	21790	21870	—	
(N)	*(76410)*	*(80900)*	*(84550)*	*(87130)*	*(89980)*	*(91670)*	*(92600)*	*(93490)*	*(95090)*	*(96160)*	*(96520)*	*(96920)*	*(97270)*	—	
Input Power HP	**51.9**	**46.0**	**42.1**	**38.6**	**35.3**	**30.4**	**27.6**	**25.2**	**20.5**	**17.3**	**15.0**	**12.4**	**10.2**	—	4E195
(kW)	***(38.7)***	***(34.3)***	***(31.4)***	***(28.8)***	***(26.3)***	***(22.7)***	***(20.6)***	***(18.8)***	***(15.3)***	***(12.9)***	***(11.2)***	***(9.28)***	***(7.57)***	—	
Output Torque in•lbs	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	
Hollow Shaft OHL lbs	14835	15665	16300	16905	17580	18430	18430	18430	18430	18430	18430	18430	18430	—	
(N)	*(66000)*	*(69700)*	*(72500)*	*(75200)*	*(78200)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	17180	18190	19010	19590	20230	20610	20820	21020	21380	21620	21700	21790	21870	—	
(N)	*(76410)*	*(80900)*	*(84550)*	*(87130)*	*(89980)*	*(91670)*	*(92600)*	*(93490)*	*(95090)*	*(96160)*	*(96520)*	*(96920)*	*(97270)*	—	
Input Power HP	**41.0**	**40.2**	**40.2**	**32.3**	**32.3**	**26.1**	**25.2**	**25.2**	**20.2**	**16.1**	**13.1**	**11.8**	**9.59**	—	4F180
(kW)	***(30.6)***	***(30.0)***	***(30.0)***	***(24.1)***	***(24.1)***	***(19.5)***	***(18.8)***	***(18.8)***	***(15.1)***	***(12)***	***(9.75)***	***(8.8)***	***(7.15)***	—	
Output Torque in•lbs	81070	89390	98240	85850	93815	88150	93805	102665	100885	95575	89380	97345	97345	—	
(N•m)	*(9160)*	*(10100)*	*(11100)*	*(9700)*	*(10600)*	*(9960)*	*(10600)*	*(11600)*	*(11400)*	*(10800)*	*(10100)*	*(11000)*	*(11000)*	—	
Hollow Shaft OHL lbs	28775	28325	27875	28550	28100	28325	28100	27650	27875	28100	28325	27875	27875	—	
(N)	*(128000)*	*(126000)*	*(124000)*	*(127000)*	*(125000)*	*(126000)*	*(125000)*	*(123000)*	*(124000)*	*(125000)*	*(126000)*	*(124000)*	*(124000)*	—	
Solid Shaft OHL lbs	28900	28920	28940	28950	28970	28970	28970	28970	28970	28990	29140	29300	29440	—	
(N)	*(128540)*	*(128630)*	*(128720)*	*(128760)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128940)*	*(129610)*	*(130320)*	*(130940)*	—	
Input Power HP	**52.3**	**52.3**	**52.3**	**40.4**	**40.4**	**32.3**	**30.3**	**30.3**	**25.2**	**20.2**	**16.1**	**13.1**	**11.5**	—	4F185
(kW)	***(39)***	***(39)***	***(39)***	***(30.1)***	***(30.1)***	***(24.1)***	***(22.6)***	***(22.6)***	***(18.8)***	***(15.1)***	***(12)***	***(9.79)***	***(8.59)***	—	
Output Torque in•lbs	103540	116810	127430	107080	117695	108850	112385	123005	125660	120350	110620	107965	116810	—	
(N•m)	*(11700)*	*(13200)*	*(14400)*	*(12100)*	*(13300)*	*(12300)*	*(12700)*	*(13900)*	*(14200)*	*(13600)*	*(12500)*	*(12200)*	*(13200)*	—	
Hollow Shaft OHL lbs	27650	27200	26750	27425	27200	27425	27200	26750	26750	26975	27425	27425	27200	—	
(N)	*(123000)*	*(121000)*	*(119000)*	*(122000)*	*(121000)*	*(122000)*	*(121000)*	*(119000)*	*(119000)*	*(120000)*	*(122000)*	*(122000)*	*(121000)*	—	
Solid Shaft OHL lbs	28900	28920	28940	28950	28970	28970	28970	28970	28970	28990	29140	29300	29440	—	
(N)	*(128540)*	*(128630)*	*(128720)*	*(128760)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128940)*	*(129610)*	*(130320)*	*(130940)*	—	
Input Power HP	**67.9**	**55.0**	**55.0**	**47.2**	**47.2**	**41.2**	**32.6**	**32.6**	**28.0**	**24.4**	**20.5**	**18.1**	**15.7**	—	4F190
(kW)	***(50.6)***	***(41)***	***(41)***	***(35.2)***	***(35.2)***	***(30.7)***	***(24.3)***	***(24.3)***	***(20.9)***	***(18.2)***	***(15.3)***	***(13.5)***	***(11.7)***	—	
Output Torque in•lbs	133625	123005	134510	125660	137165	138935	121235	132740	139820	144245	140705	149555	159310	—	
(N•m)	*(15100)*	*(13900)*	*(15200)*	*(14200)*	*(15500)*	*(15700)*	*(13700)*	*(15000)*	*(15800)*	*(16300)*	*(15900)*	*(16900)*	*(18000)*	—	
Hollow Shaft OHL lbs	26300	26750	26300	26750	26300	26075	26975	26525	26075	25850	26075	25625	25175	—	
(N)	*(117000)*	*(119000)*	*(117000)*	*(119000)*	*(117000)*	*(116000)*	*(120000)*	*(118000)*	*(116000)*	*(115000)*	*(116000)*	*(114000)*	*(112000)*	—	
Solid Shaft OHL lbs	28900	28920	28940	28950	28970	28970	28970	28970	28970	28990	29140	29300	29440	—	
(N)	*(128540)*	*(128630)*	*(128720)*	*(128760)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128940)*	*(129610)*	*(130320)*	*(130940)*	—	
Input Power HP	**73.8**	**64.5**	**64.5**	**54.3**	**54.3**	**47.2**	**40.4**	**39.2**	**31.9**	**26.8**	**23.2**	**19.3**	**15.7**	—	4F195
(kW)	***(55)***	***(48.1)***	***(48.1)***	***(40.5)***	***(40.5)***	***(35.2)***	***(30.1)***	***(29.2)***	***(23.8)***	***(20.0)***	***(17.3)***	***(14.4)***	***(11.7)***	—	
Output Torque in•lbs	146015	144245	157540	144245	157540	159310	150440	159310	159310	159310	159310	159310	159310	—	
(N•m)	*(16500)*	*(16300)*	*(17800)*	*(16300)*	*(17800)*	*(18000)*	*(17000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	—	
Hollow Shaft OHL lbs	25850	25850	25400	25850	25400	25175	25625	25175	25175	25175	25175	25175	25175	—	
(N)	*(115000)*	*(115000)*	*(113000)*	*(115000)*	*(113000)*	*(112000)*	*(114000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	—	
Solid Shaft OHL lbs	28900	28920	28940	28950	28970	28970	28970	28970	28970	28990	29140	29300	29440	—	
(N)	*(128540)*	*(128630)*	*(128720)*	*(128760)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128940)*	*(129610)*	*(130320)*	*(130940)*	—	

Frame Size Selection Tables 50 Hz, 1450 RPM

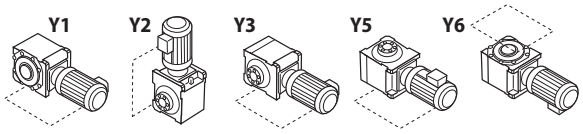
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	132	112	104	90.6	80.6	69.0	65.9	58.0	51.8	41.4	37.2	31.5	27.4	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	**3.15**	**3.15**	**3.15**	**3.15**	**3.15**	**3.15**	—	—	**3.15**	**3.15**	**3.15**	**3.15**	**3.15**	
(kW)	***(2.35)***	***(2.35)***	***(2.35)***	***(2.35)***	***(2.35)***	***(2.35)***	—	—	***(2.35)***	***(2.35)***	***(2.35)***	***(2.35)***	***(2.35)***	
Output Torque in•lbs	1325	1610	1765	2015	2200	2645	—	—	3530	4440	4855	5740	6615	
(N•m)	*(150)*	*(182)*	*(200)*	*(228)*	*(249)*	*(299)*	—	—	*(399)*	*(502)*	*(549)*	*(649)*	*(748)*	**4A100**
Hollow Shaft OHL lbs	3910	4110	4225	4360	4470	4675	—	—	5010	5280	5370	5550	5325	
(N)	*(17400)*	*(18300)*	*(18800)*	*(19400)*	*(19900)*	*(20800)*	—	—	*(22300)*	*(23500)*	*(23900)*	*(24700)*	*(23700)*	
Solid Shaft OHL lbs	3350	3350	3350	3350	3530	3800	—	—	4290	4530	4560	4580	4580	
(N)	*(14900)*	*(14900)*	*(14900)*	*(14900)*	*(15700)*	*(16900)*	—	—	*(19080)*	*(20140)*	*(20280)*	*(20370)*	*(20370)*	
Input Power HP	**4.26**	**4.26**	**4.26**	**4.26**	**4.26**	**4.26**	**—**	**—**	**4.26**	**4.26**	**4.26**	**4.26**	**4.26**	
(kW)	***(3.18)***	***(3.18)***	***(3.18)***	***(3.18)***	***(3.18)***	***(3.18)***	**—**	**—**	***(3.18)***	***(3.18)***	***(3.18)***	***(3.18)***	***(3.18)***	
Output Torque in•lbs	1795	2185	2385	2730	2990	3580	—	—	4785	6015	6575	7775	8935	
(N•m)	*(203)*	*(247)*	*(270)*	*(309)*	*(338)*	*(405)*	—	—	*(541)*	*(680)*	*(743)*	*(879)*	*(1010)*	**4A105**
Hollow Shaft OHL lbs	3840	4045	4135	4270	4360	4540	—	—	4830	5055	5145	4990	4515	
(N)	*(17100)*	*(18000)*	*(18400)*	*(19000)*	*(19400)*	*(20200)*	—	—	*(21500)*	*(22500)*	*(22900)*	*(22200)*	*(20100)*	
Solid Shaft OHL lbs	3350	3350	3350	3350	3530	3800	—	—	4290	4530	4560	4580	4580	
(N)	*(14900)*	*(14900)*	*(14900)*	*(14900)*	*(15700)*	*(16900)*	—	—	*(19080)*	*(20140)*	*(20280)*	*(20370)*	*(20370)*	
Input Power HP	**—**	**—**	**—**	**—**	**—**	**4.76**	**—**	**—**	**4.76**	**4.76**	**4.76**	**4.76**	**4.76**	
(kW)	**—**	**—**	**—**	**—**	**—**	***(3.55)***	**—**	**—**	***(3.55)***	***(3.55)***	***(3.55)***	***(3.55)***	***(3.55)***	
Output Torque in•lbs	—	—	—	—	—	4005	—	—	5335	6715	7345	8680	10000	
(N•m)	—	—	—	—	—	*(453)*	—	—	*(603)*	*(759)*	*(830)*	*(981)*	*(1130)*	**4A110**
Hollow Shaft OHL lbs	—	—	—	—	—	4495	—	—	4765	4965	5035	4650	4020	
(N)	—	—	—	—	—	*(20000)*	—	—	*(21200)*	*(22100)*	*(22400)*	*(20700)*	*(17900)*	
Solid Shaft OHL lbs	—	—	—	—	—	3800	—	—	4290	4530	4560	4580	4580	
(N)	—	—	—	—	—	*(16900)*	—	—	*(19080)*	*(20140)*	*(20280)*	*(20370)*	*(20370)*	
Input Power HP	**—**	**—**	**—**	**—**	**—**	**5.26**	**—**	**—**	**5.26**	**5.26**	**5.26**	**5.23**	**5.23**	
(kW)	**—**	**—**	**—**	**—**	**—**	***(3.92)***	**—**	**—**	***(3.92)***	***(3.92)***	***(3.92)***	***(3.90)***	***(3.90)***	
Output Torque in•lbs	—	—	—	—	—	4420	—	—	5890	7415	8105	9555	10970	
(N•m)	—	—	—	—	—	*(500)*	—	—	*(666)*	*(838)*	*(916)*	*(1080)*	*(1240)*	**4A115**
Hollow Shaft OHL lbs	—	—	—	—	—	4425	—	—	4695	4855	4855	4270	3435	
(N)	—	—	—	—	—	*(19700)*	—	—	*(20900)*	*(21600)*	*(21600)*	*(19000)*	*(15300)*	
Solid Shaft OHL lbs	—	—	—	—	—	3800	—	—	4290	4530	4560	4580	4580	
(N)	—	—	—	—	—	*(16900)*	—	—	*(19080)*	*(20140)*	*(20280)*	*(20370)*	*(20370)*	
Input Power HP	**12.9**	**12.9**	**12.9**	**12.9**	**12.9**	**8.77**	**8.77**	**8.77**	**8.77**	**6.80**	**6.80**	**6.26**	**5.43**	
(kW)	***(9.60)***	***(9.60)***	***(9.60)***	***(9.60)***	***(9.60)***	***(6.54)***	***(6.54)***	***(6.54)***	***(6.54)***	***(5.07)***	***(5.07)***	***(4.67)***	***(4.05)***	
Output Torque in•lbs	5415	6600	7220	8255	9025	7380	7875	8610	9820	9555	10530	11415	11415	
(N•m)	*(612)*	*(746)*	*(816)*	*(933)*	*(1020)*	*(834)*	*(890)*	*(973)*	*(1110)*	*(1080)*	*(1190)*	*(1290)*	*(1290)*	**4A120**
Hollow Shaft OHL lbs	3345	3435	3480	3505	3525	4020	4045	4090	4110	4245	3750	3120	3120	
(N)	*(14900)*	*(15300)*	*(15500)*	*(15600)*	*(15700)*	*(17900)*	*(18000)*	*(18200)*	*(18300)*	*(18900)*	*(16700)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	3350	3350	3350	3350	3530	3800	3890	4110	4290	4530	4560	4580	4580	
(N)	*(14900)*	*(14900)*	*(14900)*	*(14900)*	*(15700)*	*(16900)*	*(17300)*	*(18280)*	*(19080)*	*(20140)*	*(20280)*	*(20370)*	*(20370)*	
Input Power HP	**14.8**	**14.8**	**14.8**	**14.8**	**14.8**	**10.1**	**10.1**	**10.1**	**10.1**	**7.94**	**7.40**	**6.26**	**5.43**	
(kW)	***(11.0)***	***(11.0)***	***(11.0)***	***(11.0)***	***(11.0)***	***(7.51)***	***(7.51)***	***(7.51)***	***(7.51)***	***(5.92)***	***(5.52)***	***(4.67)***	***(4.05)***	
Output Torque in•lbs	6200	7565	8270	9465	10350	8465	9025	9910	11325	11235	11415	11415	11415	
(N•m)	*(701)*	*(855)*	*(935)*	*(1070)*	*(1170)*	*(957)*	*(1020)*	*(1120)*	*(1280)*	*(1270)*	*(1290)*	*(1290)*	*(1290)*	**4A125**
Hollow Shaft OHL lbs	3235	3300	3325	3345	3345	3885	3885	3930	3210	3280	3120	3120	3120	
(N)	*(14400)*	*(14700)*	*(14800)*	*(14900)*	*(14900)*	*(17300)*	*(17300)*	*(17500)*	*(14300)*	*(14600)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	3350	3350	3350	3350	3530	3800	3890	4110	4290	4530	4560	4580	4580	
(N)	*(14900)*	*(14900)*	*(14900)*	*(14900)*	*(15700)*	*(16900)*	*(17300)*	*(18280)*	*(19080)*	*(20140)*	*(20280)*	*(20370)*	*(20370)*	

Frame Size Selection Tables 50 Hz, 1450 RPM



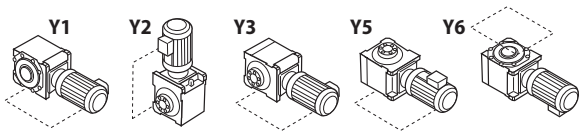
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	24.2	21.6	19.6	18.1	16.5	14.2	13.0	11.8	9.60	8.10	7.00	5.82	4.75	3.48	Frame Size
Ratio	**60**	**67**	**74**	**80**	**88**	**102**	**112**	**123**	**151**	**179**	**207**	**249**	**305**	**417**	
Input Power HP	**2.67**	**2.55**	**2.55**	**1.70**	**1.70**	**1.62**	**1.31**	**1.31**	**1.05**	**0.751**	**0.692**	**0.585**	**0.581**	**0.282**	
(kW)	***(1.99)***	***(1.90)***	***(1.90)***	***(1.27)***	***(1.27)***	***(1.21)***	***(0.975)***	***(0.975)***	***(0.780)***	***(0.560)***	***(0.516)***	***(0.436)***	***(0.433)***	***(0.210)***	
Output Torque in•lbs	6345	6865	7510	5460	5970	6600	5865	6415	6305	5370	5725	5820	7085	4695	
(N•m)	*(717)*	*(776)*	*(849)*	*(617)*	*(675)*	*(746)*	*(663)*	*(725)*	*(713)*	*(607)*	*(647)*	*(658)*	*(801)*	*(531)*	**4A100**
Hollow Shaft OHL lbs	5395	5260	5055	5595	5485	5325	5505	5370	5415	5620	5550	5530	5190	5755	
(N)	*(24000)*	*(23400)*	*(22500)*	*(24900)*	*(24400)*	*(23700)*	*(24500)*	*(23900)*	*(24100)*	*(25000)*	*(24700)*	*(24600)*	*(23100)*	*(25600)*	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	4540	4540	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	
Input Power HP	**3.30**	**3.06**	**3.06**	**2.24**	**2.24**	**2.13**	**1.61**	**1.61**	**1.45**	**1.04**	**0.913**	**0.679**	**0.675**	**0.384**	
(kW)	***(2.46)***	***(2.28)***	***(2.28)***	***(1.67)***	***(1.67)***	***(1.59)***	***(1.20)***	***(1.20)***	***(1.08)***	***(0.776)***	***(0.681)***	***(0.506)***	***(0.503)***	***(0.286)***	
Output Torque in•lbs	7845	8245	9025	7190	7865	8670	7210	7880	8775	7440	7555	6750	8230	6405	
(N•m)	*(887)*	*(932)*	*(1020)*	*(813)*	*(889)*	*(980)*	*(815)*	*(891)*	*(992)*	*(841)*	*(854)*	*(763)*	*(930)*	*(724)*	**4A105**
Hollow Shaft OHL lbs	4945	4810	4515	5170	4945	4650	5170	4945	4605	5080	5055	5305	4830	5395	
(N)	*(22000)*	*(21400)*	*(20100)*	*(23000)*	*(22000)*	*(20700)*	*(23000)*	*(22000)*	*(20500)*	*(22600)*	*(22500)*	*(23600)*	*(21500)*	*(24000)*	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	4540	4540	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	
Input Power HP	**4.26**	**3.65**	**3.65**	**2.56**	**2.56**	**2.55**	**2.01**	**2.01**	**1.74**	**1.27**	**1.15**	**0.897**	**0.886**	**—**	
(kW)	***(3.18)***	***(2.72)***	***(2.72)***	***(1.91)***	***(1.91)***	***(1.90)***	***(1.50)***	***(1.50)***	***(1.30)***	***(0.944)***	***(0.859)***	***(0.669)***	***(0.661)***	**—**	
Output Torque in•lbs	10175	9820	10795	8230	9025	10350	9025	9910	10530	9025	9555	8935	10795	—	
(N•m)	*(1150)*	*(1110)*	*(1220)*	*(930)*	*(1020)*	*(1170)*	*(1020)*	*(1120)*	*(1190)*	*(1020)*	*(1080)*	*(1010)*	*(1220)*	—	**4A110**
Hollow Shaft OHL lbs	3955	4110	3595	4830	4515	3820	4495	4090	3750	4495	4270	4540	3550	—	
(N)	*(17600)*	*(18300)*	*(16000)*	*(21500)*	*(20100)*	*(17000)*	*(20000)*	*(18200)*	*(16700)*	*(20000)*	*(19000)*	*(20200)*	*(15800)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*		
Input Power HP	**4.79**	**4.17**	**3.88**	**2.98**	**2.98**	**2.80**	**2.43**	**2.32**	**1.89**	**1.49**	**1.35**	**1.02**	**0.936**	**—**	
(kW)	***(3.57)***	***(3.11)***	***(2.89)***	***(2.22)***	***(2.22)***	***(2.09)***	***(1.81)***	***(1.73)***	***(1.41)***	***(1.11)***	***(1.01)***	***(0.758)***	***(0.698)***	**—**	
Output Torque in•lbs	11415	11235	11415	9555	10440	11415	10885	11415	11415	10615	11235	10085	11415	—	
(N•m)	*(1290)*	*(1270)*	*(1290)*	*(1080)*	*(1180)*	*(1290)*	*(1230)*	*(1290)*	*(1290)*	*(1200)*	*(1270)*	*(1140)*	*(1290)*	—	**4A115**
Hollow Shaft OHL lbs	3120	3255	3120	4270	3775	3120	3505	3120	3120	3660	3280	3975	3120	—	
(N)	*(13900)*	*(14500)*	*(13900)*	*(19000)*	*(16800)*	*(13900)*	*(15600)*	*(13900)*	*(13900)*	*(16300)*	*(14600)*	*(17700)*	*(13900)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	—	
Input Power HP	**4.79**	**4.24**	**3.88**	**3.57**	**3.26**	**2.80**	**2.55**	**2.32**	**1.89**	**1.60**	**1.38**	**1.15**	**0.936**	**—**	
(kW)	***(3.57)***	***(3.16)***	***(2.89)***	***(2.66)***	***(2.43)***	***(2.09)***	***(1.90)***	***(1.73)***	***(1.41)***	***(1.19)***	***(1.03)***	***(0.855)***	***(0.698)***	**—**	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	**4A120**
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	—	
Input Power HP	**4.79**	**4.24**	**3.88**	**3.57**	**3.26**	**2.80**	**2.55**	**2.32**	**1.89**	**1.60**	**1.38**	**1.15**	**0.936**	**—**	
(kW)	***(3.57)***	***(3.16)***	***(2.89)***	***(2.66)***	***(2.43)***	***(2.09)***	***(1.90)***	***(1.73)***	***(1.41)***	***(1.19)***	***(1.03)***	***(0.855)***	***(0.698)***	**—**	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	**4A125**
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	—	

Frame Size Selection Tables 50 Hz, 1450 RPM

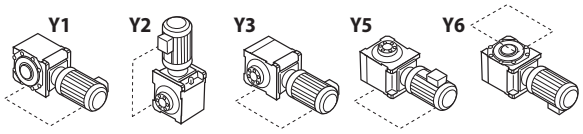
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	132	112	104	90.6	80.6	69.0	65.9	58.0	51.8	41.4	37.2	31.5	27.4	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	**24.5**	**22.1**	**20.4**	**17.8**	**16.2**	**13.5**	**12.7**	**11.6**	**10.2**	**8.10**	**7.40**	**6.26**	**5.43**	
(kW)	***(18.3)***	***(16.5)***	***(15.2)***	***(13.3)***	***(12.1)***	***(10.1)***	***(9.48)***	***(8.67)***	***(7.59)***	***(6.04)***	***(5.52)***	***(4.67)***	***(4.05)***	
Output Torque in•lbs	10350	11325	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	
(N•m)	*(1170)*	*(1280)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	**4A140**
Hollow Shaft OHL lbs	2675	2785	2900	3075	3120	3120	3120	3120	3120	3120	3120	3120	3120	
(N)	*(11900)*	*(12400)*	*(12900)*	*(13700)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	3350	3350	3350	3350	3530	3800	3890	4110	4290	4530	4560	4580	4580	
(N)	*(14900)*	*(14900)*	*(14900)*	*(14900)*	*(15700)*	*(16900)*	*(17300)*	*(18280)*	*(19080)*	*(20140)*	*(20280)*	*(20370)*	*(20370)*	
Input Power HP	**24.5**	**22.1**	**20.4**	**17.8**	**16.2**	**13.5**	**12.7**	**11.6**	**10.2**	**8.10**	**7.40**	**6.26**	**5.43**	
(kW)	***(18.3)***	***(16.5)***	***(15.2)***	***(13.3)***	***(12.1)***	***(10.1)***	***(9.48)***	***(8.67)***	***(7.59)***	***(6.04)***	***(5.52)***	***(4.67)***	***(4.05)***	
Output Torque in•lbs	10350	11325	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	
(N•m)	*(1170)*	*(1280)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	**4A145**
Hollow Shaft OHL lbs	2675	2785	2900	3075	3120	3120	3120	3120	3120	3120	3120	3120	3120	
(N)	*(11900)*	*(12400)*	*(12900)*	*(13700)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	3350	3350	3350	3350	3530	3800	3890	4110	4290	4530	4560	4580	4580	
(N)	*(14900)*	*(14900)*	*(14900)*	*(14900)*	*(15700)*	*(16900)*	*(17300)*	*(18280)*	*(19080)*	*(20140)*	*(20280)*	*(20370)*	*(20370)*	
Input Power HP	**12.9**	**12.9**	**12.9**	**12.9**	**12.9**	**8.77**	**8.77**	**8.77**	**8.77**	**6.80**	**6.80**	**6.80**	**6.80**	
(kW)	***(9.60)***	***(9.60)***	***(9.60)***	***(9.60)***	***(9.60)***	***(6.54)***	***(6.54)***	***(6.54)***	***(6.54)***	***(5.07)***	***(5.07)***	***(5.07)***	***(5.07)***	
Output Torque in•lbs	5415	6600	7220	8255	9025	7380	7875	8610	9820	9555	10530	12385	14335	
(N•m)	*(612)*	*(746)*	*(816)*	*(933)*	*(1020)*	*(834)*	*(890)*	*(973)*	*(1110)*	*(1080)*	*(1190)*	*(1400)*	*(1620)*	**4B120**
Hollow Shaft OHL lbs	4945	5145	5235	5370	5460	6000	6065	6180	6335	6900	7010	7235	7415	
(N)	*(22000)*	*(22900)*	*(23300)*	*(23900)*	*(24300)*	*(26700)*	*(27000)*	*(27500)*	*(28200)*	*(30700)*	*(31200)*	*(32200)*	*(33000)*	
Solid Shaft OHL lbs	3490	3490	3490	3490	3740	4100	4200	4500	4780	5360	5650	6100	6520	
(N)	*(15520)*	*(15520)*	*(15520)*	*(15520)*	*(16630)*	*(18230)*	*(18680)*	*(20010)*	*(21260)*	*(23840)*	*(25130)*	*(27130)*	*(29000)*	
Input Power HP	**14.8**	**14.8**	**14.8**	**14.8**	**14.8**	**10.1**	**10.1**	**10.1**	**10.1**	**7.94**	**7.94**	**7.94**	**7.94**	
(kW)	***(11.0)***	***(11.0)***	***(11.0)***	***(11.0)***	***(11.0)***	***(7.51)***	***(7.51)***	***(7.51)***	***(7.51)***	***(5.92)***	***(5.92)***	***(5.92)***	***(5.92)***	
Output Torque in•lbs	6200	7565	8270	9465	10350	8465	9025	9910	11325	11235	12210	14510	16725	
(N•m)	*(701)*	*(855)*	*(935)*	*(1070)*	*(1170)*	*(957)*	*(1020)*	*(1120)*	*(1280)*	*(1270)*	*(1380)*	*(1640)*	*(1890)*	**4B125**
Hollow Shaft OHL lbs	4855	5035	5125	5235	5325	5890	5955	6045	6180	6720	6830	7010	7145	
(N)	*(21600)*	*(22400)*	*(22800)*	*(23300)*	*(23700)*	*(26200)*	*(26500)*	*(26900)*	*(27500)*	*(29900)*	*(30400)*	*(31200)*	*(31800)*	
Solid Shaft OHL lbs	3490	3490	3490	3490	3740	4100	4200	4500	4780	5360	5650	6100	6520	
(N)	*(15520)*	*(15520)*	*(15520)*	*(15520)*	*(16630)*	*(18230)*	*(18680)*	*(20010)*	*(21260)*	*(23840)*	*(25130)*	*(27130)*	*(29000)*	
Input Power HP	**25.5**	**25.5**	**25.5**	**25.5**	**25.5**	**17.4**	**17.4**	**17.4**	**17.4**	**16.1**	**14.8**	**12.5**	**10.8**	
(kW)	***(19.0)***	***(19.0)***	***(19.0)***	***(19.0)***	***(19.0)***	***(13.0)***	***(13.0)***	***(13.0)***	***(13.0)***	***(12.0)***	***(11.0)***	***(9.30)***	***(8.06)***	
Output Torque in•lbs	10705	13095	14335	16370	17875	14690	15660	17080	19555	22740	22740	22740	22740	
(N•m)	*(1210)*	*(1480)*	*(1620)*	*(1850)*	*(2020)*	*(1660)*	*(1770)*	*(1930)*	*(2210)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	**4B140**
Hollow Shaft OHL lbs	4360	4450	4470	4495	4515	5215	5235	5260	5305	5460	5710	5710	5710	
(N)	*(19400)*	*(19800)*	*(19900)*	*(20000)*	*(20100)*	*(23200)*	*(23300)*	*(23400)*	*(23600)*	*(24300)*	*(25400)*	*(25400)*	*(25400)*	
Solid Shaft OHL lbs	3490	3490	3490	3490	3740	4100	4200	4500	4780	5360	5650	6100	6520	
(N)	*(15520)*	*(15520)*	*(15520)*	*(15520)*	*(16630)*	*(18230)*	*(18680)*	*(20010)*	*(21260)*	*(23840)*	*(25130)*	*(27130)*	*(29000)*	
Input Power HP	**29.5**	**29.5**	**29.5**	**29.5**	**29.5**	**20.2**	**20.2**	**20.2**	**20.2**	**16.1**	**14.8**	**12.5**	**10.8**	
(kW)	***(22.0)***	***(22.0)***	***(22.0)***	***(22.0)***	***(22.0)***	***(15.1)***	***(15.1)***	***(15.1)***	***(15.1)***	***(12.0)***	***(11.0)***	***(9.30)***	***(8.06)***	
Output Torque in•lbs	12385	15130	16545	18935	20705	17075	18230	19910	22740	22740	22740	22740	22740	
(N•m)	*(1400)*	*(1710)*	*(1870)*	*(2140)*	*(2340)*	*(1930)*	*(2060)*	*(2250)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	**4B145**
Hollow Shaft OHL lbs	4180	4225	4225	4200	4200	4945	4945	4965	4965	5460	5710	5710	5710	
(N)	*(18600)*	*(18800)*	*(18800)*	*(18700)*	*(18700)*	*(22000)*	*(22000)*	*(22100)*	*(22100)*	*(24300)*	*(25400)*	*(25400)*	*(25400)*	
Solid Shaft OHL lbs	3490	3490	3490	3490	3740	4100	4200	4500	4780	5360	5650	6100	6520	
(N)	*(15520)*	*(15520)*	*(15520)*	*(15520)*	*(16630)*	*(18230)*	*(18680)*	*(20010)*	*(21260)*	*(23840)*	*(25130)*	*(27130)*	*(29000)*	

Frame Size Selection Tables 50 Hz, 1450 RPM



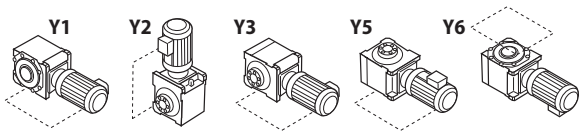
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	24.2	21.6	19.6	18.1	16.5	14.2	13.0	11.8	9.60	8.10	7.00	5.82	4.75	3.48	Frame Size
Ratio	**60**	**67**	**74**	**80**	**88**	**102**	**112**	**123**	**151**	**179**	**207**	**249**	**305**	**417**	
Input Power HP	**4.79**	**4.24**	**3.88**	**3.57**	**3.26**	**2.80**	**2.55**	**2.32**	**1.89**	**1.60**	**1.38**	**1.15**	**0.936**	**—**	**4A140**
(kW)	***(3.57)***	***(3.16)***	***(2.89)***	***(2.66)***	***(2.43)***	***(2.09)***	***(1.90)***	***(1.73)***	***(1.41)***	***(1.19)***	***(1.03)***	***(0.855)***	***(0.698)***	**—**	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	—	
Input Power HP	**4.79**	**4.24**	**3.88**	**3.57**	**3.26**	**2.80**	**2.55**	**2.32**	**1.89**	**1.60**	**1.38**	**1.15**	**0.936**	**—**	**4A145**
(kW)	***(3.57)***	***(3.16)***	***(2.89)***	***(2.66)***	***(2.43)***	***(2.09)***	***(1.90)***	***(1.73)***	***(1.41)***	***(1.19)***	***(1.03)***	***(0.855)***	***(0.698)***	**—**	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	—	
Input Power HP	**6.56**	**5.31**	**5.31**	**4.14**	**4.14**	**3.85**	**3.18**	**3.18**	**2.56**	**2.19**	**1.74**	**1.28**	**1.27**	**—**	**4B120**
(kW)	***(4.89)***	***(3.96)***	***(3.96)***	***(3.09)***	***(3.09)***	***(2.87)***	***(2.37)***	***(2.37)***	***(1.91)***	***(1.63)***	***(1.30)***	***(0.957)***	***(0.944)***	**—**	
Output Torque in•lbs	15660	14245	15660	13270	14510	15660	14245	15660	15485	15660	14510	12740	15485	—	
(N•m)	*(1770)*	*(1610)*	*(1770)*	*(1500)*	*(1640)*	*(1770)*	*(1610)*	*(1770)*	*(1750)*	*(1770)*	*(1640)*	*(1440)*	*(1750)*	—	
Hollow Shaft OHL lbs	7595	8090	8205	8720	8540	8295	8610	8295	8315	8295	8565	8900	8340	—	
(N)	*(33800)*	*(36000)*	*(36500)*	*(38800)*	*(38000)*	*(36900)*	*(38300)*	*(36900)*	*(37000)*	*(36900)*	*(38100)*	*(39600)*	*(37100)*	—	
Solid Shaft OHL lbs	6870	7140	7330	7370	7420	7490	7530	7570	7580	7430	7320	7200	7120	—	
(N)	*(30550)*	*(31750)*	*(32600)*	*(32780)*	*(33000)*	*(33310)*	*(33490)*	*(33670)*	*(33710)*	*(33040)*	*(32550)*	*(32020)*	*(31660)*	—	
Input Power HP	**7.59**	**6.42**	**6.42**	**5.31**	**5.31**	**4.65**	**3.86**	**3.86**	**3.14**	**2.64**	**2.17**	**1.53**	**1.38**	**—**	**4B125**
(kW)	***(5.66)***	***(4.79)***	***(4.79)***	***(3.96)***	***(3.96)***	***(3.47)***	***(2.88)***	***(2.88)***	***(2.34)***	***(1.97)***	***(1.62)***	***(1.14)***	***(1.03)***	**—**	
Output Torque in•lbs	18050	17345	18935	16990	18580	18935	17345	18935	18935	18935	17960	15220	16810	—	
(N•m)	*(2040)*	*(1960)*	*(2140)*	*(1920)*	*(2100)*	*(2140)*	*(1960)*	*(2140)*	*(2140)*	*(2140)*	*(2030)*	*(1720)*	*(1900)*	—	
Hollow Shaft OHL lbs	7350	7755	7325	7935	7440	7325	7845	7325	7325	7325	7640	8385	7980	—	
(N)	*(32700)*	*(34500)*	*(32600)*	*(35300)*	*(33100)*	*(32600)*	*(34900)*	*(32600)*	*(32600)*	*(32600)*	*(34000)*	*(37300)*	*(35500)*	—	
Solid Shaft OHL lbs	6870	7140	7330	7370	7420	7490	7530	7570	7580	7430	7320	7200	7120	—	
(N)	*(30550)*	*(31750)*	*(32600)*	*(32780)*	*(33000)*	*(33310)*	*(33490)*	*(33670)*	*(33710)*	*(33040)*	*(32550)*	*(32020)*	*(31660)*	—	
Input Power HP	**9.53**	**8.45**	**7.72**	**7.09**	**6.49**	**5.59**	**5.07**	**4.63**	**3.77**	**3.18**	**2.75**	**2.28**	**1.86**	**—**	**4B140**
(kW)	***(7.11)***	***(6.30)***	***(5.76)***	***(5.29)***	***(4.84)***	***(4.17)***	***(3.78)***	***(3.45)***	***(2.81)***	***(2.37)***	***(2.05)***	***(1.70)***	***(1.39)***	**—**	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	—	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	—	
Hollow Shaft OHL lbs	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	—	
(N)	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	—	
Solid Shaft OHL lbs	6870	7140	7330	7370	7420	7490	7530	7570	7580	7430	7320	7200	7120	—	
(N)	*(30550)*	*(31750)*	*(32600)*	*(32780)*	*(33000)*	*(33310)*	*(33490)*	*(33670)*	*(33710)*	*(33040)*	*(32550)*	*(32020)*	*(31660)*	—	
Input Power HP	**9.53**	**8.45**	**7.72**	**7.09**	**6.49**	**5.59**	**5.07**	**4.63**	**3.77**	**3.18**	**2.75**	**2.28**	**1.86**	**—**	**4B145**
(kW)	***(7.11)***	***(6.30)***	***(5.76)***	***(5.29)***	***(4.84)***	***(4.17)***	***(3.78)***	***(3.45)***	***(2.81)***	***(2.37)***	***(2.05)***	***(1.70)***	***(1.39)***	**—**	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	—	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	—	
Hollow Shaft OHL lbs	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	—	
(N)	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	—	
Solid Shaft OHL lbs	6870	7140	7330	7370	7420	7490	7530	7570	7580	7430	7320	7200	7120	—	
(N)	*(30550)*	*(31750)*	*(32600)*	*(32780)*	*(33000)*	*(33310)*	*(33490)*	*(33670)*	*(33710)*	*(33040)*	*(32550)*	*(32020)*	*(31660)*	—	

Frame Size Selection Tables 50 Hz, 1450 RPM

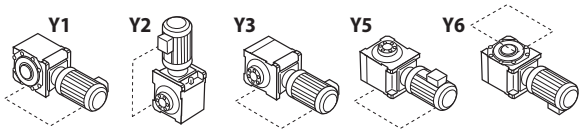
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	132	112	104	90.6	80.6	69.0	65.9	58.0	51.8	41.4	37.2	31.5	27.4	Frame Size
Ratio	**11**	**13**	**14**	**16**	**18**	**21**	**22**	**25**	**28**	**35**	**39**	**46**	**53**	
Input Power HP	**33.9**	**33.9**	**33.9**	**33.3**	**31.6**	**27.1**	**25.3**	**23.2**	**20.2**	**16.1**	**14.8**	**12.5**	**10.8**	4B160
(kW)	***(25.3)***	***(25.3)***	***(25.3)***	***(24.8)***	***(23.6)***	***(20.2)***	***(18.9)***	***(17.3)***	***(15.1)***	***(12.0)***	***(11.0)***	***(9.30)***	***(8.06)***	
Output Torque in•lbs	14245	17430	19025	21325	22210	22740	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(1610)*	*(1970)*	*(2150)*	*(2410)*	*(2510)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	
Hollow Shaft OHL lbs	3975	3975	3955	3955	4045	4335	4450	4675	4965	5460	5710	5710	5710	
(N)	*(17700)*	*(17700)*	*(17600)*	*(17600)*	*(18000)*	*(19300)*	*(19800)*	*(20800)*	*(22100)*	*(24300)*	*(25400)*	*(25400)*	*(25400)*	
Solid Shaft OHL lbs	3490	3490	3490	3490	3740	4100	4200	4500	4780	5360	5650	6100	6520	
(N)	*(15520)*	*(15520)*	*(15520)*	*(15520)*	*(16630)*	*(18230)*	*(18680)*	*(20010)*	*(21260)*	*(23840)*	*(25130)*	*(27130)*	*(29000)*	
Input Power HP	**38.9**	**38.9**	**37.4**	**33.3**	**31.6**	**27.1**	**25.3**	**23.2**	**20.2**	**16.1**	**14.8**	**12.5**	**10.8**	4B165
(kW)	***(29.0)***	***(29.0)***	***(27.9)***	***(24.8)***	***(23.6)***	***(20.2)***	***(18.9)***	***(17.3)***	***(15.1)***	***(12.0)***	***(11.0)***	***(9.30)***	***(8.06)***	
Output Torque in•lbs	16370	19910	21060	21325	22210	22740	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(1850)*	*(2250)*	*(2380)*	*(2410)*	*(2510)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	
Hollow Shaft OHL lbs	3750	3685	3750	3955	4045	4335	4450	4675	4965	5460	5710	5710	5710	
(N)	*(16700)*	*(16400)*	*(16700)*	*(17600)*	*(18000)*	*(19300)*	*(19800)*	*(20800)*	*(22100)*	*(24300)*	*(25400)*	*(25400)*	*(25400)*	
Solid Shaft OHL lbs	3490	3490	3490	3490	3740	4100	4200	4500	4780	5360	5650	6100	6520	
(N)	*(15520)*	*(15520)*	*(15520)*	*(15520)*	*(16630)*	*(18230)*	*(18680)*	*(20010)*	*(21260)*	*(23840)*	*(25130)*	*(27130)*	*(29000)*	
Input Power HP	**25.5**	**25.5**	**25.5**	**25.5**	**25.5**	**17.4**	**17.4**	**17.4**	**17.4**	**17.4**	**17.4**	**17.4**	**16.1**	4C140
(kW)	***(19.0)***	***(19.0)***	***(19.0)***	***(19.0)***	***(19.0)***	***(13.0)***	***(13.0)***	***(13.0)***	***(13.0)***	***(13.0)***	***(13.0)***	***(13.0)***	***(12.0)***	
Output Torque in•lbs	10705	13095	14335	16370	17875	14690	15660	17165	19555	24600	26900	31855	33890	
(N•m)	*(1210)*	*(1480)*	*(1620)*	*(1850)*	*(2020)*	*(1660)*	*(1770)*	*(1940)*	*(2210)*	*(2780)*	*(3040)*	*(3600)*	*(3830)*	
Hollow Shaft OHL lbs	6560	6810	6920	7055	7145	7955	8025	8160	8340	8565	8655	8765	9100	
(N)	*(29200)*	*(30300)*	*(30800)*	*(31400)*	*(31800)*	*(35400)*	*(35700)*	*(36300)*	*(37100)*	*(38100)*	*(38500)*	*(39000)*	*(40500)*	
Solid Shaft OHL lbs	4590	4590	4590	4590	4910	5400	5550	5940	6250	7170	7580	8210	8860	
(N)	*(20410)*	*(20410)*	*(20410)*	*(20410)*	*(21830)*	*(24010)*	*(24680)*	*(26420)*	*(27800)*	*(31890)*	*(33710)*	*(36510)*	*(39400)*	
Input Power HP	**29.5**	**29.5**	**29.5**	**29.5**	**29.5**	**20.2**	**20.2**	**20.2**	**20.2**	**20.2**	**20.2**	**20.2**	**19.4**	4C145
(kW)	***(22.0)***	***(22.0)***	***(22.0)***	***(22.0)***	***(22.0)***	***(15.1)***	***(15.1)***	***(15.1)***	***(15.1)***	***(15.1)***	***(15.1)***	***(15.1)***	***(14.5)***	
Output Torque in•lbs	12385	15130	16545	18935	20705	17075	18230	19910	22830	28670	31325	36810	40795	
(N•m)	*(1400)*	*(1710)*	*(1870)*	*(2140)*	*(2340)*	*(1930)*	*(2060)*	*(2250)*	*(2580)*	*(3240)*	*(3540)*	*(4160)*	*(4610)*	
Hollow Shaft OHL lbs	6405	6605	6695	6810	6875	7730	7775	7890	8025	8180	8250	8295	8430	
(N)	*(28500)*	*(29400)*	*(29800)*	*(30300)*	*(30600)*	*(34400)*	*(34600)*	*(35100)*	*(35700)*	*(36400)*	*(36700)*	*(36900)*	*(37500)*	
Solid Shaft OHL lbs	4590	4590	4590	4590	4910	5400	5550	5940	6250	7170	7580	8210	8860	
(N)	*(20410)*	*(20410)*	*(20410)*	*(20410)*	*(21830)*	*(24010)*	*(24680)*	*(26420)*	*(27800)*	*(31890)*	*(33710)*	*(36510)*	*(39400)*	
Input Power HP	**33.9**	**33.9**	**33.9**	**33.9**	**33.9**	**33.9**	**27.2**	**27.2**	**26.4**	**26.4**	**26.4**	**24.9**	**21.6**	4C160
(kW)	***(25.3)***	***(25.3)***	***(25.3)***	***(25.3)***	***(25.3)***	***(25.3)***	***(20.3)***	***(20.3)***	***(19.7)***	***(19.7)***	***(19.7)***	***(18.6)***	***(16.1)***	
Output Torque in•lbs	14245	17430	19025	21770	23805	28580	24420	26725	29645	37255	40705	45485	45485	
(N•m)	*(1610)*	*(1970)*	*(2150)*	*(2460)*	*(2690)*	*(3230)*	*(2760)*	*(3020)*	*(3350)*	*(4210)*	*(4600)*	*(5140)*	*(5140)*	
Hollow Shaft OHL lbs	6245	6380	6470	6540	6585	6630	7190	7260	7370	7350	7350	7485	8000	
(N)	*(27800)*	*(28400)*	*(28800)*	*(29100)*	*(29300)*	*(29500)*	*(32000)*	*(32300)*	*(32800)*	*(32700)*	*(32700)*	*(33300)*	*(35600)*	
Solid Shaft OHL lbs	4590	4590	4590	4590	4910	5400	5550	5940	6250	7170	7580	8210	8860	
(N)	*(20410)*	*(20410)*	*(20410)*	*(20410)*	*(21830)*	*(24010)*	*(24680)*	*(26420)*	*(27800)*	*(31890)*	*(33710)*	*(36510)*	*(39400)*	
Input Power HP	**40.2**	**40.2**	**40.2**	**40.2**	**40.2**	**40.2**	**32.3**	**32.3**	**32.3**	**32.2**	**29.5**	**24.9**	**21.6**	4C165
(kW)	***(30.0)***	***(30.0)***	***(30.0)***	***(30.0)***	***(30.0)***	***(30.0)***	***(24.1)***	***(24.1)***	***(24.1)***	***(24.0)***	***(22.0)***	***(18.6)***	***(16.1)***	
Output Torque in•lbs	16900	20615	22565	25750	28230	33890	28935	31680	36190	45485	45485	45485	45485	
(N•m)	*(1910)*	*(2330)*	*(2550)*	*(2910)*	*(3190)*	*(3830)*	*(3270)*	*(3580)*	*(4090)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	
Hollow Shaft OHL lbs	5975	6090	6135	6155	6180	6135	6765	6785	6765	6560	6900	7485	8000	
(N)	*(26600)*	*(27100)*	*(27300)*	*(27400)*	*(27500)*	*(27300)*	*(30100)*	*(30200)*	*(30100)*	*(29200)*	*(30700)*	*(33300)*	*(35600)*	
Solid Shaft OHL lbs	4590	4590	4590	4590	4910	5400	5550	5940	6250	7170	7580	8210	8860	
(N)	*(20410)*	*(20410)*	*(20410)*	*(20410)*	*(21830)*	*(24010)*	*(24680)*	*(26420)*	*(27800)*	*(31890)*	*(33710)*	*(36510)*	*(39400)*	

Frame Size Selection Tables 50 Hz, 1450 RPM



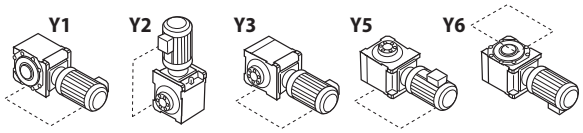
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	24.2	21.6	19.6	18.1	16.5	14.2	13.0	11.8	9.60	8.10	7.00	5.82	4.75	3.48	Frame Size
Ratio	**60**	**67**	**74**	**80**	**88**	**102**	**112**	**123**	**151**	**179**	**207**	**249**	**305**	**417**	
Input Power HP	**9.53**	**8.45**	**7.72**	**7.09**	**6.49**	**5.59**	**5.07**	**4.63**	**3.77**	**3.18**	**2.75**	**2.28**	**1.86**	**—**	**4B160**
(kW)	***(7.11)***	***(6.30)***	***(5.76)***	***(5.29)***	***(4.84)***	***(4.17)***	***(3.78)***	***(3.45)***	***(2.81)***	***(2.37)***	***(2.05)***	***(1.70)***	***(1.39)***	**—**	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	—	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	—	
Hollow Shaft OHL lbs	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	—	
(N)	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	—	
Solid Shaft OHL lbs	6870	7140	7330	7370	7420	7490	7530	7570	7580	7430	7320	7200	7120	—	
(N)	*(30550)*	*(31750)*	*(32600)*	*(32780)*	*(33000)*	*(33310)*	*(33490)*	*(33670)*	*(33710)*	*(33040)*	*(32550)*	*(32020)*	*(31660)*	—	
Input Power HP	**9.53**	**8.45**	**7.72**	**7.09**	**6.49**	**5.59**	**5.07**	**4.63**	**3.77**	**3.18**	**2.75**	**2.28**	**1.86**	**—**	**4B165**
(kW)	***(7.11)***	***(6.30)***	***(5.76)***	***(5.29)***	***(4.84)***	***(4.17)***	***(3.78)***	***(3.45)***	***(2.81)***	***(2.37)***	***(2.05)***	***(1.70)***	***(1.39)***	**—**	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	—	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	—	
Hollow Shaft OHL lbs	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	—	
(N)	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	—	
Solid Shaft OHL lbs	6870	7140	7330	7370	7420	7490	7530	7570	7580	7430	7320	7200	7120	—	
(N)	*(30550)*	*(31750)*	*(32600)*	*(32780)*	*(33000)*	*(33310)*	*(33490)*	*(33670)*	*(33710)*	*(33040)*	*(32550)*	*(32020)*	*(31660)*	—	
Input Power HP	**13.5**	**11.6**	**11.6**	**9.24**	**9.24**	**7.98**	**6.99**	**6.99**	**5.28**	**4.60**	**3.97**	**3.26**	**2.66**	**—**	**4C140**
(kW)	***(10.1)***	***(8.66)***	***(8.66)***	***(6.89)***	***(6.89)***	***(5.95)***	***(5.21)***	***(5.21)***	***(3.94)***	***(3.43)***	***(2.96)***	***(2.43)***	***(1.98)***	**—**	
Output Torque in•lbs	32210	31325	34245	29645	32385	32475	31325	34245	31855	32920	32830	32475	32385	—	
(N•m)	*(3640)*	*(3540)*	*(3870)*	*(3350)*	*(3660)*	*(3670)*	*(3540)*	*(3870)*	*(3600)*	*(3720)*	*(3710)*	*(3670)*	*(3660)*	—	
Hollow Shaft OHL lbs	9710	10250	10360	11125	11260	11910	12450	12610	13260	13060	13080	13150	13170	—	
(N)	*(43200)*	*(45600)*	*(46100)*	*(49500)*	*(50100)*	*(53000)*	*(55400)*	*(56100)*	*(59000)*	*(58100)*	*(58200)*	*(58500)*	*(58600)*	—	
Solid Shaft OHL lbs	9420	9870	10260	10660	11100	11710	12050	12360	12810	12720	12660	12590	12550	—	
(N)	*(41900)*	*(43900)*	*(45630)*	*(47410)*	*(49370)*	*(52080)*	*(53590)*	*(54970)*	*(56970)*	*(56570)*	*(56310)*	*(56000)*	*(55820)*	—	
Input Power HP	**16.1**	**12.7**	**12.7**	**10.6**	**10.6**	**10.1**	**8.39**	**8.39**	**6.26**	**4.96**	**4.26**	**3.51**	**2.90**	**—**	**4C145**
(kW)	***(12.0)***	***(9.49)***	***(9.49)***	***(7.91)***	***(7.91)***	***(7.53)***	***(6.26)***	***(6.26)***	***(4.67)***	***(3.70)***	***(3.18)***	***(2.62)***	***(2.16)***	**—**	
Output Torque in•lbs	38405	34245	37430	33980	37165	41060	37610	41150	37785	35485	35305	35040	35305	—	
(N•m)	*(4340)*	*(3870)*	*(4230)*	*(3840)*	*(4200)*	*(4640)*	*(4250)*	*(4650)*	*(4270)*	*(4010)*	*(3990)*	*(3960)*	*(3990)*	—	
Hollow Shaft OHL lbs	9125	9980	10045	10720	10810	10970	11845	10945	11910	12495	12540	12610	12540	—	
(N)	*(40600)*	*(44400)*	*(44700)*	*(47700)*	*(48100)*	*(48800)*	*(52700)*	*(48700)*	*(53000)*	*(55600)*	*(55800)*	*(56100)*	*(55800)*	—	
Solid Shaft OHL lbs	9420	9870	10260	10660	11100	11710	12050	12360	12810	12720	12660	12590	12550	—	
(N)	*(41900)*	*(43900)*	*(45630)*	*(47410)*	*(49370)*	*(52080)*	*(53590)*	*(54970)*	*(56970)*	*(56570)*	*(56310)*	*(56000)*	*(55820)*	—	
Input Power HP	**17.6**	**16.9**	**15.4**	**13.2**	**13.0**	**11.2**	**10.1**	**9.27**	**7.54**	**6.36**	**5.50**	**4.57**	**3.73**	**—**	**4C160**
(kW)	***(13.1)***	***(12.6)***	***(11.5)***	***(9.86)***	***(9.67)***	***(8.34)***	***(7.56)***	***(6.91)***	***(5.62)***	***(4.74)***	***(4.10)***	***(3.41)***	***(2.78)***	**—**	
Output Torque in•lbs	41770	45485	45485	42385	45485	45485	45485	45485	45485	45485	45485	45485	45485	—	
(N•m)	*(4720)*	*(5140)*	*(5140)*	*(4790)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	—	
Hollow Shaft OHL lbs	8810	8900	9305	9910	9415	9415	9415	9415	9415	9415	9415	9415	9415	—	
(N)	*(39200)*	*(39600)*	*(41400)*	*(44100)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	—	
Solid Shaft OHL lbs	9420	9870	10260	10660	11100	11710	12050	12360	12810	12720	12660	12590	12550	—	
(N)	*(41900)*	*(43900)*	*(45630)*	*(47410)*	*(49370)*	*(52080)*	*(53590)*	*(54970)*	*(56970)*	*(56570)*	*(56310)*	*(56000)*	*(55820)*	—	
Input Power HP	**19.0**	**16.9**	**15.4**	**14.2**	**13.0**	**11.2**	**10.1**	**9.27**	**7.54**	**6.36**	**5.50**	**4.57**	**3.73**	**—**	**4C165**
(kW)	***(14.2)***	***(12.6)***	***(11.5)***	***(10.6)***	***(9.67)***	***(8.34)***	***(7.56)***	***(6.91)***	***(5.62)***	***(4.74)***	***(4.10)***	***(3.41)***	***(2.78)***	**—**	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	—	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	—	
Hollow Shaft OHL lbs	8450	8900	9305	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	—	
(N)	*(37600)*	*(39600)*	*(41400)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	—	
Solid Shaft OHL lbs	9420	9870	10260	10660	11100	11710	12050	12360	12810	12720	12660	12590	12550	—	
(N)	*(41900)*	*(43900)*	*(45630)*	*(47410)*	*(49370)*	*(52080)*	*(53590)*	*(54970)*	*(56970)*	*(56570)*	*(56310)*	*(56000)*	*(55820)*	—	

Frame Size Selection Tables 50 Hz, 1450 RPM

Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions [1]

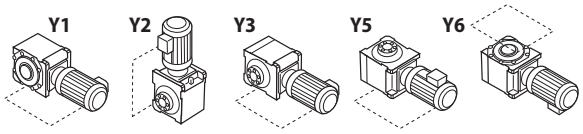


Dimensions on pages 2.156 - 2.166

Output RPM	132	112	104	90.6	80.6	69.0	65.9	58.0	51.8	41.4	37.2	31.5	27.4	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	**55.7**	**55.7**	**55.7**	**55.7**	**55.5**	**45.5**	**45.5**	**43.3**	**39.4**	**32.2**	**29.5**	**24.9**	**21.6**	4C170
(kW)	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(41.4)***	***(33.9)***	***(33.9)***	***(32.3)***	***(29.4)***	***(24.0)***	***(22.0)***	***(18.6)***	***(16.1)***	
Output Torque in•lbs	23450	28585	31240	35665	38940	38230	40795	42565	44245	45485	45485	45485	45485	
(N•m)	*(2650)*	*(3230)*	*(3530)*	*(4030)*	*(4400)*	*(4320)*	*(4610)*	*(4810)*	*(5000)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	
Hollow Shaft OHL lbs	5370	5350	5305	5235	5145	5710	5640	5755	6000	6560	6900	7485	8000	
(N)	*(23900)*	*(23800)*	*(23600)*	*(23300)*	*(22900)*	*(25400)*	*(25100)*	*(25600)*	*(26700)*	*(29200)*	*(30700)*	*(33300)*	*(35600)*	
Solid Shaft OHL lbs	4590	4590	4590	4590	4910	5400	5550	5940	6250	7170	7580	8210	8860	
(N)	*(20410)*	*(20410)*	*(20410)*	*(20410)*	*(21830)*	*(24010)*	*(24680)*	*(26420)*	*(27800)*	*(31890)*	*(33710)*	*(36510)*	*(39400)*	
Input Power HP	**60.3**	**60.3**	**60.3**	**59.3**	**55.5**	**48.3**	**46.8**	**43.3**	**39.4**	**32.2**	**29.5**	**24.9**	**21.6**	4C175
(kW)	***(45.0)***	***(45.0)***	***(45.0)***	***(44.2)***	***(41.4)***	***(36.0)***	***(34.9)***	***(32.3)***	***(29.4)***	***(24.0)***	***(22.0)***	***(18.6)***	***(16.1)***	
Output Torque in•lbs	25400	30975	33895	37970	38940	40625	41950	42565	44245	45485	45485	45485	45485	
(N•m)	*(2870)*	*(3500)*	*(3830)*	*(4290)*	*(4400)*	*(4590)*	*(4740)*	*(4810)*	*(5000)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	
Hollow Shaft OHL lbs	5190	5125	5055	5010	5145	5505	5530	5755	6000	6560	6900	7485	8000	
(N)	*(23100)*	*(22800)*	*(22500)*	*(22300)*	*(22900)*	*(24500)*	*(24600)*	*(25600)*	*(26700)*	*(29200)*	*(30700)*	*(33300)*	*(35600)*	
Solid Shaft OHL lbs	4590	4590	4590	4590	4910	5400	5550	5940	6250	7170	7580	8210	8860	
(N)	*(20410)*	*(20410)*	*(20410)*	*(20410)*	*(21830)*	*(24010)*	*(24680)*	*(26420)*	*(27800)*	*(31890)*	*(33710)*	*(36510)*	*(39400)*	
Input Power HP	**—**	**—**	**—**	**—**	**—**	**33.9**	**27.2**	**27.2**	**26.4**	**26.4**	**26.4**	**26.4**	**25.1**	4D160
(kW)	**—**	**—**	**—**	**—**	**—**	***(25.3)***	***(20.3)***	***(20.3)***	***(19.7)***	***(19.7)***	***(19.7)***	***(19.7)***	***(18.7)***	
Output Torque in•lbs	—	—	—	—	—	28580	24420	26725	29645	37255	40705	48140	52740	
(N•m)	—	—	—	—	—	*(3230)*	*(2760)*	*(3020)*	*(3350)*	*(4210)*	*(4600)*	*(5440)*	*(5960)*	
Hollow Shaft OHL lbs	—	—	—	—	—	11195	11780	11980	12315	12720	12900	13125	13510	
(N)	—	—	—	—	—	*(49800)*	*(52400)*	*(53300)*	*(54800)*	*(56600)*	*(57400)*	*(58400)*	*(60100)*	
Solid Shaft OHL lbs	—	—	—	—	—	7690	7910	8500	9060	10240	10830	11740	12690	
(N)	—	—	—	—	—	*(34200)*	*(35180)*	*(37800)*	*(40290)*	*(45540)*	*(48170)*	*(52210)*	*(56440)*	
Input Power HP	**—**	**—**	**—**	**—**	**—**	**40.2**	**32.3**	**32.3**	**32.3**	**32.3**	**32.3**	**30.3**	**30.0**	4D165
(kW)	**—**	**—**	**—**	**—**	**—**	***(30.0)***	***(24.1)***	***(24.1)***	***(24.1)***	***(24.1)***	***(24.1)***	***(22.6)***	***(22.4)***	
Output Torque in•lbs	—	—	—	—	—	33890	28935	31680	36190	45485	49730	55310	63095	
(N•m)	—	—	—	—	—	*(3830)*	*(3270)*	*(3580)*	*(4090)*	*(5140)*	*(5620)*	*(6250)*	*(7130)*	
Hollow Shaft OHL lbs	—	—	—	—	—	10765	11395	11575	11800	12070	12180	12565	12675	
(N)	—	—	—	—	—	*(47900)*	*(50700)*	*(51500)*	*(52500)*	*(53700)*	*(54200)*	*(55900)*	*(56400)*	
Solid Shaft OHL lbs	—	—	—	—	—	7690	7910	8500	9060	10240	10830	11740	12690	
(N)	—	—	—	—	—	*(34200)*	*(35180)*	*(37800)*	*(40290)*	*(45540)*	*(48170)*	*(52210)*	*(56440)*	
Input Power HP	**55.7**	**55.7**	**55.7**	**55.7**	**55.7**	**45.5**	**45.5**	**45.5**	**45.5**	**37.0**	**37.0**	**36.6**	**34.2**	4D170
(kW)	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(33.9)***	***(33.9)***	***(33.9)***	***(33.9)***	***(27.6)***	***(27.6)***	***(27.3)***	***(25.5)***	
Output Torque in•lbs	23450	28580	31235	35660	39025	38230	40795	44600	50970	52210	57075	66725	71945	
(N•m)	*(2650)*	*(3230)*	*(3530)*	*(4030)*	*(4410)*	*(4320)*	*(4610)*	*(5040)*	*(5760)*	*(5900)*	*(6450)*	*(7540)*	*(8130)*	
Hollow Shaft OHL lbs	9080	9330	9440	9550	9620	10405	10450	10540	10610	11530	11575	11645	11955	
(N)	*(40400)*	*(41500)*	*(42000)*	*(42500)*	*(42800)*	*(46300)*	*(46500)*	*(46900)*	*(47200)*	*(51300)*	*(51500)*	*(51800)*	*(53200)*	
Solid Shaft OHL lbs	6480	6480	6480	6480	6980	7690	7910	8500	9060	10240	10830	11740	12690	
(N)	*(28820)*	*(28820)*	*(28820)*	*(28820)*	*(31040)*	*(34200)*	*(35180)*	*(37800)*	*(40290)*	*(45540)*	*(48170)*	*(52210)*	*(56440)*	
Input Power HP	**60.3**	**60.3**	**60.3**	**60.3**	**60.3**	**49.6**	**49.6**	**49.6**	**49.6**	**40.4**	**40.4**	**40.4**	**36.7**	4D175
(kW)	***(45.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(37.0)***	***(37.0)***	***(37.0)***	***(37.0)***	***(30.1)***	***(30.1)***	***(30.1)***	***(27.4)***	
Output Torque in•lbs	25395	30970	33890	38670	42300	41770	44510	48670	55660	56900	62300	73625	77165	
(N•m)	*(2870)*	*(3500)*	*(3830)*	*(4370)*	*(4780)*	*(4720)*	*(5030)*	*(5500)*	*(6290)*	*(6430)*	*(7040)*	*(8320)*	*(8720)*	
Hollow Shaft OHL lbs	8925	9125	9215	9305	9375	10135	10135	10205	10225	11125	11170	11080	11375	
(N)	*(39700)*	*(40600)*	*(41000)*	*(41400)*	*(41700)*	*(45100)*	*(45100)*	*(45400)*	*(45500)*	*(49500)*	*(49700)*	*(49300)*	*(50600)*	
Solid Shaft OHL lbs	6480	6480	6480	6480	6980	7690	7910	8500	9060	10240	10830	11740	12690	
(N)	*(28820)*	*(28820)*	*(28820)*	*(28820)*	*(31040)*	*(34200)*	*(35180)*	*(37800)*	*(40290)*	*(45540)*	*(48170)*	*(52210)*	*(56440)*	

Notes: [1] For selections noted with shade, the continuous duty thermal rating is up to 50HP and only when Y2 mounting, the additional duty cycle limit to be applied up to 75% Equivalent Duty (10 minute cycle time).

Frame Size Selection Tables 50 Hz, 1450 RPM



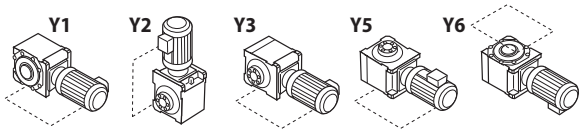
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	24.2	21.6	19.6	18.1	16.5	14.2	13.0	11.8	9.60	8.10	7.00	5.82	4.75	3.48	Frame Size
Ratio	**60**	**67**	**74**	**80**	**88**	**102**	**112**	**123**	**151**	**179**	**207**	**249**	**305**	**417**	
Input Power HP	**19.0**	**16.9**	**15.4**	**14.2**	**13.0**	**11.2**	**10.1**	**9.27**	**7.54**	**6.36**	**5.50**	**4.57**	**3.73**	—	4C170
(kW)	***(14.2)***	***(12.6)***	***(11.5)***	***(10.6)***	***(9.67)***	***(8.34)***	***(7.56)***	***(6.91)***	***(5.62)***	***(4.74)***	***(4.10)***	***(3.41)***	***(2.78)***	—	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	—	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	—	
Hollow Shaft OHL lbs	8450	8900	9305	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	—	
(N)	*(37600)*	*(39600)*	*(41400)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	—	
Solid Shaft OHL lbs	9420	9870	10260	10660	11100	11710	12050	12360	12810	12720	12660	12590	12550	—	
(N)	*(41900)*	*(43900)*	*(45630)*	*(47410)*	*(49370)*	*(52080)*	*(53590)*	*(54970)*	*(56970)*	*(56570)*	*(56310)*	*(56000)*	*(55820)*	—	
Input Power HP	**19.0**	**16.9**	**15.4**	**14.2**	**13.0**	**11.2**	**10.1**	**9.27**	**7.54**	**6.36**	**5.50**	**4.57**	**3.73**	—	4C175
(kW)	***(14.2)***	***(12.6)***	***(11.5)***	***(10.6)***	***(9.67)***	***(8.34)***	***(7.56)***	***(6.91)***	***(5.62)***	***(4.74)***	***(4.10)***	***(3.41)***	***(2.78)***	—	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	—	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	—	
Hollow Shaft OHL lbs	8450	8900	9305	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	—	
(N)	*(37600)*	*(39600)*	*(41400)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	—	
Solid Shaft OHL lbs	9420	9870	10260	10660	11100	11710	12050	12360	12810	12720	12660	12590	12550	—	
(N)	*(41900)*	*(43900)*	*(45630)*	*(47410)*	*(49370)*	*(52080)*	*(53590)*	*(54970)*	*(56970)*	*(56570)*	*(56310)*	*(56000)*	*(55820)*	—	
Input Power HP	**17.6**	**17.3**	**17.3**	**13.2**	**13.2**	**12.8**	**10.7**	**10.7**	**8.65**	**7.38**	**5.93**	**4.65**	**4.32**	—	4D160
(kW)	***(13.1)***	***(12.9)***	***(12.9)***	***(9.86)***	***(9.86)***	***(9.56)***	***(8.01)***	***(8.01)***	***(6.45)***	***(5.50)***	***(4.42)***	***(3.47)***	***(3.22)***	—	
Output Torque in•lbs	41770	46545	50970	42385	46370	52120	48230	52740	52120	52740	49025	46370	52740	—	
(N•m)	*(4720)*	*(5260)*	*(5760)*	*(4790)*	*(5240)*	*(5890)*	*(5450)*	*(5960)*	*(5890)*	*(5960)*	*(5540)*	*(5240)*	*(5960)*	—	
Hollow Shaft OHL lbs	15080	15350	15530	16700	16970	17445	18385	17915	18025	17915	18545	18950	17915	—	
(N)	*(67100)*	*(68300)*	*(69100)*	*(74300)*	*(75500)*	*(77600)*	*(81800)*	*(79700)*	*(80200)*	*(79700)*	*(82500)*	*(84300)*	*(79700)*	—	
Solid Shaft OHL lbs	13500	14150	14650	14960	15320	15800	16070	16310	16690	16650	16620	16590	16580	—	
(N)	*(60040)*	*(62930)*	*(65160)*	*(66540)*	*(68140)*	*(70270)*	*(71470)*	*(72540)*	*(74230)*	*(74050)*	*(73920)*	*(73790)*	*(73740)*	—	
Input Power HP	**25.2**	**21.5**	**21.5**	**18.0**	**18.0**	**15.3**	**12.9**	**12.9**	**10.5**	**8.82**	**7.63**	**6.34**	**5.06**	—	4D165
(kW)	***(18.8)***	***(16.0)***	***(16.0)***	***(13.4)***	***(13.4)***	***(11.4)***	***(9.59)***	***(9.59)***	***(7.81)***	***(6.58)***	***(5.69)***	***(4.73)***	***(3.77)***	—	
Output Torque in•lbs	60265	57695	63095	57695	63095	62210	57695	63095	63095	63095	63095	63095	61680	—	
(N•m)	*(6810)*	*(6520)*	*(7130)*	*(6520)*	*(7130)*	*(7030)*	*(6520)*	*(7130)*	*(7130)*	*(7130)*	*(7130)*	*(7130)*	*(6970)*	—	
Hollow Shaft OHL lbs	13600	14455	14565	15465	15620	15960	16970	15755	15755	15755	15755	15755	16115	—	
(N)	*(60500)*	*(64300)*	*(64800)*	*(68800)*	*(69500)*	*(71000)*	*(75500)*	*(70100)*	*(70100)*	*(70100)*	*(70100)*	*(70100)*	*(71700)*	—	
Solid Shaft OHL lbs	13500	14150	14650	14960	15320	15800	16070	16310	16690	16650	16620	16590	16580	—	
(N)	*(60040)*	*(62930)*	*(65160)*	*(66540)*	*(68140)*	*(70270)*	*(71470)*	*(72540)*	*(74230)*	*(74050)*	*(73920)*	*(73790)*	*(73740)*	—	
Input Power HP	**26.4**	**24.9**	**24.9**	**20.9**	**20.9**	**18.1**	**15.0**	**15.0**	**12.2**	**10.3**	**8.88**	**7.38**	**6.13**	—	4D170
(kW)	***(19.7)***	***(18.6)***	***(18.6)***	***(15.6)***	***(15.6)***	***(13.5)***	***(11.2)***	***(11.2)***	***(9.08)***	***(7.66)***	***(6.62)***	***(5.50)***	***(4.57)***	—	
Output Torque in•lbs	62830	67075	73360	66990	73270	73360	67165	73450	73450	73450	73450	73540	74775	—	
(N•m)	*(7100)*	*(7580)*	*(8290)*	*(7570)*	*(8280)*	*(8290)*	*(7590)*	*(8300)*	*(8300)*	*(8300)*	*(8300)*	*(8310)*	*(8450)*	—	
Hollow Shaft OHL lbs	13375	13690	12790	14725	12855	12790	14725	12790	12790	12765	12790	12765	12315	—	
(N)	*(59500)*	*(60900)*	*(56900)*	*(65500)*	*(57200)*	*(56900)*	*(65500)*	*(56900)*	*(56900)*	*(56800)*	*(56900)*	*(56800)*	*(54800)*	—	
Solid Shaft OHL lbs	13500	14150	14650	14960	15320	15800	16070	16310	16690	16650	16620	16590	16580	—	
(N)	*(60040)*	*(62930)*	*(65160)*	*(66540)*	*(68140)*	*(70270)*	*(71470)*	*(72540)*	*(74230)*	*(74050)*	*(73920)*	*(73790)*	*(73740)*	—	
Input Power HP	**32.3**	**28.7**	**26.1**	**24.0**	**22.0**	**18.9**	**17.2**	**15.7**	**12.8**	**10.8**	**9.32**	**7.75**	**6.33**	—	4D175
(kW)	***(24.1)***	***(21.4)***	***(19.5)***	***(17.9)***	***(16.4)***	***(14.1)***	***(12.8)***	***(11.7)***	***(9.54)***	***(8.04)***	***(6.95)***	***(5.78)***	***(4.72)***	—	
Output Torque in•lbs	76900	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	—	
(N•m)	*(8690)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	—	
Hollow Shaft OHL lbs	11485	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	—	
(N)	*(51100)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	—	
Solid Shaft OHL lbs	13500	14150	14650	14960	15320	15800	16070	16310	16690	16650	16620	16590	16580	—	
(N)	*(60040)*	*(62930)*	*(65160)*	*(66540)*	*(68140)*	*(70270)*	*(71470)*	*(72540)*	*(74230)*	*(74050)*	*(73920)*	*(73790)*	*(73740)*	—	

Frame Size Selection Tables 50 Hz, 1450 RPM

Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions [1]

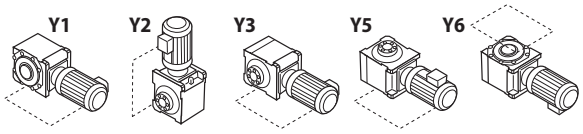


Dimensions on pages 2.156 - 2.166

Output RPM	132	112	104	90.6	80.6	69.0	65.9	58.0	51.8	41.4	37.2	31.5	27.4	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	**71.6**	**71.6**	**71.6**	**71.6**	**71.6**	**55.7**	**55.7**	**55.7**	**55.7**	**53.4**	**49.2**	**42.4**	**36.7**	4D180
(kW)	***(53.4)***	***(53.4)***	***(53.4)***	***(53.4)***	***(53.4)***	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(39.8)***	***(36.7)***	***(31.6)***	***(27.4)***	
Output Torque in•lbs	30085	36725	40175	45925	50175	46810	49910	54600	62485	75320	75850	77175	77175	
(N•m)	*(3400)*	*(4150)*	*(4540)*	*(5190)*	*(5670)*	*(5290)*	*(5640)*	*(6170)*	*(7060)*	*(8510)*	*(8570)*	*(8720)*	*(8270)*	
Hollow Shaft OHL lbs	8540	8675	8720	8745	8720	9710	9730	9730	9685	9685	10070	10810	11375	
(N)	*(38000)*	*(38600)*	*(38800)*	*(38900)*	*(38800)*	*(43200)*	*(43300)*	*(43300)*	*(43100)*	*(43100)*	*(44800)*	*(48100)*	*(50600)*	
Solid Shaft OHL lbs	6480	6480	6480	6480	6980	7690	7910	8500	9060	10240	10830	11740	12690	
(N)	*(28820)*	*(28820)*	*(28820)*	*(28820)*	*(31040)*	*(34200)*	*(35180)*	*(37800)*	*(40290)*	*(45540)*	*(48170)*	*(52210)*	*(56440)*	
Input Power HP	**80.5**	**80.5**	**80.5**	**80.5**	**80.5**	**60.3**	**60.3**	**60.3**	**60.3**	**53.4**	**49.2**	**42.4**	**36.7**	4D185
(kW)	***(60.0)***	***(60.0)***	***(60.0)***	***(60.0)***	***(60.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(39.8)***	***(36.7)***	***(31.6)***	***(27.4)***	
Output Torque in•lbs	33890	41235	45130	51590	56465	50795	54155	59210	67705	75320	75850	77175	77175	
(N•m)	*(3830)*	*(4660)*	*(5100)*	*(5830)*	*(6380)*	*(5740)*	*(6120)*	*(6690)*	*(7650)*	*(8510)*	*(8570)*	*(8720)*	*(8270)*	
Hollow Shaft OHL lbs	8225	8295	8315	8270	8225	9395	9395	9350	9260	9685	10070	10810	11375	
(N)	*(36600)*	*(36900)*	*(37000)*	*(36800)*	*(36600)*	*(41800)*	*(41800)*	*(41600)*	*(41200)*	*(43100)*	*(44800)*	*(48100)*	*(50600)*	
Solid Shaft OHL lbs	6480	6480	6480	6480	6980	7690	7910	8500	9060	10240	10830	11740	12690	
(N)	*(28820)*	*(28820)*	*(28820)*	*(28820)*	*(31040)*	*(34200)*	*(35180)*	*(37800)*	*(40290)*	*(45540)*	*(48170)*	*(52210)*	*(56440)*	
Input Power HP	**55.7**	**55.7**	**55.7**	**55.7**	**55.7**	**45.5**	**45.5**	**45.5**	**45.5**	**37.0**	**37.0**	**36.6**	**34.2**	4E170
(kW)	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(33.9)***	***(33.9)***	***(33.9)***	***(33.9)***	***(27.6)***	***(27.6)***	***(27.3)***	***(25.5)***	
Output Torque in•lbs	23450	28580	31235	35660	39025	38230	40795	44600	50970	52210	57075	66725	71945	
(N•m)	*(2650)*	*(3230)*	*(3530)*	*(4030)*	*(4410)*	*(4320)*	*(4610)*	*(5040)*	*(5760)*	*(5900)*	*(6450)*	*(7540)*	*(8130)*	
Hollow Shaft OHL lbs	12340	12835	13035	13330	13530	14500	14635	14855	15125	16365	16565	16950	17510	
(N)	*(54900)*	*(57100)*	*(58000)*	*(59300)*	*(60200)*	*(64500)*	*(65100)*	*(66100)*	*(67300)*	*(72800)*	*(73700)*	*(75400)*	*(77900)*	
Solid Shaft OHL lbs	9770	9770	9770	9770	10410	11310	11590	12350	13080	14630	15370	16550	17780	
(N)	*(43450)*	*(43450)*	*(43450)*	*(43450)*	*(46300)*	*(50300)*	*(51550)*	*(54930)*	*(58170)*	*(65070)*	*(68360)*	*(73610)*	*(79080)*	
Input Power HP	**60.3**	**60.3**	**60.3**	**60.3**	**60.3**	**49.6**	**49.6**	**49.6**	**49.6**	**40.4**	**40.4**	**40.4**	**40.4**	4E175
(kW)	***(45.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(37.0)***	***(37.0)***	***(37.0)***	***(37.0)***	***(30.1)***	***(30.1)***	***(30.1)***	***(30.1)***	
Output Torque in•lbs	25395	30970	33890	38670	42300	41770	44510	48670	55660	56900	62300	73625	84865	
(N•m)	*(2870)*	*(3500)*	*(3830)*	*(4370)*	*(4780)*	*(4720)*	*(5030)*	*(5500)*	*(6290)*	*(6430)*	*(7040)*	*(8320)*	*(9590)*	
Hollow Shaft OHL lbs	21625	12655	12835	13105	13285	14250	14365	14565	14790	16005	16185	16430	16565	
(N)	*(96200)*	*(56300)*	*(57100)*	*(58300)*	*(59100)*	*(63400)*	*(63900)*	*(64800)*	*(65800)*	*(71200)*	*(72000)*	*(73100)*	*(73700)*	
Solid Shaft OHL lbs	9770	9770	9770	9770	10410	11310	11590	12350	13080	14630	15370	16550	17780	
(N)	*(43450)*	*(43450)*	*(43450)*	*(43450)*	*(46300)*	*(50300)*	*(51550)*	*(54930)*	*(58170)*	*(65070)*	*(68360)*	*(73610)*	*(79080)*	
Input Power HP	**71.6**	**71.6**	**71.6**	**71.6**	**71.6**	**55.7**	**55.7**	**55.7**	**55.7**	**55.7**	**55.7**	**55.7**	**43.4**	4E180
(kW)	***(53.4)***	***(53.4)***	***(53.4)***	***(53.4)***	***(53.4)***	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(32.4)***	
Output Torque in•lbs	30085	36725	40175	45925	50175	46810	49910	54600	62475	78495	85850	101780	91160	
(N•m)	*(3400)*	*(4150)*	*(4540)*	*(5190)*	*(5670)*	*(5290)*	*(5640)*	*(6170)*	*(7060)*	*(8870)*	*(9700)*	*(11500)*	*(10300)*	
Hollow Shaft OHL lbs	11845	12230	12385	12585	12700	13870	13980	14115	14295	14455	14475	14385	16095	
(N)	*(52700)*	*(54400)*	*(55100)*	*(56000)*	*(56500)*	*(61700)*	*(62200)*	*(62800)*	*(63600)*	*(64300)*	*(64400)*	*(64000)*	*(71600)*	
Solid Shaft OHL lbs	9770	9770	9770	9770	10410	11310	11590	12350	13080	14630	15370	16550	17780	
(N)	*(43450)*	*(43450)*	*(43450)*	*(43450)*	*(46300)*	*(50300)*	*(51550)*	*(54930)*	*(58170)*	*(65070)*	*(68360)*	*(73610)*	*(79080)*	
Input Power HP	**80.5**	**80.5**	**80.5**	**80.5**	**80.5**	**60.3**	**60.3**	**60.3**	**60.3**	**60.3**	**60.3**	**56.1**	**48.8**	4E185
(kW)	***(60.0)***	***(60.0)***	***(60.0)***	***(60.0)***	***(60.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(41.8)***	***(36.4)***	
Output Torque in•lbs	33890	41235	45130	51590	56460	50795	54155	59200	67695	85140	92930	101780	102665	
(N•m)	*(3830)*	*(4660)*	*(5100)*	*(5830)*	*(6380)*	*(5740)*	*(6120)*	*(6690)*	*(7650)*	*(9620)*	*(10500)*	*(11500)*	*(11600)*	
Hollow Shaft OHL lbs	11575	11890	12025	12160	12250	13575	13665	13780	13915	13960	13935	14340	15265	
(N)	*(51500)*	*(52900)*	*(53500)*	*(54100)*	*(54500)*	*(60400)*	*(60800)*	*(61300)*	*(61900)*	*(62100)*	*(62000)*	*(63800)*	*(67900)*	
Solid Shaft OHL lbs	9770	9770	9770	9770	10410	11310	11590	12350	13080	14630	15370	16550	17780	
(N)	*(43450)*	*(43450)*	*(43450)*	*(43450)*	*(46300)*	*(50300)*	*(51550)*	*(54930)*	*(58170)*	*(65070)*	*(68360)*	*(73610)*	*(79080)*	

Notes: [1] For selections noted with shade, the continuous duty thermal rating is up to 50HP and only when Y2 mounting, the additional duty cycle limit to be applied up to 75% Equivalent Duty (10 minute cycle time).

Frame Size Selection Tables 50 Hz, 1450 RPM



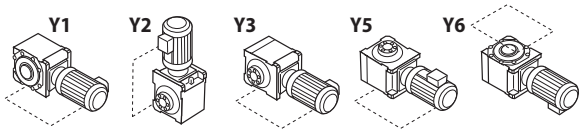
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	24.2	21.6	19.6	18.1	16.5	14.2	13.0	11.8	9.60	8.10	7.00	5.82	4.75	3.48	Frame Size
Ratio	**60**	**67**	**74**	**80**	**88**	**102**	**112**	**123**	**151**	**179**	**207**	**249**	**305**	**417**	
Input Power HP	**32.3**	**28.7**	**26.1**	**24.0**	**22.0**	**18.9**	**17.2**	**15.7**	**12.8**	**10.8**	**9.32**	**7.75**	**6.33**	—	4D180
(kW)	***(24.1)***	***(21.4)***	***(19.5)***	***(17.9)***	***(16.4)***	***(14.1)***	***(12.8)***	***(11.7)***	***(9.54)***	***(8.04)***	***(6.95)***	***(5.78)***	***(4.72)***	—	
Output Torque in•lbs	77175	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	—	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	—	
Hollow Shaft OHL lbs	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	—	
(N)	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	—	
Solid Shaft OHL lbs	13500	14150	14650	14960	15320	15800	16070	16310	16690	16650	16620	16590	16580	—	
(N)	*(60040)*	*(62930)*	*(65160)*	*(66540)*	*(68140)*	*(70270)*	*(71470)*	*(72540)*	*(74230)*	*(74050)*	*(73920)*	*(73790)*	*(73740)*	—	
Input Power HP	**32.3**	**28.7**	**26.1**	**24.0**	**22.0**	**18.9**	**17.2**	**15.7**	**12.8**	**10.8**	**9.32**	**7.75**	**6.33**	—	4D185
(kW)	***(24.1)***	***(21.4)***	***(19.5)***	***(17.9)***	***(16.4)***	***(14.1)***	***(12.8)***	***(11.7)***	***(9.54)***	***(8.04)***	***(6.95)***	***(5.78)***	***(4.72)***	—	
Output Torque in•lbs	77175	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	—	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	—	
Hollow Shaft OHL lbs	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	—	
(N)	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	—	
Solid Shaft OHL lbs	13500	14150	14650	14960	15320	15800	16070	16310	16690	16650	16620	16590	16580	—	
(N)	*(60040)*	*(62930)*	*(65160)*	*(66540)*	*(68140)*	*(70270)*	*(71470)*	*(72540)*	*(74230)*	*(74050)*	*(73920)*	*(73790)*	*(73740)*	—	
Input Power HP	**26.4**	**24.9**	**24.9**	**20.9**	**20.9**	**18.1**	**15.0**	**15.0**	**12.2**	**10.3**	**8.88**	**7.38**	**6.13**	—	4E170
(kW)	***(19.7)***	***(18.6)***	***(18.6)***	***(15.6)***	***(15.6)***	***(13.5)***	***(11.2)***	***(11.2)***	***(9.08)***	***(7.66)***	***(6.62)***	***(5.50)***	***(4.57)***	—	
Output Torque in•lbs	62830	67075	73360	66990	73270	73360	67165	73450	73450	73450	73450	73540	74775	—	
(N•m)	*(7100)*	*(7580)*	*(8290)*	*(7570)*	*(8280)*	*(8290)*	*(7590)*	*(8300)*	*(8300)*	*(8300)*	*(8300)*	*(8310)*	*(8450)*	—	
Hollow Shaft OHL lbs	19060	19580	19825	20410	20095	20075	20410	20075	20075	20075	20075	20075	20005	—	
(N)	*(84800)*	*(87100)*	*(88200)*	*(90800)*	*(89400)*	*(89300)*	*(90800)*	*(89300)*	*(89300)*	*(89300)*	*(89300)*	*(89300)*	*(89000)*	—	
Solid Shaft OHL lbs	18840	19670	20270	20480	20700	21020	21200	21360	21630	21720	21790	21860	21920	—	
(N)	*(83800)*	*(87490)*	*(90160)*	*(91090)*	*(92070)*	*(93490)*	*(94290)*	*(95000)*	*(96210)*	*(96610)*	*(96920)*	*(97230)*	*(97500)*	—	
Input Power HP	**32.3**	**31.6**	**29.5**	**26.1**	**24.8**	**21.3**	**19.3**	**19.3**	**15.2**	**13.2**	**11.1**	**9.36**	**7.54**	—	4E175
(kW)	***(24.1)***	***(23.6)***	***(22.0)***	***(19.5)***	***(18.5)***	***(15.9)***	***(14.4)***	***(14.4)***	***(11.3)***	***(9.87)***	***(8.29)***	***(6.98)***	***(5.62)***	—	
Output Torque in•lbs	76900	85130	86990	83805	86990	86990	86545	94690	91150	94690	92035	92920	92035	—	
(N•m)	*(8690)*	*(9620)*	*(9830)*	*(9470)*	*(9830)*	*(9830)*	*(9780)*	*(10700)*	*(10300)*	*(10700)*	*(10400)*	*(10500)*	*(10400)*	—	
Hollow Shaft OHL lbs	18025	18250	18835	19555	19400	19400	19420	18995	19175	18995	19150	19085	19150	—	
(N)	*(80200)*	*(81200)*	*(83800)*	*(87000)*	*(86300)*	*(86300)*	*(86400)*	*(84500)*	*(85300)*	*(84500)*	*(85200)*	*(84900)*	*(85200)*	—	
Solid Shaft OHL lbs	18840	19670	20270	20480	20700	21020	21200	21360	21630	21720	21790	21860	21920	—	
(N)	*(83800)*	*(87490)*	*(90160)*	*(91090)*	*(92070)*	*(93490)*	*(94290)*	*(95000)*	*(96210)*	*(96610)*	*(96920)*	*(97230)*	*(97500)*	—	
Input Power HP	**41.0**	**38.1**	**34.9**	**32.0**	**29.2**	**25.5**	**22.9**	**20.9**	**17.0**	**14.4**	**12.4**	**10.3**	**8.41**	—	4E180
(kW)	***(30.6)***	***(28.4)***	***(26.0)***	***(23.9)***	***(21.8)***	***(18.8)***	***(17.1)***	***(15.6)***	***(12.7)***	***(10.7)***	***(9.25)***	***(7.69)***	***(6.27)***	—	
Output Torque in•lbs	98240	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	—	
(N•m)	*(11100)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	
Hollow Shaft OHL lbs	16500	17015	17690	18320	18430	18430	18430	18430	18430	18430	18430	18430	18430	—	
(N)	*(73400)*	*(75700)*	*(78700)*	*(81500)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	18840	19670	20270	20480	20700	21020	21200	21360	21630	21720	21790	21860	21920	—	
(N)	*(83800)*	*(87490)*	*(90160)*	*(91090)*	*(92070)*	*(93490)*	*(94290)*	*(95000)*	*(96210)*	*(96610)*	*(96920)*	*(97230)*	*(97500)*	—	
Input Power HP	**43.0**	**38.1**	**34.9**	**32.0**	**29.2**	**25.2**	**22.9**	**20.9**	**17.0**	**14.4**	**12.4**	**10.3**	**8.41**	—	4E185
(kW)	***(32.1)***	***(28.4)***	***(26.0)***	***(23.9)***	***(21.8)***	***(18.8)***	***(17.1)***	***(15.6)***	***(12.7)***	***(10.7)***	***(9.25)***	***(7.69)***	***(6.27)***	—	
Output Torque in•lbs	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	
Hollow Shaft OHL lbs	16140	17015	17690	18300	18430	18430	18430	18430	18430	18430	18430	18430	18430	—	
(N)	*(71800)*	*(75700)*	*(78700)*	*(81500)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	18840	19670	20270	20480	20700	21020	21200	21360	21630	21720	21790	21860	21920	—	
(N)	*(83800)*	*(87490)*	*(90160)*	*(91090)*	*(92070)*	*(93490)*	*(94290)*	*(95000)*	*(96210)*	*(96610)*	*(96920)*	*(97230)*	*(97500)*	—	

Frame Size Selection Tables 50 Hz, 1450 RPM

Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions [1]

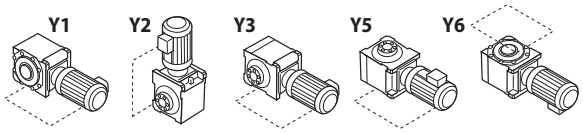


Dimensions on pages 2.156 - 2.166

Output RPM	132	112	104	90.6	80.6	69.0	65.9	58.0	51.8	41.4	37.2	31.5	27.4	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	**91.7**	**91.7**	**91.7**	**91.7**	**91.7**	**67.9**	**67.9**	**67.9**	**67.9**	**67.9**	**64.6**	**56.3**	**48.8**	4E190
(kW)	***(68.4)***	***(68.4)***	***(68.4)***	***(68.4)***	***(68.4)***	***(50.6)***	***(50.6)***	***(50.6)***	***(50.6)***	***(50.6)***	***(48.2)***	***(42.0)***	***(36.4)***	
Output Torque in•lbs	38580	47075	51500	58845	64335	57075	60885	66635	76105	95585	100010	102665	102665	
(N•m)	*(4360)*	*(5320)*	*(5820)*	*(6650)*	*(7270)*	*(6450)*	*(6880)*	*(7530)*	*(8600)*	*(10800)*	*(11300)*	*(11600)*	*(11600)*	
Hollow Shaft OHL lbs	11240	11465	11555	11645	11665	13125	13170	13240	13285	13195	13465	14295	15265	
(N)	*(50000)*	*(51000)*	*(51400)*	*(51800)*	*(51900)*	*(58400)*	*(58600)*	*(58900)*	*(59100)*	*(58700)*	*(59900)*	*(63600)*	*(67900)*	
Solid Shaft OHL lbs	9770	9770	9770	9770	10410	11310	11590	12350	13080	14630	15370	16550	17780	
(N)	*(43450)*	*(43450)*	*(43450)*	*(43450)*	*(46300)*	*(50300)*	*(51550)*	*(54930)*	*(58170)*	*(65070)*	*(68360)*	*(73610)*	*(79080)*	
Input Power HP	**101**	**101**	**101**	**101**	**101**	**73.8**	**73.8**	**73.8**	**73.84**	**70.0**	**64.6**	**56.3**	**48.8**	4E195
(kW)	***(75.0)***	***(75.0)***	***(75.0)***	***(75.0)***	***(75.0)***	***(55.0)***	***(55.0)***	***(55.0)***	***(55.0)***	***(52.2)***	***(48.2)***	***(42.0)***	***(36.4)***	
Output Torque in•lbs	42300	51590	56460	64510	70540	62035	66195	72385	82750	99125	100015	102665	102665	
(N•m)	*(4780)*	*(5830)*	*(6380)*	*(7290)*	*(7970)*	*(7010)*	*(7480)*	*(8180)*	*(9350)*	*(11200)*	*(11300)*	*(11600)*	*(11600)*	
Hollow Shaft OHL lbs	10945	11125	11195	11215	11215	12765	12790	12810	12790	12970	13465	14295	15265	
(N)	*(48700)*	*(49500)*	*(49800)*	*(49900)*	*(49900)*	*(56800)*	*(56900)*	*(57000)*	*(56900)*	*(57700)*	*(59900)*	*(63600)*	*(67900)*	
Solid Shaft OHL lbs	9770	9770	9770	9770	10410	11310	11590	12350	13080	14630	15370	16550	17780	
(N)	*(43450)*	*(43450)*	*(43450)*	*(43450)*	*(46300)*	*(50300)*	*(51550)*	*(54930)*	*(58170)*	*(65070)*	*(68360)*	*(73610)*	*(79080)*	
Input Power HP	**71.6**	**71.6**	**71.6**	**71.6**	**71.6**	**55.7**	**55.7**	**55.7**	**55.7**	**55.7**	**55.7**	**55.7**	**43.4**	4F180
(kW)	***(53.4)***	***(53.4)***	***(53.4)***	***(53.4)***	***(53.4)***	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(32.4)***	
Output Torque in•lbs	30085	36725	40175	45925	50175	46810	49910	54600	62475	78495	85840	101770	91150	
(N•m)	*(3400)*	*(4150)*	*(4540)*	*(5190)*	*(5670)*	*(5290)*	*(5640)*	*(6170)*	*(7060)*	*(8870)*	*(9700)*	*(11500)*	*(10300)*	
Hollow Shaft OHL lbs	21285	22255	22705	23380	23825	25625	25850	26300	27200	28325	28550	27875	28325	
(N)	*(94700)*	*(99000)*	*(101000)*	*(104000)*	*(106000)*	*(114000)*	*(115000)*	*(117000)*	*(121000)*	*(126000)*	*(127000)*	*(124000)*	*(126000)*	
Solid Shaft OHL lbs	17510	17510	17510	17510	18570	20070	20530	21790	22990	25560	26850	28470	28910	
(N)	*(77880)*	*(77880)*	*(77880)*	*(77880)*	*(82590)*	*(89270)*	*(91310)*	*(96920)*	*(102250)*	*(113690)*	*(119420)*	*(126630)*	*(128590)*	
Input Power HP	**80.5**	**80.5**	**80.5**	**80.5**	**80.5**	**60.3**	**60.3**	**60.3**	**60.3**	**60.3**	**60.3**	**60.3**	**52.3**	4F185
(kW)	***(60.0)***	***(60.0)***	***(60.0)***	***(60.0)***	***(60.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(39.0)***	
Output Torque in•lbs	33890	41235	45130	51590	56460	50795	54155	59200	67695	85130	92920	109735	109735	
(N•m)	*(3830)*	*(4660)*	*(5100)*	*(5830)*	*(6380)*	*(5740)*	*(6120)*	*(6690)*	*(7650)*	*(9620)*	*(10500)*	*(12400)*	*(12400)*	
Hollow Shaft OHL lbs	21040	21940	22390	22930	23380	25400	25625	26075	26750	27875	28100	27425	27425	
(N)	*(93600)*	*(97600)*	*(99600)*	*(102000)*	*(104000)*	*(113000)*	*(114000)*	*(116000)*	*(119000)*	*(124000)*	*(125000)*	*(122000)*	*(122000)*	
Solid Shaft OHL lbs	17510	17510	17510	17510	18570	20070	20530	21790	22990	25560	26850	28470	28910	
(N)	*(77880)*	*(77880)*	*(77880)*	*(77880)*	*(82590)*	*(89270)*	*(91310)*	*(96920)*	*(102250)*	*(113690)*	*(119420)*	*(126630)*	*(128590)*	
Input Power HP	**91.7**	**91.7**	**91.7**	**91.7**	**91.7**	**67.9**	**67.9**	**67.9**	**67.9**	**67.9**	**67.9**	**67.9**	**67.9**	4F190
(kW)	***(68.4)***	***(68.4)***	***(68.4)***	***(68.4)***	***(68.4)***	***(50.6)***	***(50.6)***	***(50.6)***	***(50.6)***	***(50.6)***	***(50.6)***	***(50.6)***	***(50.6)***	
Output Torque in•lbs	38580	47075	51500	58845	64335	57075	60885	66635	76105	95575	104425	123890	142475	
(N•m)	*(4360)*	*(5320)*	*(5820)*	*(6650)*	*(7270)*	*(6450)*	*(6880)*	*(7530)*	*(8600)*	*(10800)*	*(11800)*	*(14000)*	*(16100)*	
Hollow Shaft OHL lbs	20725	21555	21985	22480	22930	24950	25175	25625	26300	27200	27425	26750	26075	
(N)	*(92200)*	*(95900)*	*(97800)*	*(100000)*	*(102000)*	*(111000)*	*(112000)*	*(114000)*	*(117000)*	*(121000)*	*(122000)*	*(119000)*	*(116000)*	
Solid Shaft OHL lbs	17510	17510	17510	17510	18570	20070	20530	21790	22990	25560	26850	28470	28910	
(N)	*(77880)*	*(77880)*	*(77880)*	*(77880)*	*(82590)*	*(89270)*	*(91310)*	*(96920)*	*(102250)*	*(113690)*	*(119420)*	*(126630)*	*(128590)*	
Input Power HP	**101**	**101**	**101**	**101**	**101**	**73.8**	**73.8**	**73.8**	**73.8**	**73.8**	**73.8**	**73.8**	**73.8**	4F195
(kW)	***(75.0)***	***(75.0)***	***(75.0)***	***(75.0)***	***(75.0)***	***(55.0)***	***(55.0)***	***(55.0)***	***(55.0)***	***(55.0)***	***(55.0)***	***(55.0)***	***(55.0)***	
Output Torque in•lbs	42300	51590	56460	64510	70530	62035	66195	72385	82740	104425	114155	134510	154885	
(N•m)	*(4780)*	*(5830)*	*(6380)*	*(7290)*	*(7970)*	*(7010)*	*(7480)*	*(8180)*	*(9350)*	*(11800)*	*(12900)*	*(15200)*	*(17500)*	
Hollow Shaft OHL lbs	20480	21265	21645	22120	22480	24500	24725	25175	25850	26525	26975	26300	25400	
(N)	*(91100)*	*(94600)*	*(96300)*	*(98400)*	*(100000)*	*(109000)*	*(110000)*	*(112000)*	*(115000)*	*(118000)*	*(120000)*	*(117000)*	*(113000)*	
Solid Shaft OHL lbs	17510	17510	17510	17510	18570	20070	20530	21790	22990	25560	26850	28470	28910	
(N)	*(77880)*	*(77880)*	*(77880)*	*(77880)*	*(82590)*	*(89270)*	*(91310)*	*(96920)*	*(102250)*	*(113690)*	*(119420)*	*(126630)*	*(128590)*	

Notes: [1] For selections noted with shade, the continuous duty thermal rating for 618# input is up to 50HP, 619# input is up to 75HP, and only when Y2 mounting, the additional duty cycle limit to be applied up to 75% Equivalent Duty (10 minute cycle time).

Frame Size Selection Tables 50 Hz, 1450 RPM



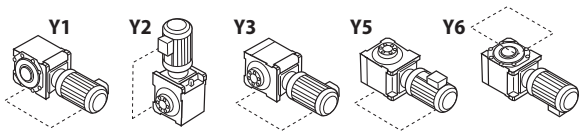
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	24.2	21.6	19.6	18.1	16.5	14.2	13.0	11.8	9.60	8.10	7.00	5.82	4.75	3.48	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	**43.0**	**38.1**	**34.9**	**32.0**	**29.2**	**25.2**	**22.9**	**20.9**	**17.0**	**14.4**	**12.4**	**10.3**	**8.41**	**—**	4E190
(kW)	***(32.1)***	***(28.4)***	***(26.0)***	***(23.9)***	***(21.8)***	***(18.8)***	***(17.1)***	***(15.6)***	***(12.7)***	***(10.7)***	***(9.25)***	***(7.69)***	***(6.27)***	**—**	
Output Torque in•lbs	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	
Hollow Shaft OHL lbs	16140	17015	17690	18320	18430	18430	18430	18430	18430	18430	18430	18430	18430	—	
(N)	*(71800)*	*(75700)*	*(78700)*	*(81500)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	18840	19670	20270	20480	20700	21020	21200	21360	21630	21720	21790	21860	21920	—	
(N)	*(83800)*	*(87490)*	*(90160)*	*(91090)*	*(92070)*	*(93490)*	*(94290)*	*(95000)*	*(96210)*	*(96610)*	*(96920)*	*(97230)*	*(97500)*	—	
Input Power HP	**43.0**	**38.1**	**34.9**	**32.0**	**29.2**	**25.2**	**22.9**	**20.9**	**17.0**	**14.4**	**12.4**	**10.3**	**8.41**	**—**	4E195
(kW)	***(32.1)***	***(28.4)***	***(26.0)***	***(23.9)***	***(21.8)***	***(18.8)***	***(17.1)***	***(15.6)***	***(12.7)***	***(10.7)***	***(9.25)***	***(7.69)***	***(6.27)***	**—**	
Output Torque in•lbs	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	
Hollow Shaft OHL lbs	16140	17015	17690	18320	18430	18430	18430	18430	18430	18430	18430	18430	18430	—	
(N)	*(71800)*	*(75700)*	*(78700)*	*(81500)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	18840	19670	20270	20480	20700	21020	21200	21360	21630	21720	21790	21860	21920	—	
(N)	*(83800)*	*(87490)*	*(90160)*	*(91090)*	*(92070)*	*(93490)*	*(94290)*	*(95000)*	*(96210)*	*(96610)*	*(96920)*	*(97230)*	*(97500)*	—	
Input Power HP	**41.0**	**40.2**	**40.2**	**32.3**	**32.3**	**26.1**	**24.8**	**24.8**	**20.2**	**16.1**	**13.1**	**11.8**	**9.59**	**—**	4F180
(kW)	***(30.6)***	***(30.0)***	***(30.0)***	***(24.1)***	***(24.1)***	***(19.5)***	***(18.5)***	***(18.5)***	***(15.1)***	***(12.0)***	***(9.75)***	***(8.80)***	***(7.15)***	**—**	
Output Torque in•lbs	98230	107965	118580	103540	113270	106195	111500	122120	122120	115040	107965	117695	116810	—	
(N•m)	*(11100)*	*(12200)*	*(13400)*	*(11700)*	*(12800)*	*(12000)*	*(12600)*	*(13800)*	*(13800)*	*(13000)*	*(12200)*	*(13300)*	*(13200)*	—	
Hollow Shaft OHL lbs	27875	27425	26975	27650	27200	27650	27425	26975	26975	27200	27425	26975	27200	—	
(N)	*(124000)*	*(122000)*	*(120000)*	*(123000)*	*(121000)*	*(123000)*	*(122000)*	*(120000)*	*(120000)*	*(121000)*	*(122000)*	*(120000)*	*(121000)*	—	
Solid Shaft OHL lbs	28940	28950	28970	28970	28970	28970	28970	28970	29010	29180	29300	29430	29530	—	
(N)	*(128720)*	*(128760)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(129030)*	*(129790)*	*(130320)*	*(130900)*	*(131340)*	—	
Input Power HP	**51.2**	**51.1**	**51.1**	**40.4**	**40.4**	**32.3**	**30.3**	**30.3**	**24.9**	**20.2**	**16.1**	**13.1**	**11.5**	**—**	4F185
(kW)	***(38.2)***	***(38.1)***	***(38.1)***	***(30.1)***	***(30.1)***	***(24.1)***	***(22.6)***	***(22.6)***	***(18.6)***	***(15.1)***	***(12.0)***	***(9.79)***	***(8.59)***	**—**	
Output Torque in•lbs	122120	137165	150440	129200	141590	131855	136280	148670	150440	145130	132740	130970	140705	—	
(N•m)	*(13800)*	*(15500)*	*(17000)*	*(14600)*	*(16000)*	*(14900)*	*(15400)*	*(16800)*	*(17000)*	*(16400)*	*(15000)*	*(14800)*	*(15900)*	—	
Hollow Shaft OHL lbs	26975	26300	25625	26525	26075	26525	26300	25625	25625	25850	26300	26525	26075	—	
(N)	*(120000)*	*(117000)*	*(114000)*	*(118000)*	*(116000)*	*(118000)*	*(117000)*	*(114000)*	*(114000)*	*(115000)*	*(117000)*	*(118000)*	*(116000)*	—	
Solid Shaft OHL lbs	28940	28950	28970	28970	28970	28970	28970	28970	29010	29180	29300	29430	29530	—	
(N)	*(128720)*	*(128760)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(129030)*	*(129790)*	*(130320)*	*(130900)*	*(131340)*	—	
Input Power HP	**66.8**	**55.0**	**54.0**	**47.2**	**45.5**	**39.2**	**32.6**	**32.5**	**26.4**	**22.3**	**19.3**	**160**	**13.0**	**—**	4F190
(kW)	***(49.8)***	***(41.0)***	***(40.3)***	***(35.2)***	***(33.9)***	***(29.2)***	***(24.3)***	***(24.2)***	***(19.7)***	***(16.6)***	***(14.4)***	***(11.9)***	***(9.73)***	**—**	
Output Torque in•lbs	159310	147785	159310	151325	159310	159310	146015	159310	159310	159310	159310	159310	159310	—	
(N•m)	*(18000)*	*(16700)*	*(18000)*	*(17100)*	*(18000)*	*(18000)*	*(16500)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	—	
Hollow Shaft OHL lbs	25175	25850	25175	25625	25175	25175	25850	25175	25175	25175	25175	25175	25175	—	
(N)	*(112000)*	*(115000)*	*(112000)*	*(114000)*	*(112000)*	*(112000)*	*(115000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(113000)*	—	
Solid Shaft OHL lbs	28940	28950	28940	28970	28940	28940	28970	28940	28940	28940	28940	28940	28940	—	
(N)	*(128720)*	*(128760)*	*(128720)*	*(128850)*	*(128720)*	*(128720)*	*(128850)*	*(128720)*	*(128720)*	*(128720)*	*(128720)*	*(128720)*	*(128720)*	—	
Input Power HP	**66.8**	**59.1**	**54.0**	**49.8**	**45.5**	**39.2**	**35.5**	**32.5**	**26.4**	**22.3**	**19.3**	**16.0**	**13.0**	**—**	4F195
(kW)	***(49.8)***	***(44.1)***	***(40.3)***	***(37.1)***	***(33.9)***	***(29.2)***	***(26.5)***	***(24.2)***	***(19.7)***	***(16.6)***	***(14.4)***	***(11.9)***	***(9.73)***	**—**	
Output Torque in•lbs	159310	159290	159310	159290	159310	159310	159290	159310	159310	159310	159310	159310	159310	—	
(N•m)	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	—	
Hollow Shaft OHL lbs	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	—	
(N)	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	—	
Solid Shaft OHL lbs	28940	28950	28970	28970	28970	28970	28970	28970	29010	29180	29300	29430	29530	—	
(N)	*(128720)*	*(128760)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(129030)*	*(129790)*	*(130320)*	*(130900)*	*(131340)*	—	

Frame Size Selection Tables 1165 RPM

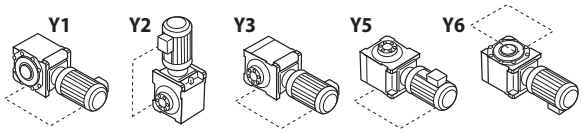
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	106	89.6	83.2	72.8	64.7	55.5	53.0	46.6	41.6	33.3	29.9	25.3	22.0	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	**3.15**	**3.15**	**3.15**	**3.15**	**3.15**	**3.15**	—	—	**3.15**	**3.15**	**3.15**	**3.15**	**2.87**	
(kW)	***(2.35)***	***(2.35)***	***(2.35)***	***(2.35)***	***(2.35)***	***(2.35)***	—	—	***(2.35)***	***(2.35)***	***(2.35)***	***(2.35)***	***(2.14)***	
Output Torque in•lbs	1645	2005	2200	2510	2750	3300	—	—	4395	5530	6050	7150	7510	
(N•m)	*(186)*	*(227)*	*(249)*	*(284)*	*(311)*	*(373)*	—	—	*(497)*	*(625)*	*(684)*	*(808)*	*(849)*	**4A100**
Hollow Shaft OHL lbs	4135	4360	4470	4605	4720	4920	—	—	5260	5530	5485	5190	5055	
(N)	*(18400)*	*(19400)*	*(19900)*	*(20500)*	*(21000)*	*(21900)*	—	—	*(23400)*	*(24600)*	*(24400)*	*(23100)*	*(22500)*	
Solid Shaft OHL lbs	3350	3350	3480	3700	3920	4180	—	—	4530	4580	4580	4580	4580	
(N)	*(14900)*	*(14900)*	*(15470)*	*(16450)*	*(17430)*	*(18590)*	—	—	*(20140)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**4.26**	**4.26**	**4.26**	**4.26**	**4.26**	**4.26**	**—**	**—**	**4.26**	**4.26**	**4.26**	**3.97**	**3.45**	
(kW)	***(3.18)***	***(3.18)***	***(3.18)***	***(3.18)***	***(3.18)***	***(3.18)***	**—**	**—**	***(3.18)***	***(3.18)***	***(3.18)***	***(2.96)***	***(2.57)***	
Output Torque in•lbs	2230	2725	2970	3405	3725	4465	—	—	5955	7485	8185	9025	9025	
(N•m)	*(252)*	*(308)*	*(336)*	*(385)*	*(421)*	*(505)*	—	—	*(673)*	*(846)*	*(925)*	*(1020)*	*(1020)*	**4A105**
Hollow Shaft OHL lbs	4065	4270	4360	4495	4585	4765	—	—	5055	5080	4830	4515	4515	
(N)	*(18100)*	*(19000)*	*(19400)*	*(20000)*	*(20400)*	*(21200)*	—	—	*(22500)*	*(22600)*	*(21500)*	*(20100)*	*(20100)*	
Solid Shaft OHL lbs	3350	3350	3480	3700	3920	4180	—	—	4530	4580	4580	4580	4580	
(N)	*(14900)*	*(14900)*	*(15470)*	*(16450)*	*(17430)*	*(18590)*	—	—	*(20140)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**—**	**—**	**—**	**—**	**—**	**4.76**	**—**	**—**	**4.76**	**4.76**	**4.76**	**4.76**	**4.13**	
(kW)	**—**	**—**	**—**	**—**	**—**	***(3.55)***	**—**	**—**	***(3.55)***	***(3.55)***	***(3.55)***	***(3.55)***	***(3.08)***	
Output Torque in•lbs	—	—	—	—	—	4980	—	—	6645	8350	9115	10795	10795	
(N•m)	—	—	—	—	—	*(563)*	—	—	*(751)*	*(944)*	*(1030)*	*(1220)*	*(1220)*	**4A110**
Hollow Shaft OHL lbs	—	—	—	—	—	4695	—	—	4965	4765	4450	3570	3550	
(N)	—	—	—	—	—	*(20900)*	—	—	*(22100)*	*(21200)*	*(19800)*	*(15900)*	*(15800)*	
Solid Shaft OHL lbs	—	—	—	—	—	4180	—	—	4530	4580	4580	4580	4580	
(N)	—	—	—	—	—	*(18590)*	—	—	*(20140)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**—**	**—**	**—**	**—**	**—**	**5.26**	**—**	**—**	**5.26**	**5.26**	**5.26**	**5.03**	**4.36**	
(kW)	**—**	**—**	**—**	**—**	**—**	***(3.92)***	**—**	**—**	***(3.92)***	***(3.92)***	***(3.92)***	***(3.75)***	***(3.25)***	
Output Torque in•lbs	—	—	—	—	—	5500	—	—	7345	9200	10085	11415	11415	
(N•m)	—	—	—	—	—	*(622)*	—	—	*(830)*	*(1040)*	*(1140)*	*(1290)*	*(1290)*	**4A115**
Hollow Shaft OHL lbs	—	—	—	—	—	4630	—	—	4855	4405	3975	3120	3120	
(N)	—	—	—	—	—	*(20600)*	—	—	*(21600)*	*(19600)*	*(17700)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	—	—	—	—	—	4180	—	—	4530	4580	4580	4580	4580	
(N)	—	—	—	—	—	*(18590)*	—	—	*(20140)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**12.9**	**12.9**	**12.9**	**12.8**	**12.8**	**8.77**	**8.77**	**8.77**	**8.18**	**6.50**	**5.94**	**5.03**	**4.36**	
(kW)	***(9.60)***	***(9.60)***	***(9.60)***	***(9.54)***	***(9.54)***	***(6.54)***	***(6.54)***	***(6.54)***	***(6.10)***	***(4.85)***	***(4.43)***	***(3.75)***	***(3.25)***	
Output Torque in•lbs	6740	8220	9025	10175	11150	9200	9820	10705	11415	11415	11415	11415	11415	
(N•m)	*(762)*	*(929)*	*(1020)*	*(1150)*	*(1260)*	*(1040)*	*(1110)*	*(1210)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	**4A120**
Hollow Shaft OHL lbs	3435	3505	3525	3550	3300	4110	4135	3615	3120	3120	3120	3120	3120	
(N)	*(15300)*	*(15600)*	*(15700)*	*(15800)*	*(14700)*	*(18300)*	*(18400)*	*(16100)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	3350	3350	3480	3700	3920	4180	4260	4450	4530	4580	4580	4580	4580	
(N)	*(14900)*	*(14900)*	*(15470)*	*(16450)*	*(17430)*	*(18590)*	*(18940)*	*(19790)*	*(20140)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**14.8**	**13.5**	**13.5**	**12.8**	**12.8**	**9.79**	**9.11**	**9.11**	**8.18**	**6.50**	**5.94**	**5.03**	**4.36**	
(kW)	***(11.0)***	***(10.1)***	***(10.1)***	***(9.54)***	***(9.54)***	***(7.30)***	***(6.79)***	***(6.79)***	***(6.10)***	***(4.85)***	***(4.43)***	***(3.75)***	***(3.25)***	
Output Torque in•lbs	7725	8625	9465	10175	11150	10265	10175	11150	11415	11415	11415	11415	11415	
(N•m)	*(873)*	*(975)*	*(1070)*	*(1150)*	*(1260)*	*(1160)*	*(1150)*	*(1260)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	**4A125**
Hollow Shaft OHL lbs	3300	3435	3460	3550	3300	3885	3930	3345	3120	3120	3120	3120	3120	
(N)	*(14700)*	*(15300)*	*(15400)*	*(15800)*	*(14700)*	*(17300)*	*(17500)*	*(14900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	3350	3350	3480	3700	3920	4180	4260	4450	4530	4580	4580	4580	4580	
(N)	*(14900)*	*(14900)*	*(15470)*	*(16450)*	*(17430)*	*(18590)*	*(18940)*	*(19790)*	*(20140)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	

Frame Size Selection Tables 1165 RPM



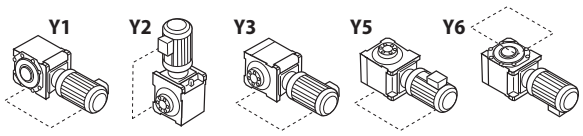
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	19.4	17.4	15.7	14.6	13.2	11.4	10.4	9.47	7.72	6.51	5.63	4.68	3.82	2.79	Frame Size
Ratio	**60**	**67**	**74**	**80**	**88**	**102**	**112**	**123**	**151**	**179**	**207**	**249**	**305**	**417**	
Input Power HP	**2.53**	**2.05**	**2.05**	**1.70**	**1.70**	**1.49**	**1.23**	**1.23**	**1.00**	**0.751**	**0.692**	**0.585**	**0.495**	**0.282**	**4A100**
(kW)	***(1.89)***	***(1.53)***	***(1.53)***	***(1.27)***	***(1.27)***	***(1.11)***	***(0.917)***	***(0.917)***	***(0.747)***	***(0.560)***	***(0.516)***	***(0.436)***	***(0.369)***	***(0.210)***	
Output Torque in•lbs	7510	6865	7510	6795	7430	7510	6865	7510	7510	6690	7120	7245	7510	5845	
(N•m)	*(849)*	*(776)*	*(849)*	*(768)*	*(840)*	*(849)*	*(776)*	*(849)*	*(849)*	*(756)*	*(805)*	*(819)*	*(849)*	*(661)*	
Hollow Shaft OHL lbs	5055	5260	5055	5280	5100	5055	5260	5055	5055	5305	5190	5145	5055	5530	
(N)	*(22500)*	*(23400)*	*(22500)*	*(23500)*	*(22700)*	*(22500)*	*(23400)*	*(22500)*	*(22500)*	*(23600)*	*(23100)*	*(22900)*	*(22500)*	*(24600)*	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	4540	4540	4540	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	
Input Power HP	**3.04**	**2.45**	**2.45**	**2.07**	**2.07**	**1.78**	**1.48**	**1.48**	**1.20**	**0.937**	**0.809**	**0.601**	**0.570**	**0.351**	**4A105**
(kW)	***(2.27)***	***(1.83)***	***(1.83)***	***(1.54)***	***(1.54)***	***(1.33)***	***(1.10)***	***(1.10)***	***(0.896)***	***(0.699)***	***(0.603)***	***(0.448)***	***(0.425)***	***(0.262)***	
Output Torque in•lbs	9025	8245	9025	8245	9025	9025	8245	9025	9025	8345	8325	7440	8660	7290	
(N•m)	*(1020)*	*(932)*	*(1020)*	*(932)*	*(1020)*	*(1020)*	*(932)*	*(1020)*	*(1020)*	*(943)*	*(941)*	*(841)*	*(979)*	*(824)*	
Hollow Shaft OHL lbs	4515	4810	4515	4810	4515	4515	4810	4515	4515	4785	4785	5080	4650	5125	
(N)	*(20100)*	*(21400)*	*(20100)*	*(21400)*	*(20100)*	*(20100)*	*(21400)*	*(20100)*	*(20100)*	*(21300)*	*(21300)*	*(22600)*	*(20700)*	*(22800)*	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	4540	4540	4540	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	
Input Power HP	**3.65**	**2.95**	**2.95**	**2.48**	**2.48**	**2.13**	**1.77**	**1.77**	**1.45**	**1.21**	**1.05**	**0.873**	**0.712**	**—**	**4A110**
(kW)	***(2.72)***	***(2.20)***	***(2.20)***	***(1.85)***	***(1.85)***	***(1.59)***	***(1.32)***	***(1.32)***	***(1.08)***	***(0.906)***	***(0.784)***	***(0.651)***	***(0.531)***	**—**	
Output Torque in•lbs	10795	9910	10795	9910	10795	10795	9910	10795	10795	10795	10795	10795	10795	—	
(N•m)	*(1220)*	*(1120)*	*(1220)*	*(1120)*	*(1220)*	*(1220)*	*(1120)*	*(1220)*	*(1220)*	*(1220)*	*(1220)*	*(1220)*	*(1220)*	—	
Hollow Shaft OHL lbs	3550	4090	3550	4090	3550	3550	4090	3550	3550	3550	3550	3550	3550	—	
(N)	*(15800)*	*(18200)*	*(15800)*	*(18200)*	*(15800)*	*(15800)*	*(18200)*	*(15800)*	*(15800)*	*(15800)*	*(15800)*	*(15800)*	*(15800)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	—	
Input Power HP	**3.85**	**3.41**	**3.11**	**2.86**	**2.61**	**2.25**	**2.04**	**1.86**	**1.52**	**1.28**	**1.11**	**0.920**	**0.752**	**—**	**4A115**
(kW)	***(2.87)***	***(2.54)***	***(2.32)***	***(2.13)***	***(1.95)***	***(1.68)***	***(1.52)***	***(1.39)***	***(1.13)***	***(0.956)***	***(0.827)***	***(0.687)***	***(0.561)***	**—**	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*		
Input Power HP	**3.85**	**3.41**	**3.11**	**2.86**	**2.61**	**2.25**	**2.04**	**1.86**	**1.52**	**1.28**	**1.11**	**0.920**	**0.752**	**—**	**4A120**
(kW)	***(2.87)***	***(2.54)***	***(2.32)***	***(2.13)***	***(1.95)***	***(1.68)***	***(1.52)***	***(1.39)***	***(1.13)***	***(0.956)***	***(0.827)***	***(0.687)***	***(0.561)***	**—**	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*		
Input Power HP	**3.85**	**3.41**	**3.11**	**2.86**	**2.61**	**2.25**	**2.04**	**1.86**	**1.52**	**1.28**	**1.11**	**0.920**	**0.752**	**—**	**4A125**
(kW)	***(2.87)***	***(2.54)***	***(2.32)***	***(2.13)***	***(1.95)***	***(1.68)***	***(1.52)***	***(1.39)***	***(1.13)***	***(0.956)***	***(0.827)***	***(0.687)***	***(0.561)***	**—**	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*		

Frame Size Selection Tables 1165 RPM

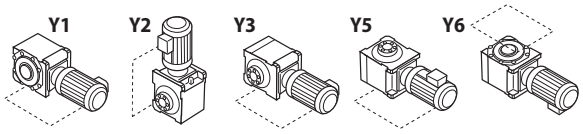
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	106	89.6	83.2	72.8	64.7	55.5	53.0	46.6	41.6	33.3	29.9	25.3	22.0	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	**21.1**	**17.8**	**16.4**	**14.3**	**13.1**	**10.9**	**10.2**	**9.35**	**8.18**	**6.50**	**5.94**	**5.03**	**4.36**	4A140
(kW)	***(15.7)***	***(13.3)***	***(12.2)***	***(10.7)***	***(9.75)***	***(8.13)***	***(7.62)***	***(6.97)***	***(6.10)***	***(4.85)***	***(4.43)***	***(3.75)***	***(3.25)***	
Output Torque in•lbs	11060	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	
(N•m)	*(1250)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	
Hollow Shaft OHL lbs	2855	3055	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	
(N)	*(12700)*	*(13600)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	3350	3350	3480	3700	3920	4180	4260	4450	4530	4580	4580	4580	4580	
(N)	*(14900)*	*(14900)*	*(15470)*	*(16450)*	*(17430)*	*(18590)*	*(18940)*	*(19790)*	*(20140)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**21.1**	**17.8**	**16.4**	**14.3**	**13.1**	**10.9**	**10.2**	**9.35**	**8.18**	**6.50**	**5.94**	**5.03**	**4.36**	4A145
(kW)	***(15.7)***	***(13.3)***	***(12.2)***	***(10.7)***	***(9.75)***	***(8.13)***	***(7.62)***	***(6.97)***	***(6.10)***	***(4.85)***	***(4.43)***	***(3.75)***	***(3.25)***	
Output Torque in•lbs	11060	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	
(N•m)	*(1250)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	
Hollow Shaft OHL lbs	2855	3055	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	
(N)	*(12700)*	*(13600)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	3350	3350	3480	3700	3920	4180	4260	4450	4530	4580	4580	4580	4580	
(N)	*(14900)*	*(14900)*	*(15470)*	*(16450)*	*(17430)*	*(18590)*	*(18940)*	*(19790)*	*(20140)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**12.9**	**12.9**	**12.9**	**12.8**	**12.8**	**8.77**	**8.77**	**8.77**	**8.77**	**6.80**	**6.80**	**6.80**	**6.02**	4B120
(kW)	***(9.60)***	***(9.60)***	***(9.60)***	***(9.54)***	***(9.54)***	***(6.54)***	***(6.54)***	***(6.54)***	***(6.54)***	***(5.07)***	***(5.07)***	***(5.07)***	***(4.49)***	
Output Torque in•lbs	6740	8220	9025	10175	11150	9200	9820	10705	12210	11945	13095	15395	15750	
(N•m)	*(762)*	*(929)*	*(1020)*	*(1150)*	*(1260)*	*(1040)*	*(1110)*	*(1210)*	*(1380)*	*(1350)*	*(1480)*	*(1740)*	*(1780)*	
Hollow Shaft OHL lbs	5170	5370	5460	5575	5665	6270	6335	6450	6585	7170	7305	7485	7845	
(N)	*(23000)*	*(23900)*	*(24300)*	*(24800)*	*(25200)*	*(27900)*	*(28200)*	*(28700)*	*(29300)*	*(31900)*	*(32500)*	*(33300)*	*(34900)*	
Solid Shaft OHL lbs	3490	3500	3670	3970	4240	4610	4720	5030	5350	5950	6250	6740	7100	
(N)	*(15520)*	*(15560)*	*(16320)*	*(17650)*	*(18850)*	*(20500)*	*(20990)*	*(22370)*	*(23790)*	*(26460)*	*(27800)*	*(29970)*	*(31580)*	
Input Power HP	**14.8**	**13.5**	**13.5**	**12.8**	**12.8**	**9.79**	**9.11**	**9.11**	**9.15**	**7.93**	**7.93**	**7.16**	**7.23**	4B125
(kW)	***(11.0)***	***(10.1)***	***(10.1)***	***(9.54)***	***(9.54)***	***(7.30)***	***(6.79)***	***(6.79)***	***(6.82)***	***(5.91)***	***(5.91)***	***(5.34)***	***(5.39)***	
Output Torque in•lbs	7725	8625	9465	10175	11150	10265	10175	11150	12740	13890	15220	16280	18935	
(N•m)	*(873)*	*(975)*	*(1070)*	*(1150)*	*(1260)*	*(1160)*	*(1150)*	*(1260)*	*(1440)*	*(1570)*	*(1720)*	*(1840)*	*(2140)*	
Hollow Shaft OHL lbs	5055	5325	5415	5575	5665	6155	6290	6405	6540	6965	7055	7395	7325	
(N)	*(22500)*	*(23700)*	*(24100)*	*(24800)*	*(25200)*	*(27400)*	*(28000)*	*(28500)*	*(29100)*	*(31000)*	*(31400)*	*(32900)*	*(32600)*	
Solid Shaft OHL lbs	3490	3500	3670	3970	4240	4610	4720	5030	5350	5950	6250	6740	7100	
(N)	*(15520)*	*(15560)*	*(16320)*	*(17650)*	*(18850)*	*(20500)*	*(20990)*	*(22370)*	*(23790)*	*(26460)*	*(27800)*	*(29970)*	*(31580)*	
Input Power HP	**24.7**	**24.7**	**24.7**	**24.7**	**24.7**	**17.4**	**17.4**	**17.4**	**16.2**	**13.0**	**11.8**	**10.0**	**8.69**	4B140
(kW)	***(18.4)***	***(18.4)***	***(18.4)***	***(18.4)***	***(18.4)***	***(13.0)***	***(13.0)***	***(13.0)***	***(12.1)***	***(9.66)***	***(8.83)***	***(7.47)***	***(6.48)***	
Output Torque in•lbs	12920	15750	17255	19730	21590	18230	19465	21325	22740	22740	22740	22740	22740	
(N•m)	*(1460)*	*(1780)*	*(1950)*	*(2230)*	*(2440)*	*(2060)*	*(2200)*	*(2410)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	
Hollow Shaft OHL lbs	4495	4540	4560	4540	4540	5280	5280	5305	5460	5710	5710	5710	5710	
(N)	*(20000)*	*(20200)*	*(20300)*	*(20200)*	*(20200)*	*(23500)*	*(23500)*	*(23600)*	*(24300)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	
Solid Shaft OHL lbs	3490	3500	3670	3970	4240	4610	4720	5030	5350	5950	6250	6740	7100	
(N)	*(15520)*	*(15560)*	*(16320)*	*(17650)*	*(18850)*	*(20500)*	*(20990)*	*(22370)*	*(23790)*	*(26460)*	*(27800)*	*(29970)*	*(31580)*	
Input Power HP	**24.7**	**24.7**	**24.7**	**24.7**	**24.7**	**18.6**	**20.2**	**18.6**	**16.2**	**13.0**	**11.8**	**10.0**	**8.69**	4B145
(kW)	***(18.4)***	***(18.4)***	***(18.4)***	***(18.4)***	***(18.4)***	***(13.9)***	***(15.1)***	***(13.9)***	***(12.1)***	***(9.66)***	***(8.83)***	***(7.47)***	***(6.48)***	
Output Torque in•lbs	12920	15750	17255	19730	21590	19555	22650	22740	22740	22740	22740	22740	22740	
(N•m)	*(1460)*	*(1780)*	*(1950)*	*(2230)*	*(2440)*	*(2210)*	*(2560)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	
Hollow Shaft OHL lbs	4495	4540	4560	4540	4540	5145	4945	5145	5460	5710	5710	5710	5710	
(N)	*(20000)*	*(20200)*	*(20300)*	*(20200)*	*(20200)*	*(22900)*	*(22000)*	*(22900)*	*(24300)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	
Solid Shaft OHL lbs	3490	3500	3670	3970	4240	4610	4720	5030	5350	5950	6250	6740	7100	
(N)	*(15520)*	*(15560)*	*(16320)*	*(17650)*	*(18850)*	*(20500)*	*(20990)*	*(22370)*	*(23790)*	*(26460)*	*(27800)*	*(29970)*	*(31580)*	

Frame Size Selection Tables 1165 RPM



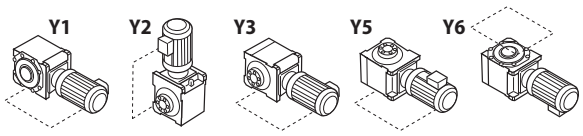
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	19.4	17.4	15.7	14.6	13.2	11.4	10.4	9.47	7.72	6.51	5.63	4.68	3.82	2.79	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	**3.85**	**3.41**	**3.11**	**2.86**	**2.61**	**2.25**	**2.04**	**1.86**	**1.52**	**1.28**	**1.11**	**0.920**	**0.752**	—	
(kW)	***(2.87)***	***(2.54)***	***(2.32)***	***(2.13)***	***(1.95)***	***(1.68)***	***(1.52)***	***(1.39)***	***(1.13)***	***(0.956)***	***(0.827)***	***(0.687)***	***(0.561)***	—	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	**4A140**
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	—	
Input Power HP	**3.85**	**3.41**	**3.11**	**2.86**	**2.61**	**2.25**	**2.04**	**1.86**	**1.52**	**1.28**	**1.11**	**0.921**	**0.752**	—	
(kW)	***(2.87)***	***(2.54)***	***(2.32)***	***(2.13)***	***(1.95)***	***(1.68)***	***(1.52)***	***(1.39)***	***(1.13)***	***(0.956)***	***(0.827)***	***(0.687)***	***(0.561)***	—	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	**4A145**
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	—	
Input Power HP	**5.27**	**4.28**	**4.28**	**3.62**	**3.62**	**3.08**	**2.59**	**2.59**	**2.11**	**1.77**	**1.53**	**1.27**	**1.04**	—	
(kW)	***(3.93)***	***(3.19)***	***(3.19)***	***(2.70)***	***(2.70)***	***(2.30)***	***(1.93)***	***(1.93)***	***(1.57)***	***(1.32)***	***(1.14)***	***(0.950)***	***(0.775)***	—	
Output Torque in•lbs	15660	14335	15660	14420	15750	15660	14420	15750	15750	15750	15750	15750	15750	—	
(N•m)	*(1770)*	*(1620)*	*(1770)*	*(1630)*	*(1780)*	*(1770)*	*(1630)*	*(1780)*	*(1780)*	*(1780)*	*(1780)*	*(1780)*	*(1780)*	—	**4B120**
Hollow Shaft OHL lbs	8225	8585	8270	8565	8250	8295	8565	8250	8250	8250	8250	8250	8250	—	
(N)	*(36600)*	*(38200)*	*(36800)*	*(38100)*	*(36700)*	*(36900)*	*(38100)*	*(36700)*	*(36700)*	*(36700)*	*(36700)*	*(36700)*	*(36700)*	—	
Solid Shaft OHL lbs	7330	7400	7450	7480	7530	7580	7610	7570	7390	7270	7180	7120	7120	—	
(N)	*(32600)*	*(32910)*	*(33130)*	*(33270)*	*(33490)*	*(33710)*	*(33840)*	*(33670)*	*(32870)*	*(32330)*	*(31930)*	*(31660)*	*(31660)*	—	
Input Power HP	**6.38**	**5.16**	**5.16**	**4.34**	**4.34**	**3.74**	**3.10**	**3.10**	**2.52**	**2.13**	**1.84**	**1.29**	**1.16**	—	
(kW)	***(4.76)***	***(3.85)***	***(3.85)***	***(3.24)***	***(3.24)***	***(2.79)***	***(2.31)***	***(2.31)***	***(1.88)***	***(1.59)***	***(1.37)***	***(0.963)***	***(0.868)***	—	
Output Torque in•lbs	18935	17345	18935	17345	18935	18935	17345	18935	18935	18935	18935	16015	17695	—	
(N•m)	*(2140)*	*(1960)*	*(2140)*	*(1960)*	*(2140)*	*(2140)*	*(1960)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(1810)*	*(2000)*	—	**4B125**
Hollow Shaft OHL lbs	7325	7845	7325	7845	7325	7325	7845	7325	7325	7325	7325	8205	7730	—	
(N)	*(32600)*	*(34900)*	*(32600)*	*(34900)*	*(32600)*	*(32600)*	*(34900)*	*(32600)*	*(32600)*	*(32600)*	*(32600)*	*(36500)*	*(34400)*	—	
Solid Shaft OHL lbs	7330	7400	7450	7480	7530	7580	7610	7570	7390	7270	7180	7120	7120	—	
(N)	*(32600)*	*(32910)*	*(33130)*	*(33270)*	*(33490)*	*(33710)*	*(33840)*	*(33670)*	*(32870)*	*(32330)*	*(31930)*	*(31660)*	*(31660)*	—	
Input Power HP	**7.66**	**6.79**	**6.21**	**5.70**	**5.22**	**4.49**	**4.08**	**3.73**	**3.03**	**2.55**	**2.21**	**1.84**	**1.50**	—	
(kW)	***(5.71)***	***(5.06)***	***(4.63)***	***(4.25)***	***(3.89)***	***(3.35)***	***(3.04)***	***(2.78)***	***(2.26)***	***(1.90)***	***(1.65)***	***(1.37)***	***(1.12)***	—	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	—	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	—	**4B140**
Hollow Shaft OHL lbs	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	—	
(N)	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	—	
Solid Shaft OHL lbs	7330	7400	7450	7480	7530	7580	7610	7570	7390	7270	7180	7120	7120	—	
(N)	*(32600)*	*(32910)*	*(33130)*	*(33270)*	*(33490)*	*(33710)*	*(33840)*	*(33670)*	*(32870)*	*(32330)*	*(31930)*	*(31660)*	*(31660)*	—	
Input Power HP	**7.66**	**6.79**	**6.21**	**5.70**	**5.22**	**4.49**	**4.08**	**3.73**	**3.03**	**2.55**	**2.21**	**1.84**	**1.50**	—	
(kW)	***(5.71)***	***(5.06)***	***(4.63)***	***(4.25)***	***(3.89)***	***(3.35)***	***(3.04)***	***(2.78)***	***(2.26)***	***(1.90)***	***(1.65)***	***(1.37)***	***(1.12)***	—	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	—	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	—	**4B145**
Hollow Shaft OHL lbs	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	—	
(N)	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	—	
Solid Shaft OHL lbs	7330	7400	7450	7480	7530	7580	7610	7570	7390	7270	7180	7120	7120	—	
(N)	*(32600)*	*(32910)*	*(33130)*	*(33270)*	*(33490)*	*(33710)*	*(33840)*	*(33670)*	*(32870)*	*(32330)*	*(31930)*	*(31660)*	*(31660)*	—	

Frame Size Selection Tables 1165 RPM

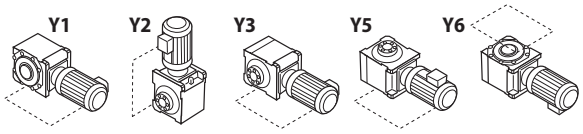
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	106	89.6	83.2	72.8	64.7	55.5	53.0	46.6	41.6	33.3	29.9	25.3	22.0	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	**31.2**	**31.2**	**31.2**	**28.6**	**26.0**	**21.7**	**20.4**	**18.6**	**16.2**	**13.0**	**11.8**	**10.0**	**8.69**	4B160
(kW)	***(23.3)***	***(23.3)***	***(23.3)***	***(21.3)***	***(19.4)***	***(16.2)***	***(15.2)***	***(13.9)***	***(12.1)***	***(9.66)***	***(8.83)***	***(7.47)***	***(6.48)***	
Output Torque in•lbs	16370	19910	21855	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(1850)*	*(2250)*	*(2470)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	
Hollow Shaft OHL lbs	4135	4090	4065	4225	4425	4810	4920	5145	5460	5710	5710	5710	5710	
(N)	*(18400)*	*(18200)*	*(18100)*	*(18800)*	*(19700)*	*(21400)*	*(21900)*	*(22900)*	*(24300)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	
Solid Shaft OHL lbs	3490	3500	3670	3970	4240	4610	4720	5030	5350	5950	6250	6740	7100	
(N)	*(15520)*	*(15560)*	*(16320)*	*(17650)*	*(18850)*	*(20500)*	*(20990)*	*(22370)*	*(23790)*	*(26460)*	*(27800)*	*(29970)*	*(31580)*	
Input Power HP	**31.2**	**31.2**	**31.2**	**28.6**	**26.0**	**21.7**	**20.4**	**18.6**	**16.2**	**13.0**	**11.8**	**10.0**	**8.69**	4B165
(kW)	***(23.3)***	***(23.3)***	***(23.3)***	***(21.3)***	***(19.4)***	***(16.2)***	***(15.2)***	***(13.9)***	***(12.1)***	***(9.66)***	***(8.83)***	***(7.47)***	***(6.48)***	
Output Torque in•lbs	16370	19910	21855	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(1850)*	*(2250)*	*(2470)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	
Hollow Shaft OHL lbs	4135	4090	4065	4225	4425	4810	4920	5145	5460	5710	5710	5710	5710	
(N)	*(18400)*	*(18200)*	*(18100)*	*(18800)*	*(19700)*	*(21400)*	*(21900)*	*(22900)*	*(24300)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	
Solid Shaft OHL lbs	3490	3500	3670	3970	4240	4610	4720	5030	5350	5950	6250	6740	7100	
(N)	*(15520)*	*(15560)*	*(16320)*	*(17650)*	*(18850)*	*(20500)*	*(20990)*	*(22370)*	*(23790)*	*(26460)*	*(27800)*	*(29970)*	*(31580)*	
Input Power HP	**24.7**	**24.7**	**24.7**	**24.7**	**24.7**	**17.4**	**17.4**	**17.4**	**17.4**	**17.4**	**17.4**	**16.2**	**14.1**	4C140
(kW)	***(18.4)***	***(18.4)***	***(18.4)***	***(18.4)***	***(18.4)***	***(13.0)***	***(13.0)***	***(13.0)***	***(13.0)***	***(13.0)***	***(13.0)***	***(12.1)***	***(10.5)***	
Output Torque in•lbs	12920	15750	17255	19730	21590	18230	19465	21325	24335	30615	33450	36810	36810	
(N•m)	*(1460)*	*(1780)*	*(1950)*	*(2230)*	*(2440)*	*(2060)*	*(2200)*	*(2410)*	*(2750)*	*(3460)*	*(3780)*	*(4160)*	*(4160)*	
Hollow Shaft OHL lbs	6875	7100	7190	7305	7395	8250	8315	8430	8565	8720	8790	9100	9640	
(N)	*(30600)*	*(31600)*	*(32000)*	*(32500)*	*(32900)*	*(36700)*	*(37000)*	*(37500)*	*(38100)*	*(38800)*	*(39100)*	*(40500)*	*(42900)*	
Solid Shaft OHL lbs	4590	4600	4820	5210	5610	6120	6270	6710	7160	7990	8420	9220	9810	
(N)	*(20410)*	*(20460)*	*(21430)*	*(23170)*	*(24950)*	*(27220)*	*(27880)*	*(29840)*	*(31840)*	*(35530)*	*(37450)*	*(41010)*	*(43630)*	
Input Power HP	**24.7**	**24.7**	**24.7**	**24.7**	**24.7**	**18.6**	**20.2**	**20.2**	**17.8**	**18.5**	**18.5**	**18.1**	**15.6**	4C145
(kW)	***(18.4)***	***(18.4)***	***(18.4)***	***(18.4)***	***(18.4)***	***(13.9)***	***(15.1)***	***(15.1)***	***(13.3)***	***(13.8)***	***(13.8)***	***(13.5)***	***(11.6)***	
Output Torque in•lbs	12920	15750	17255	19730	21590	19555	22650	24775	24865	32385	35395	40970	40795	
(N•m)	*(1460)*	*(1780)*	*(1950)*	*(2230)*	*(2440)*	*(2210)*	*(2560)*	*(2800)*	*(2810)*	*(3660)*	*(4000)*	*(4630)*	*(4610)*	
Hollow Shaft OHL lbs	6875	7100	7190	7305	7395	8115	8000	8090	8520	8565	8610	8700	9260	
(N)	*(30600)*	*(31600)*	*(32000)*	*(32500)*	*(32900)*	*(36100)*	*(35600)*	*(36000)*	*(37900)*	*(38100)*	*(38300)*	*(38700)*	*(41200)*	
Solid Shaft OHL lbs	4590	4600	4820	5210	5610	6120	6270	6710	7160	7990	8420	9220	9810	
(N)	*(20410)*	*(20460)*	*(21430)*	*(23170)*	*(24950)*	*(27220)*	*(27880)*	*(29840)*	*(31840)*	*(35530)*	*(37450)*	*(41010)*	*(43630)*	
Input Power HP	**33.9**	**33.9**	**33.9**	**33.9**	**33.9**	**33.9**	**27.2**	**27.2**	**26.4**	**25.9**	**23.7**	**20.0**	**17.4**	4C160
(kW)	***(25.3)***	***(25.3)***	***(25.3)***	***(25.3)***	***(25.3)***	***(25.3)***	***(20.3)***	***(20.3)***	***(19.7)***	***(19.3)***	***(17.7)***	***(14.9)***	***(13.0)***	
Output Torque in•lbs	17785	21680	23715	27075	29645	35575	30440	33270	36900	45485	45485	45485	45485	
(N•m)	*(2010)*	*(2450)*	*(2680)*	*(3060)*	*(3350)*	*(4020)*	*(3440)*	*(3760)*	*(4170)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	
Hollow Shaft OHL lbs	6425	6540	6585	6605	6630	6605	7280	7305	7370	7305	7665	8270	8835	
(N)	*(28600)*	*(29100)*	*(29300)*	*(29400)*	*(29500)*	*(29400)*	*(32400)*	*(32500)*	*(32800)*	*(32500)*	*(34100)*	*(36800)*	*(39300)*	
Solid Shaft OHL lbs	4590	4600	4820	5210	5610	6120	6270	6710	7160	7990	8420	9220	9810	
(N)	*(20410)*	*(20460)*	*(21430)*	*(23170)*	*(24950)*	*(27220)*	*(27880)*	*(29840)*	*(31840)*	*(35530)*	*(37450)*	*(41010)*	*(43630)*	
Input Power HP	**40.2**	**40.2**	**40.2**	**40.2**	**40.2**	**38.0**	**32.3**	**32.3**	**32.3**	**25.9**	**23.7**	**20.0**	**17.4**	4C165
(kW)	***(30.0)***	***(30.0)***	***(30.0)***	***(30.0)***	***(30.0)***	***(28.3)***	***(24.1)***	***(24.1)***	***(24.1)***	***(19.3)***	***(17.7)***	***(14.9)***	***(13.0)***	
Output Torque in•lbs	21060	25660	28050	32120	35130	39820	36105	39465	45130	45485	45485	45485	45485	
(N•m)	*(2380)*	*(2900)*	*(3170)*	*(3630)*	*(3970)*	*(4500)*	*(4080)*	*(4460)*	*(5100)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	
Hollow Shaft OHL lbs	6110	6155	6180	6135	6110	6200	6740	6720	6605	7305	7665	8270	8835	
(N)	*(27200)*	*(27400)*	*(27500)*	*(27300)*	*(27200)*	*(27600)*	*(30000)*	*(29900)*	*(29400)*	*(32500)*	*(34100)*	*(36800)*	*(39300)*	
Solid Shaft OHL lbs	4590	4600	4820	5210	5610	6120	6270	6710	7160	7990	8420	9220	9810	
(N)	*(20410)*	*(20460)*	*(21430)*	*(23170)*	*(24950)*	*(27220)*	*(27880)*	*(29840)*	*(31840)*	*(35530)*	*(37450)*	*(41010)*	*(43630)*	

Frame Size Selection Tables 1165 RPM



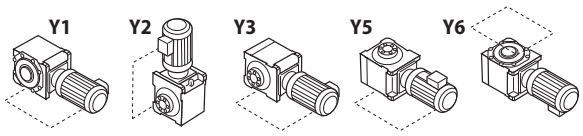
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	19.4	17.4	15.7	14.6	13.2	11.4	10.4	9.47	7.72	6.51	5.63	4.68	3.82	2.79	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	**7.66**	**6.79**	**6.21**	**5.70**	**5.22**	**4.49**	**4.08**	**3.73**	**3.03**	**2.55**	**2.21**	**1.84**	**1.50**	—	4B160
(kW)	***(5.71)***	***(5.06)***	***(4.63)***	***(4.25)***	***(3.89)***	***(3.35)***	***(3.04)***	***(2.78)***	***(2.26)***	***(1.90)***	***(1.65)***	***(1.37)***	***(1.12)***	—	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	—	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	—	
Hollow Shaft OHL lbs	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	—	
(N)	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	—	
Solid Shaft OHL lbs	7330	7400	7450	7480	7530	7580	7610	7570	7390	7270	7180	7120	7120	—	
(N)	*(32600)*	*(32910)*	*(33130)*	*(33270)*	*(33490)*	*(33710)*	*(33840)*	*(33670)*	*(32870)*	*(32330)*	*(31930)*	*(31660)*	*(31660)*	—	
Input Power HP	**7.66**	**6.79**	**6.21**	**5.70**	**5.22**	**4.49**	**4.08**	**3.73**	**3.03**	**2.55**	**2.21**	**1.84**	**1.50**	—	4B165
(kW)	***(5.71)***	***(5.06)***	***(4.63)***	***(4.25)***	***(3.89)***	***(3.35)***	***(3.04)***	***(2.78)***	***(2.26)***	***(1.90)***	***(1.65)***	***(1.37)***	***(1.12)***	—	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	—	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	—	
Hollow Shaft OHL lbs	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	—	
(N)	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	—	
Solid Shaft OHL lbs	7330	7400	7450	7480	7530	7580	7610	7570	7390	7270	7180	7120	7120	—	
(N)	*(32600)*	*(32910)*	*(33130)*	*(33270)*	*(33490)*	*(33710)*	*(33840)*	*(33670)*	*(32870)*	*(32330)*	*(31930)*	*(31660)*	*(31660)*	—	
Input Power HP	**12.4**	**10.0**	**10.0**	**8.44**	**8.44**	**7.27**	**6.02**	**6.02**	**4.91**	**4.13**	**3.58**	**2.98**	**2.43**	—	4C140
(kW)	***(9.25)***	***(7.49)***	***(7.49)***	***(6.29)***	***(6.29)***	***(5.42)***	***(4.49)***	***(4.49)***	***(3.66)***	***(3.08)***	***(2.67)***	***(2.22)***	***(1.81)***	—	
Output Torque in•lbs	36810	33625	36810	33625	36810	36810	33625	36810	36810	36810	36810	36810	36810	—	
(N•m)	*(4160)*	*(3800)*	*(4160)*	*(3800)*	*(4160)*	*(4160)*	*(3800)*	*(4160)*	*(4160)*	*(4160)*	*(4160)*	*(4160)*	*(4160)*	—	
Hollow Shaft OHL lbs	10160	10925	11035	11690	11825	12160	12900	12160	12160	12160	12160	12160	12160	—	
(N)	*(45200)*	*(48600)*	*(49100)*	*(52000)*	*(52600)*	*(54100)*	*(57400)*	*(54100)*	*(54100)*	*(54100)*	*(54100)*	*(54100)*	*(54100)*	—	
Solid Shaft OHL lbs	10310	10860	11300	11610	11970	12450	12730	12800	12700	12630	12580	12550	12550	—	
(N)	*(45850)*	*(48300)*	*(50260)*	*(51640)*	*(53240)*	*(55370)*	*(56620)*	*(56930)*	*(56480)*	*(56170)*	*(55950)*	*(55820)*	*(55820)*	—	
Input Power HP	**13.8**	**10.8**	**10.8**	**9.44**	**9.44**	**8.14**	**6.75**	**6.75**	**5.30**	**4.20**	**3.61**	**2.98**	**2.45**	—	4C145
(kW)	***(10.3)***	***(8.02)***	***(8.02)***	***(7.04)***	***(7.04)***	***(6.07)***	***(5.03)***	***(5.03)***	***(3.95)***	***(3.13)***	***(2.69)***	***(2.22)***	***(1.83)***	—	
Output Torque in•lbs	41150	36105	39465	37610	41150	41150	37610	41150	39730	37345	37165	36900	37165	—	
(N•m)	*(4650)*	*(4080)*	*(4460)*	*(4250)*	*(4650)*	*(4650)*	*(4250)*	*(4650)*	*(4490)*	*(4220)*	*(4200)*	*(4170)*	*(4200)*	—	
Hollow Shaft OHL lbs	9730	10700	10790	11305	10945	10945	11955	10945	11375	12025	12070	12160	12070	—	
(N)	*(43300)*	*(47600)*	*(48000)*	*(50300)*	*(48700)*	*(48700)*	*(53200)*	*(48700)*	*(50600)*	*(53500)*	*(53700)*	*(54100)*	*(53700)*	—	
Solid Shaft OHL lbs	10310	10860	11300	11610	11970	12450	12730	12800	12700	12630	12580	12550	12550	—	
(N)	*(45850)*	*(48300)*	*(50260)*	*(51640)*	*(53240)*	*(55370)*	*(56620)*	*(56930)*	*(56480)*	*(56170)*	*(55950)*	*(55820)*	*(55820)*	—	
Input Power HP	**15.3**	**13.5**	**12.4**	**11.4**	**10.4**	**8.98**	**8.14**	**7.44**	**6.06**	**5.11**	**4.41**	**3.67**	**2.99**	—	4C160
(kW)	***(11.4)***	***(10.1)***	***(9.25)***	***(8.50)***	***(7.77)***	***(6.70)***	***(6.07)***	***(5.55)***	***(4.52)***	***(3.81)***	***(3.29)***	***(2.74)***	***(2.23)***	—	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	—	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	—	
Hollow Shaft OHL lbs	9325	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	—	
(N)	*(41500)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	—	
Solid Shaft OHL lbs	10310	10860	11300	11610	11970	12450	12730	12800	12700	12630	12580	12550	12550	—	
(N)	*(45850)*	*(48300)*	*(50260)*	*(51640)*	*(53240)*	*(55370)*	*(56620)*	*(56930)*	*(56480)*	*(56170)*	*(55950)*	*(55820)*	*(55820)*	—	
Input Power HP	**15.3**	**13.5**	**12.4**	**11.4**	**10.4**	**8.98**	**8.14**	**7.44**	**6.06**	**5.11**	**4.41**	**3.67**	**2.99**	—	4C165
(kW)	***(11.4)***	***(10.1)***	***(9.25)***	***(8.50)***	***(7.77)***	***(6.70)***	***(6.07)***	***(5.55)***	***(4.52)***	***(3.81)***	***(3.29)***	***(2.74)***	***(2.23)***	—	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	—	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	—	
Hollow Shaft OHL lbs	9325	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	—	
(N)	*(41500)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	—	
Solid Shaft OHL lbs	10310	10860	11300	11610	11970	12450	12730	12800	12700	12630	12580	12550	12550	—	
(N)	*(45850)*	*(48300)*	*(50260)*	*(51640)*	*(53240)*	*(55370)*	*(56620)*	*(56930)*	*(56480)*	*(56170)*	*(55950)*	*(55820)*	*(55820)*	—	

Frame Size Selection Tables 1165 RPM

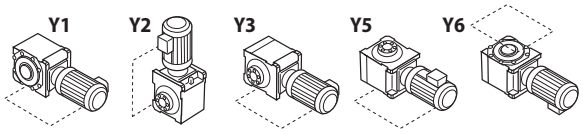
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	106	89.6	83.2	72.8	64.7	55.5	53.0	46.6	41.6	33.3	29.9	25.3	22.0	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	**55.7**	**55.7**	**55.2**	**50.8**	**47.6**	**38.8**	**38.8**	**37.1**	**32.6**	**25.9**	**23.7**	**20.0**	**17.4**	4C170
(kW)	***(41.5)***	***(41.5)***	***(41.2)***	***(37.9)***	***(35.5)***	***(28.9)***	***(28.9)***	***(27.7)***	***(24.3)***	***(19.3)***	***(17.7)***	***(14.9)***	***(13.0)***	
Output Torque in•lbs	29115	35490	38585	40535	41595	40615	43360	45395	45485	45485	45485	45485	45485	
(N•m)	*(3290)*	*(4010)*	*(4360)*	*(4580)*	*(4700)*	*(4590)*	*(4900)*	*(5130)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	
Hollow Shaft OHL lbs	5350	5235	5190	5350	5505	6135	6065	6155	6560	7305	7665	8270	8835	
(N)	*(23800)*	*(23300)*	*(23100)*	*(23800)*	*(24500)*	*(27300)*	*(27000)*	*(27400)*	*(29200)*	*(32500)*	*(34100)*	*(36800)*	*(39300)*	
Solid Shaft OHL lbs	4590	4600	4820	5210	5610	6120	6270	6710	7160	7990	8420	9220	9810	
(N)	*(20410)*	*(20460)*	*(21430)*	*(23170)*	*(24950)*	*(27220)*	*(27880)*	*(29840)*	*(31840)*	*(35530)*	*(37450)*	*(41010)*	*(43630)*	
Input Power HP	**60.3**	**58.9**	**55.2**	**50.8**	**47.6**	**38.8**	**38.8**	**37.1**	**32.6**	**25.9**	**23.7**	**20.0**	**17.4**	4C175
(kW)	***(45.0)***	***(43.9)***	***(41.2)***	***(37.9)***	***(35.5)***	***(28.9)***	***(28.9)***	***(27.7)***	***(24.3)***	***(19.3)***	***(17.7)***	***(14.9)***	***(13.0)***	
Output Torque in•lbs	31595	37615	38585	40535	41595	40615	43360	45395	45485	45485	45485	45485	45485	
(N•m)	*(3570)*	*(4250)*	*(4360)*	*(4580)*	*(4700)*	*(4590)*	*(4900)*	*(5130)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	
Hollow Shaft OHL lbs	5100	5035	5190	5350	5505	6135	6065	6155	6560	7305	7665	8270	8835	
(N)	*(22700)*	*(22400)*	*(23100)*	*(23800)*	*(24500)*	*(27300)*	*(27000)*	*(27400)*	*(29200)*	*(32500)*	*(34100)*	*(36800)*	*(39300)*	
Solid Shaft OHL lbs	4590	4600	4820	5210	5610	6120	6270	6710	7160	7990	8420	9220	9810	
(N)	*(20410)*	*(20460)*	*(24130)*	*(23170)*	*(24950)*	*(27220)*	*(27880)*	*(29840)*	*(31840)*	*(35530)*	*(37450)*	*(41010)*	*(43630)*	
Input Power HP	**—**	**—**	**—**	**—**	**—**	**33.9**	**27.2**	**27.2**	**26.4**	**26.4**	**26.4**	**23.2**	**20.1**	4D160
(kW)	**—**	**—**	**—**	**—**	**—**	***(25.3)***	***(20.3)***	***(20.3)***	***(19.7)***	***(19.7)***	***(19.7)***	***(17.3)***	***(15.0)***	
Output Torque in•lbs	—	—	—	—	—	35575	30440	33270	36900	46370	50705	52740	52740	
(N•m)	—	—	—	—	—	*(4020)*	*(3440)*	*(3760)*	*(4170)*	*(5240)*	*(5730)*	*(5960)*	*(5960)*	
Hollow Shaft OHL lbs	—	—	—	—	—	11555	12225	12405	12745	13060	13195	13915	14725	
(N)	—	—	—	—	—	*(51400)*	*(54400)*	*(55200)*	*(56700)*	*(58100)*	*(58700)*	*(61900)*	*(65500)*	
Solid Shaft OHL lbs	—	—	—	—	—	8730	8960	9590	10220	11430	12050	13210	14060	
(N)	—	—	—	—	—	*(38830)*	*(39850)*	*(42650)*	*(45450)*	*(50840)*	*(53590)*	*(58750)*	*(62530)*	
Input Power HP	**—**	**—**	**—**	**—**	**—**	**38.0**	**32.3**	**32.3**	**32.3**	**32.3**	**32.3**	**27.8**	**24.1**	4D165
(kW)	**—**	**—**	**—**	**—**	**—**	***(28.3)***	***(24.1)***	***(24.1)***	***(24.1)***	***(24.1)***	***(24.1)***	***(20.7)***	***(18.0)***	
Output Torque in•lbs	—	—	—	—	—	39820	36105	39465	45130	56725	62035	63095	63095	
(N•m)	—	—	—	—	—	*(4500)*	*(4080)*	*(4460)*	*(5100)*	*(6410)*	*(7010)*	*(7130)*	*(7130)*	
Hollow Shaft OHL lbs	—	—	—	—	—	11195	11755	11910	12070	12225	12295	13080	13890	
(N)	—	—	—	—	—	*(49800)*	*(52300)*	*(53000)*	*(53700)*	*(54400)*	*(54700)*	*(58200)*	*(61800)*	
Solid Shaft OHL lbs	—	—	—	—	—	8730	8960	9590	10220	11430	12050	13210	14060	
(N)	—	—	—	—	—	*(38830)*	*(39850)*	*(42650)*	*(45450)*	*(50840)*	*(53590)*	*(58750)*	*(62530)*	
Input Power HP	**55.7**	**55.7**	**55.7**	**55.7**	**55.7**	**45.5**	**45.5**	**45.5**	**45.5**	**37.0**	**37.0**	**33.5**	**29.1**	4D170
(kW)	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(33.9)***	***(33.9)***	***(33.9)***	***(33.9)***	***(27.6)***	***(27.6)***	***(25.0)***	***(21.7)***	
Output Torque in•lbs	29115	35485	38845	44420	48580	47610	50795	55575	63450	64955	71060	75925	76015	
(N•m)	*(3290)*	*(4010)*	*(4390)*	*(5020)*	*(5490)*	*(5380)*	*(5740)*	*(6280)*	*(7170)*	*(7340)*	*(8030)*	*(8580)*	*(8590)*	
Hollow Shaft OHL lbs	9350	9555	9620	9710	9730	10565	10565	10610	10585	11555	11555	11865	11825	
(N)	*(41600)*	*(42500)*	*(42800)*	*(43200)*	*(43300)*	*(47000)*	*(47000)*	*(47200)*	*(47100)*	*(51400)*	*(51400)*	*(52800)*	*(52600)*	
Solid Shaft OHL lbs	6480	6500	6840	7430	7990	8730	8960	9590	10220	11430	12050	13210	14060	
(N)	*(28820)*	*(28910)*	*(30420)*	*(33040)*	*(35530)*	*(38830)*	*(39850)*	*(42650)*	*(45450)*	*(50840)*	*(53590)*	*(58750)*	*(62530)*	
Input Power HP	**60.3**	**60.3**	**60.3**	**60.3**	**60.3**	**49.6**	**49.6**	**49.6**	**49.6**	**40.4**	**40.2**	**34.1**	**29.5**	4D175
(kW)	***(45.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(37.0)***	***(37.0)***	***(37.0)***	***(37.0)***	***(30.1)***	***(30.0)***	***(25.4)***	***(22.0)***	
Output Torque in•lbs	31590	38495	42120	48140	52655	51945	55395	60615	69290	70885	77165	77165	77165	
(N•m)	*(3570)*	*(4350)*	*(4760)*	*(5440)*	*(5950)*	*(5870)*	*(6260)*	*(6850)*	*(7830)*	*(8010)*	*(8720)*	*(8720)*	*(8720)*	
Hollow Shaft OHL lbs	9150	9305	9375	9395	9395	10225	10205	10205	10115	11080	11060	11375	11375	
(N)	*(40700)*	*(41400)*	*(41700)*	*(41800)*	*(41800)*	*(45500)*	*(45400)*	*(45400)*	*(45000)*	*(49300)*	*(49200)*	*(50600)*	*(50600)*	
Solid Shaft OHL lbs	6480	6500	6840	7430	7990	8730	8960	9590	10220	11430	12050	13210	14060	
(N)	*(28820)*	*(28910)*	*(30420)*	*(33040)*	*(35530)*	*(38830)*	*(39850)*	*(42650)*	*(45450)*	*(50840)*	*(53590)*	*(58750)*	*(62530)*	

Frame Size Selection Tables 1165 RPM



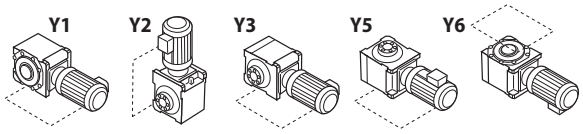
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	19.4	17.4	15.7	14.6	13.2	11.4	10.4	9.47	7.72	6.51	5.63	4.68	3.82	2.79	Frame Size
Ratio	**60**	**67**	**74**	**80**	**88**	**102**	**112**	**123**	**151**	**179**	**207**	**249**	**305**	**417**	
Input Power HP	**15.3**	**13.5**	**12.4**	**11.4**	**10.4**	**8.98**	**8.14**	**7.44**	**6.06**	**5.11**	**4.41**	**3.67**	**2.99**	**—**	**4C170**
(kW)	***(11.4)***	***(10.1)***	***(9.25)***	***(8.50)***	***(7.77)***	***(6.70)***	***(6.07)***	***(5.55)***	***(4.52)***	***(3.81)***	***(3.29)***	***(2.74)***	***(2.23)***	**—**	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	—	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	—	
Hollow Shaft OHL lbs	9325	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	—	
(N)	*(41500)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	—	
Solid Shaft OHL lbs	10310	10860	11300	11610	11970	12450	12730	12800	12700	12630	12580	12550	12550	—	
(N)	*(45850)*	*(48300)*	*(50260)*	*(51640)*	*(53240)*	*(55370)*	*(56620)*	*(56930)*	*(56480)*	*(56170)*	*(55950)*	*(55820)*	*(55820)*	—	
Input Power HP	**15.3**	**13.5**	**12.4**	**11.4**	**10.4**	**8.98**	**8.14**	**7.44**	**6.06**	**5.11**	**4.41**	**3.67**	**2.99**	**—**	**4C175**
(kW)	***(11.4)***	***(10.1)***	***(9.25)***	***(8.50)***	***(7.77)***	***(6.70)***	***(6.07)***	***(5.55)***	***(4.52)***	***(3.81)***	***(3.29)***	***(2.74)***	***(2.23)***	**—**	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	—	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	—	
Hollow Shaft OHL lbs	9325	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	—	
(N)	*(41500)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	—	
Solid Shaft OHL lbs	10310	10860	11300	11610	11970	12450	12730	12800	12700	12630	12580	12550	12550	—	
(N)	*(45850)*	*(48300)*	*(50260)*	*(51640)*	*(53240)*	*(55370)*	*(56620)*	*(56930)*	*(56480)*	*(56170)*	*(55950)*	*(55820)*	*(55820)*	—	
Input Power HP	**17.6**	**14.3**	**14.3**	**12.1**	**12.1**	**10.4**	**8.64**	**8.64**	**6.95**	**5.93**	**5.12**	**4.25**	**3.47**	**—**	**4D160**
(kW)	***(13.1)***	***(10.7)***	***(10.7)***	***(9.01)***	***(9.01)***	***(7.77)***	***(6.44)***	***(6.44)***	***(5.18)***	***(4.42)***	***(3.82)***	***(3.17)***	***(2.59)***	**—**	
Output Torque in•lbs	52120	48230	52740	48230	52740	52740	48230	52740	52120	52740	52740	52740	52740	—	
(N•m)	*(5890)*	*(5450)*	*(5960)*	*(5450)*	*(5960)*	*(5960)*	*(5450)*	*(5960)*	*(5890)*	*(5960)*	*(5960)*	*(5960)*	*(5960)*	—	
Hollow Shaft OHL lbs	15510	16520	16725	17600	17845	17915	18680	17915	18025	17915	17915	17915	17915	—	
(N)	*(69000)*	*(73500)*	*(74400)*	*(78300)*	*(79400)*	*(79700)*	*(83100)*	*(79700)*	*(80200)*	*(79700)*	*(79700)*	*(79700)*	*(79700)*	—	
Solid Shaft OHL lbs	14690	15120	15470	15720	16010	16390	16610	16680	16640	16610	16590	16580	16580	—	
(N)	*(65340)*	*(67250)*	*(68810)*	*(69920)*	*(71210)*	*(72900)*	*(73880)*	*(74190)*	*(74010)*	*(73880)*	*(73790)*	*(73740)*	*(73740)*	—	
Input Power HP	**21.3**	**17.2**	**17.2**	**14.5**	**14.5**	**12.5**	**10.3**	**10.3**	**8.41**	**7.09**	**6.13**	**5.10**	**4.06**	**—**	**4D165**
(kW)	***(15.9)***	***(12.8)***	***(12.8)***	***(10.8)***	***(10.8)***	***(9.30)***	***(7.70)***	***(7.70)***	***(6.27)***	***(5.29)***	***(4.57)***	***(3.80)***	***(3.03)***	**—**	
Output Torque in•lbs	63095	57695	63095	57695	63095	63095	57695	63095	63095	63095	63095	63095	61680	—	
(N•m)	*(7130)*	*(6520)*	*(7130)*	*(6520)*	*(7130)*	*(7130)*	*(6520)*	*(7130)*	*(7130)*	*(7130)*	*(7130)*	*(7130)*	*(6970)*	—	
Hollow Shaft OHL lbs	14610	15735	15755	16835	15755	15755	16970	15755	15755	15755	15755	15755	16115	—	
(N)	*(65000)*	*(70000)*	*(70100)*	*(74900)*	*(70100)*	*(70100)*	*(75500)*	*(70100)*	*(70100)*	*(70100)*	*(70100)*	*(70100)*	*(71700)*	—	
Solid Shaft OHL lbs	14690	15120	15470	15720	16010	16390	16610	16680	16640	16610	16590	16580	16580	—	
(N)	*(65340)*	*(67250)*	*(68810)*	*(69920)*	*(71210)*	*(72900)*	*(73880)*	*(74190)*	*(74010)*	*(73880)*	*(73790)*	*(73740)*	*(73740)*	—	
Input Power HP	**25.6**	**20.8**	**20.8**	**17.4**	**17.4**	**15.0**	**12.4**	**12.4**	**10.1**	**8.54**	**7.39**	**6.14**	**5.00**	**—**	**4D170**
(kW)	***(19.1)***	***(15.5)***	***(15.5)***	***(13.0)***	***(13.0)***	***(11.2)***	***(9.28)***	***(9.28)***	***(7.56)***	***(6.37)***	***(5.51)***	***(4.58)***	***(3.73)***	**—**	
Output Torque in•lbs	76015	69555	76015	69555	76015	76015	69555	76015	76015	76015	76015	76015	76015	—	
(N•m)	*(8590)*	*(7860)*	*(8590)*	*(7860)*	*(8590)*	*(8590)*	*(7860)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	—	
Hollow Shaft OHL lbs	11825	14050	11825	14050	11825	11825	14050	11825	11825	11825	11825	11825	11825	—	
(N)	*(52600)*	*(62500)*	*(52600)*	*(62500)*	*(52600)*	*(52600)*	*(62500)*	*(52600)*	*(52600)*	*(52600)*	*(52600)*	*(52600)*	*(52600)*	—	
Solid Shaft OHL lbs	14690	15120	15470	15720	16010	16390	16610	16680	16640	16610	16590	16580	16580	—	
(N)	*(65340)*	*(67250)*	*(68810)*	*(69920)*	*(71210)*	*(72900)*	*(73880)*	*(74190)*	*(74010)*	*(73880)*	*(73790)*	*(73740)*	*(73740)*	—	
Input Power HP	**26.0**	**23.1**	**21.1**	**19.3**	**17.7**	**15.3**	**13.8**	**12.6**	**10.3**	**8.66**	**7.50**	**6.22**	**5.08**	**—**	**4D175**
(kW)	***(19.4)***	***(17.2)***	***(15.7)***	***(14.4)***	***(13.2)***	***(11.4)***	***(10.3)***	***(9.42)***	***(7.67)***	***(6.46)***	***(5.59)***	***(4.64)***	***(3.79)***	**—**	
Output Torque in•lbs	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	—	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	—	
Hollow Shaft OHL lbs	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	—	
(N)	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	—	
Solid Shaft OHL lbs	14690	15120	15470	15720	16010	16390	16610	16680	16640	16610	16590	16580	16580	—	
(N)	*(65340)*	*(67250)*	*(68810)*	*(69920)*	*(71210)*	*(72900)*	*(73880)*	*(74190)*	*(74010)*	*(73880)*	*(73790)*	*(73740)*	*(73740)*	—	

Frame Size Selection Tables 1165 RPM

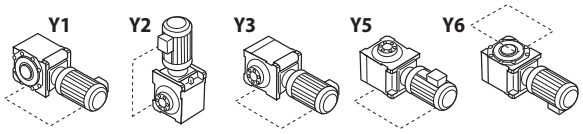
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	106	89.6	83.2	72.8	64.7	55.5	53.0	46.6	41.6	33.3	29.9	25.3	22.0	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	**71.6**	**71.6**	**71.6**	**71.6**	**71.6**	**55.7**	**55.7**	**55.7**	**52.7**	**44.0**	**40.2**	**34.1**	**29.5**	4D180
(kW)	***(53.4)***	***(53.4)***	***(53.4)***	***(53.4)***	***(53.4)***	***(41.5)***	***(41.5)***	***(41.5)***	***(39.3)***	***(32.8)***	***(30.0)***	***(25.4)***	***(22.0)***	
Output Torque in•lbs	37520	45750	50000	57165	62485	58315	62220	67970	73635	77175	77175	77175	77165	
(N•m)	*(4240)*	*(5170)*	*(5650)*	*(6460)*	*(7060)*	*(6590)*	*(7030)*	*(7680)*	*(8320)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	
Hollow Shaft OHL lbs	8675	8745	8720	8675	8610	9710	9685	9620	9775	10610	11060	11375	11375	
(N)	*(38600)*	*(38900)*	*(38800)*	*(38600)*	*(38300)*	*(43200)*	*(43100)*	*(42800)*	*(43500)*	*(47200)*	*(49200)*	*(50600)*	*(50600)*	
Solid Shaft OHL lbs	6480	6500	6840	7430	7990	8730	8960	9590	10220	11430	12050	13210	14060	
(N)	*(28820)*	*(28910)*	*(30420)*	*(33040)*	*(35530)*	*(38830)*	*(39850)*	*(42650)*	*(45450)*	*(50840)*	*(53590)*	*(58750)*	*(62530)*	
Input Power HP	**80.5**	**80.5**	**75.5**	**72.5**	**66.6**	**56.6**	**55.3**	**50.8**	**46.3**	**40.2**	**37.0**	**33.0**	**29.5**	4D185
(kW)	***(60.0)***	***(60.0)***	***(60.0)***	***(60.0)***	***(56.6)***	***(45.0)***	***(45.0)***	***(43.2)***	***(39.3)***	***(32.8)***	***(30.0)***	***(25.4)***	***(22.0)***	
Output Torque in•lbs	42120	51325	56200	64255	66200	63190	67440	70715	73635	77175	77175	77175	77165	
(N•m)	*(4760)*	*(5800)*	*(6350)*	*(7260)*	*(7480)*	*(7140)*	*(7620)*	*(7990)*	*(8320)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	
Hollow Shaft OHL lbs	8315	8270	8225	8115	8315	9305	9260	9395	9775	10610	11060	11375	11375	
(N)	*(37000)*	*(36800)*	*(36600)*	*(36600)*	*(36100)*	*(41400)*	*(41200)*	*(41800)*	*(43500)*	*(47200)*	*(49200)*	*(50600)*	*(50600)*	
Solid Shaft OHL lbs	6480	6500	6840	7430	7990	8730	8960	9590	10220	11430	12050	13210	14060	
(N)	*(28820)*	*(28910)*	*(30420)*	*(33040)*	*(35530)*	*(38830)*	*(39850)*	*(42650)*	*(45450)*	*(50840)*	*(53590)*	*(58750)*	*(62530)*	
Input Power HP	**55.7**	**55.7**	**55.7**	**55.7**	**55.7**	**45.5**	**45.5**	**45.5**	**45.5**	**37.0**	**37.0**	**33.5**	**29.1**	4E170
(kW)	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(33.9)***	***(33.9)***	***(33.9)***	***(33.9)***	***(27.6)***	***(27.6)***	***(25.0)***	***(21.7)***	
Output Torque in•lbs	29115	35485	38845	44420	48580	47610	50795	55575	63450	64955	71060	75925	76015	
(N•m)	*(3290)*	*(4010)*	*(4390)*	*(5020)*	*(5490)*	*(5380)*	*(5740)*	*(6280)*	*(7170)*	*(7340)*	*(8030)*	*(8580)*	*(8590)*	
Hollow Shaft OHL lbs	12880	13330	13510	13780	13935	14990	15105	15285	15485	16790	16970	17735	18770	
(N)	*(57300)*	*(59300)*	*(60100)*	*(61300)*	*(62000)*	*(66700)*	*(67200)*	*(68000)*	*(68900)*	*(74700)*	*(75500)*	*(78900)*	*(83500)*	
Solid Shaft OHL lbs	9770	9790	10230	10980	11700	12650	12950	13780	14600	16140	16950	18450	19560	
(N)	*(43450)*	*(43540)*	*(45500)*	*(48830)*	*(52040)*	*(56260)*	*(57600)*	*(61290)*	*(64940)*	*(71790)*	*(75390)*	*(82060)*	*(87000)*	
Input Power HP	**60.3**	**60.3**	**60.3**	**60.3**	**60.3**	**49.6**	**49.6**	**49.6**	**49.6**	**40.4**	**40.4**	**38.4**	**33.3**	4E175
(kW)	***(45.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(37.0)***	***(37.0)***	***(37.0)***	***(37.0)***	***(30.1)***	***(30.1)***	***(28.6)***	***(24.8)***	
Output Torque in•lbs	31590	38495	42120	48140	52655	51945	55395	60615	69290	70885	77520	86990	86990	
(N•m)	*(3570)*	*(4350)*	*(4760)*	*(5440)*	*(5950)*	*(5870)*	*(6260)*	*(6850)*	*(7830)*	*(8010)*	*(8760)*	*(9830)*	*(9830)*	
Hollow Shaft OHL lbs	12700	13105	13285	13510	13645	14680	14745	14900	15060	16340	16475	16925	17960	
(N)	*(56500)*	*(58300)*	*(59100)*	*(60100)*	*(60700)*	*(65300)*	*(65600)*	*(66300)*	*(67000)*	*(72700)*	*(73300)*	*(75300)*	*(79900)*	
Solid Shaft OHL lbs	9770	9790	10230	10980	11700	12650	12950	13780	14600	16140	16950	18450	19560	
(N)	*(43450)*	*(43540)*	*(45500)*	*(48830)*	*(52040)*	*(56260)*	*(57600)*	*(61290)*	*(64940)*	*(71790)*	*(75390)*	*(82060)*	*(87000)*	
Input Power HP	**71.6**	**71.6**	**71.6**	**71.6**	**71.6**	**55.7**	**55.7**	**55.7**	**53.0**	**55.7**	**53.5**	**45.2**	**39.2**	4E180
(kW)	***(53.4)***	***(53.4)***	***(53.4)***	***(53.4)***	***(53.4)***	***(41.5)***	***(41.5)***	***(41.5)***	***(39.5)***	***(41.5)***	***(39.9)***	***(33.7)***	***(29.2)***	
Output Torque in•lbs	37520	45750	50000	57165	62475	58315	62210	67960	73980	97355	102665	102665	102665	
(N•m)	*(4240)*	*(5170)*	*(5650)*	*(6460)*	*(7060)*	*(6590)*	*(7030)*	*(7680)*	*(8360)*	*(11000)*	*(11600)*	*(11600)*	*(11600)*	
Hollow Shaft OHL lbs	12275	12585	12700	12835	12925	14205	14275	14365	14725	14410	14655	15780	16815	
(N)	*(54600)*	*(56000)*	*(56500)*	*(57100)*	*(57500)*	*(63200)*	*(63500)*	*(63900)*	*(65500)*	*(64100)*	*(65200)*	*(70200)*	*(74800)*	
Solid Shaft OHL lbs	9770	9790	10230	10980	11700	12650	12950	13780	14600	16140	16950	18450	19560	
(N)	*(43450)*	*(43540)*	*(45500)*	*(48830)*	*(52040)*	*(56260)*	*(57600)*	*(61290)*	*(64940)*	*(71790)*	*(75390)*	*(82060)*	*(87000)*	
Input Power HP	**80.5**	**80.5**	**80.5**	**80.5**	**80.5**	**60.3**	**60.3**	**60.3**	**53.9**	**58.5**	**53.5**	**45.2**	**39.2**	4E185
(kW)	***(60.0)***	***(60.0)***	***(60.0)***	***(60.0)***	***(60.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(40.2)***	***(43.6)***	***(39.9)***	***(33.7)***	***(29.2)***	
Output Torque in•lbs	42120	51325	56190	64245	70265	63185	67430	73715	75310	102665	102665	102665	102665	
(N•m)	*(4760)*	*(5800)*	*(6350)*	*(7260)*	*(7940)*	*(7140)*	*(7620)*	*(8330)*	*(8510)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	
Hollow Shaft OHL lbs	11935	12160	12250	12320	12360	13845	13890	13960	14635	14050	14655	15780	16815	
(N)	*(53100)*	*(54100)*	*(54500)*	*(54800)*	*(55000)*	*(61600)*	*(61800)*	*(62100)*	*(65100)*	*(62500)*	*(65200)*	*(70200)*	*(74800)*	
Solid Shaft OHL lbs	9770	9790	10230	10980	11700	12650	12950	13780	14600	16140	16950	18450	19560	
(N)	*(43450)*	*(43540)*	*(45500)*	*(48830)*	*(52040)*	*(56260)*	*(57600)*	*(61290)*	*(64940)*	*(71790)*	*(75390)*	*(82060)*	*(87000)*	

Frame Size Selection Tables 1165 RPM



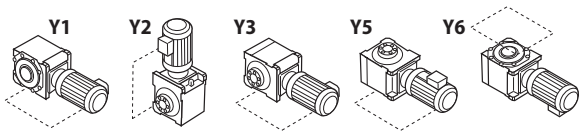
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	19.4	17.4	15.7	14.6	13.2	11.4	10.4	9.47	7.72	6.51	5.63	4.68	3.82	2.79	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	**26.0**	**23.1**	**21.1**	**19.3**	**17.7**	**15.3**	**13.8**	**12.6**	**10.3**	**8.66**	**7.50**	**6.22**	**5.08**	—	4D180
(kW)	***(19.4)***	***(17.2)***	***(15.7)***	***(14.4)***	***(13.2)***	***(11.4)***	***(10.3)***	***(9.42)***	***(7.67)***	***(6.46)***	***(5.59)***	***(4.64)***	***(3.79)***	—	
Output Torque in•lbs	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	—	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	—	
Hollow Shaft OHL lbs	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	—	
(N)	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	—	
Solid Shaft OHL lbs	14690	15120	15470	15720	16010	16390	16610	16680	16640	16610	16590	16580	16580	—	
(N)	*(65340)*	*(67250)*	*(68810)*	*(69920)*	*(71210)*	*(72900)*	*(73880)*	*(74190)*	*(74010)*	*(73880)*	*(73790)*	*(73740)*	*(73740)*	—	
Input Power HP	**26.0**	**23.1**	**21.1**	**19.3**	**17.7**	**15.3**	**13.8**	**12.6**	**10.3**	**8.66**	**7.50**	**6.22**	**5.08**	—	4D185
(kW)	***(19.4)***	***(17.2)***	***(15.7)***	***(14.4)***	***(13.2)***	***(11.4)***	***(10.3)***	***(9.42)***	***(7.67)***	***(6.46)***	***(5.59)***	***(4.64)***	***(3.79)***	—	
Output Torque in•lbs	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	—	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	—	
Hollow Shaft OHL lbs	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	—	
(N)	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	—	
Solid Shaft OHL lbs	14690	15120	15470	15720	16010	16390	16610	16680	16640	16610	16590	16580	16580	—	
(N)	*(65340)*	*(67250)*	*(68810)*	*(69920)*	*(71210)*	*(72900)*	*(73880)*	*(74190)*	*(74010)*	*(73880)*	*(73790)*	*(73740)*	*(73740)*	—	
Input Power HP	**25.6**	**20.8**	**20.8**	**17.4**	**17.4**	**15.0**	**12.4**	**12.4**	**10.1**	**8.54**	**7.39**	**6.14**	**5.00**	—	4E170
(kW)	***(19.1)***	***(15.5)***	***(15.5)***	***(13.0)***	***(13.0)***	***(11.2)***	***(9.28)***	***(9.28)***	***(7.56)***	***(6.37)***	***(5.51)***	***(4.58)***	***(3.73)***	—	
Output Torque in•lbs	76015	69555	76015	69555	76015	76015	69555	76015	76015	76015	76015	76015	76015	—	
(N•m)	*(8590)*	*(7860)*	*(8590)*	*(7860)*	*(8590)*	*(8590)*	*(7860)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	—	
Hollow Shaft OHL lbs	19690	20275	19940	20275	19940	19940	20275	19940	19940	19940	19940	19940	19940	—	
(N)	*(87600)*	*(90200)*	*(88700)*	*(90200)*	*(88700)*	*(88700)*	*(90200)*	*(88700)*	*(88700)*	*(88700)*	*(88700)*	*(88700)*	*(88700)*	—	
Solid Shaft OHL lbs	20300	20580	20810	20970	21150	21410	21550	21640	21750	21820	21880	21920	21920	—	
(N)	*(90290)*	*(91530)*	*(92560)*	*(93270)*	*(94070)*	*(95230)*	*(95850)*	*(96250)*	*(96740)*	*(97050)*	*(97320)*	*(97500)*	*(97500)*	—	
Input Power HP	**29.4**	**25.9**	**23.7**	**21.7**	**20.0**	**17.2**	**15.6**	**15.6**	**12.6**	**10.6**	**9.20**	**7.64**	**6.24**	—	4E175
(kW)	***(21.9)***	***(19.3)***	***(17.7)***	***(16.2)***	***(14.9)***	***(12.8)***	***(11.6)***	***(11.6)***	***(9.41)***	***(7.93)***	***(6.86)***	***(5.70)***	***(4.65)***	—	
Output Torque in•lbs	86990	86545	86990	86545	86990	86990	86545	94690	94690	94690	94690	94690	94690	—	
(N•m)	*(9830)*	*(9780)*	*(9830)*	*(9780)*	*(9830)*	*(9830)*	*(9780)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	—	
Hollow Shaft OHL lbs	18880	19420	19400	19420	19400	19400	19420	18995	18995	18995	18995	18995	18995	—	
(N)	*(84000)*	*(86400)*	*(86300)*	*(86400)*	*(86300)*	*(86300)*	*(86400)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	—	
Solid Shaft OHL lbs	20300	20580	20810	20970	21150	21410	21550	21640	21750	21820	21880	21920	21920	—	
(N)	*(90290)*	*(91530)*	*(92560)*	*(93270)*	*(94070)*	*(95230)*	*(95850)*	*(96250)*	*(96740)*	*(97050)*	*(97320)*	*(97500)*	*(97500)*	—	
Input Power HP	**34.6**	**30.6**	**28.0**	**25.7**	**23.5**	**20.2**	**18.4**	**16.8**	**13.7**	**11.5**	**9.96**	**8.29**	**6.76**	—	4E180
(kW)	***(25.8)***	***(22.8)***	***(20.9)***	***(19.2)***	***(17.5)***	***(15.1)***	***(13.7)***	***(12.5)***	***(10.2)***	***(8.60)***	***(7.43)***	***(6.18)***	***(5.04)***	—	
Output Torque in•lbs	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	
Hollow Shaft OHL lbs	17735	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	—	
(N)	*(78900)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	20300	20580	20810	20970	21150	21410	21550	21640	21750	21820	21880	21920	21920	—	
(N)	*(90290)*	*(91530)*	*(92560)*	*(93270)*	*(94070)*	*(95230)*	*(95850)*	*(96250)*	*(96740)*	*(97050)*	*(97320)*	*(97500)*	*(97500)*	—	
Input Power HP	**34.6**	**30.6**	**28.0**	**25.7**	**23.5**	**20.2**	**18.4**	**16.8**	**13.7**	**11.5**	**9.96**	**8.29**	**6.76**	—	4E185
(kW)	***(25.8)***	***(22.8)***	***(20.9)***	***(19.2)***	***(17.5)***	***(15.1)***	***(13.7)***	***(12.5)***	***(10.2)***	***(8.60)***	***(7.43)***	***(6.18)***	***(5.04)***	—	
Output Torque in•lbs	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	
Hollow Shaft OHL lbs	17735	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	—	
(N)	*(78900)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	20300	20580	20810	20970	21150	21410	21550	21640	21750	21820	21880	21920	21920	—	
(N)	*(90290)*	*(91530)*	*(92560)*	*(93270)*	*(94070)*	*(95230)*	*(95850)*	*(96250)*	*(96740)*	*(97050)*	*(97320)*	*(97500)*	*(97500)*	—	

Frame Size Selection Tables 1165 RPM

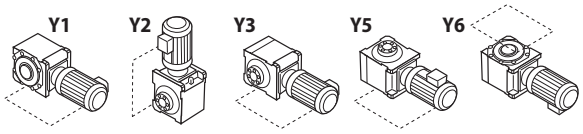
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	106	89.6	83.2	72.8	64.7	55.5	53.0	46.6	41.6	33.3	29.9	25.3	22.0	Frame Size
Ratio	**11**	**13**	**14**	**16**	**18**	**21**	**22**	**25**	**28**	**35**	**39**	**46**	**53**	
Input Power HP	**91.7**	**91.7**	**91.7**	**91.7**	**91.7**	**67.9**	**67.9**	**67.9**	**65.8**	**58.5**	**53.5**	**45.2**	**39.2**	4E190
(kW)	***(68.4)***	***(68.4)***	***(68.4)***	***(68.4)***	***(68.4)***	***(50.6)***	***(50.6)***	***(50.6)***	***(49.1)***	***(43.6)***	***(39.9)***	***(33.7)***	***(29.2)***	
Output Torque in•lbs	48050	58580	64070	73185	80095	71060	75840	82930	92045	102665	102665	102665	102665	
(N•m)	*(5430)*	*(6620)*	*(7240)*	*(8270)*	*(9050)*	*(8030)*	*(8570)*	*(9370)*	*(10400)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	
Hollow Shaft OHL lbs	11485	11645	11665	11665	11620	13285	13285	13285	13420	14050	14655	15780	16815	
(N)	*(51100)*	*(51800)*	*(51900)*	*(51900)*	*(51700)*	*(59100)*	*(59100)*	*(59100)*	*(59700)*	*(62500)*	*(65200)*	*(70200)*	*(74800)*	
Solid Shaft OHL lbs	9770	9790	10230	10980	11700	12650	12950	13780	14600	16140	16950	18450	19560	
(N)	*(43450)*	*(43540)*	*(45500)*	*(48830)*	*(52040)*	*(56260)*	*(57600)*	*(61290)*	*(64940)*	*(71790)*	*(75390)*	*(82060)*	*(87000)*	
Input Power HP	**100.6**	**100.6**	**100.6**	**100.6**	**100.4**	**73.8**	**73.8**	**73.8**	**67.2**	**58.5**	**53.5**	**45.2**	**39.2**	4E195
(kW)	***(75.0)***	***(75.0)***	***(75.0)***	***(75.0)***	***(74.9)***	***(55.0)***	***(55.0)***	***(55.0)***	***(50.1)***	***(43.6)***	***(39.9)***	***(33.7)***	***(29.2)***	
Output Torque in•lbs	52655	64245	70275	80275	87710	77265	82400	90275	93815	102665	102665	102665	102665	
(N•m)	*(5950)*	*(7260)*	*(7940)*	*(9070)*	*(9910)*	*(8730)*	*(9310)*	*(10200)*	*(10600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	
Hollow Shaft OHL lbs	11150	11215	11215	11150	11050	12810	12790	12745	13285	14050	14655	15780	16815	
(N)	*(49600)*	*(49900)*	*(49900)*	*(49600)*	*(49200)*	*(57000)*	*(56900)*	*(56700)*	*(59100)*	*(62500)*	*(65200)*	*(70200)*	*(74800)*	
Solid Shaft OHL lbs	9770	9790	10230	10980	11700	12650	12950	13780	14600	16140	16950	18450	19560	
(N)	*(43450)*	*(43540)*	*(45500)*	*(48830)*	*(52040)*	*(56260)*	*(57600)*	*(61290)*	*(64940)*	*(71790)*	*(75390)*	*(82060)*	*(87000)*	
Input Power HP	**71.6**	**71.6**	**71.6**	**71.6**	**71.6**	**55.7**	**55.7**	**55.7**	**53.0**	**55.7**	**55.7**	**53.8**	**43.4**	4F180
(kW)	***(53.4)***	***(53.4)***	***(53.4)***	***(53.4)***	***(53.4)***	***(41.5)***	***(41.5)***	***(41.5)***	***(39.5)***	***(41.5)***	***(41.5)***	***(40.1)***	***(32.4)***	
Output Torque in•lbs	37520	45750	50000	57165	62475	58315	62210	67960	73980	97345	107080	122120	114155	
(N•m)	*(4240)*	*(5170)*	*(5650)*	*(6460)*	*(7060)*	*(6590)*	*(7030)*	*(7680)*	*(8360)*	*(11000)*	*(12100)*	*(13800)*	*(12900)*	
Hollow Shaft OHL lbs	22365	23380	23825	24500	24950	26750	26975	27650	28550	27875	27650	26975	27200	
(N)	*(99500)*	*(104000)*	*(106000)*	*(109000)*	*(111000)*	*(119000)*	*(120000)*	*(123000)*	*(127000)*	*(124000)*	*(123000)*	*(120000)*	*(121000)*	
Solid Shaft OHL lbs	17510	17550	18270	19520	20710	22280	22760	24120	25510	27980	28900	28930	28950	
(N)	*(77880)*	*(78060)*	*(81260)*	*(86820)*	*(92110)*	*(99100)*	*(101230)*	*(107280)*	*(113460)*	*(124450)*	*(128540)*	*(128680)*	*(128760)*	
Input Power HP	**80.5**	**80.5**	**80.5**	**80.5**	**80.5**	**60.3**	**60.3**	**60.3**	**53.9**	**60.3**	**60.3**	**60.3**	**45.6**	4F185
(kW)	***(60.0)***	***(60.0)***	***(60.0)***	***(60.0)***	***(60.0)***	***(45.0)***	***(45.0)***	***(45.0)***	***(40.2)***	***(45.0)***	***(45.0)***	***(45.0)***	***(34.0)***	
Output Torque in•lbs	42120	51325	56190	64245	70265	63185	67430	73715	75310	106195	115925	137165	119465	
(N•m)	*(4760)*	*(5800)*	*(6350)*	*(7260)*	*(7940)*	*(7140)*	*(7620)*	*(8330)*	*(8510)*	*(12000)*	*(13100)*	*(15500)*	*(13500)*	
Hollow Shaft OHL lbs	22075	22930	23380	23825	24275	26525	26750	27200	28325	27650	27200	26300	26975	
(N)	*(98200)*	*(102000)*	*(104000)*	*(106000)*	*(108000)*	*(118000)*	*(119000)*	*(121000)*	*(126000)*	*(123000)*	*(121000)*	*(117000)*	*(120000)*	
Solid Shaft OHL lbs	17510	17550	18270	19520	20710	22280	22760	24120	25510	27980	28900	28930	28950	
(N)	*(77880)*	*(78060)*	*(81260)*	*(86820)*	*(92110)*	*(99100)*	*(101230)*	*(107280)*	*(113460)*	*(124450)*	*(128540)*	*(128680)*	*(128760)*	
Input Power HP	**91.7**	**91.7**	**91.7**	**91.7**	**91.7**	**67.9**	**67.9**	**67.9**	**65.8**	**67.9**	**67.9**	**67.9**	**60.9**	4F190
(kW)	***(68.4)***	***(68.4)***	***(68.4)***	***(68.4)***	***(68.4)***	***(50.6)***	***(50.6)***	***(50.6)***	***(49.1)***	***(50.6)***	***(50.6)***	***(50.6)***	***(45.4)***	
Output Torque in•lbs	48050	58580	64070	73185	80085	71060	75840	82920	92035	119465	130085	153980	159290	
(N•m)	*(5430)*	*(6620)*	*(7240)*	*(8270)*	*(9050)*	*(8030)*	*(8570)*	*(9370)*	*(10400)*	*(13500)*	*(14700)*	*(17400)*	*(18000)*	
Hollow Shaft OHL lbs	21690	22480	22930	23380	23605	25850	26075	26525	27200	26975	26525	25400	25175	
(N)	*(96500)*	*(100000)*	*(102000)*	*(104000)*	*(105000)*	*(115000)*	*(116000)*	*(118000)*	*(121000)*	*(120000)*	*(118000)*	*(113000)*	*(112000)*	
Solid Shaft OHL lbs	17510	17550	18270	19520	20710	22280	22760	24120	25510	27980	28900	28930	28950	
(N)	*(77880)*	*(78060)*	*(81260)*	*(86820)*	*(92110)*	*(99100)*	*(101230)*	*(107280)*	*(113460)*	*(124450)*	*(128540)*	*(128680)*	*(128760)*	
Input Power HP	**100.6**	**100.6**	**100.6**	**100.6**	**100.6**	**73.8**	**73.8**	**73.8**	**67.2**	**73.8**	**73.8**	**70.1**	**60.9**	4F195
(kW)	***(75.0)***	***(75.0)***	***(75.0)***	***(75.0)***	***(75.0)***	***(55.0)***	***(55.0)***	***(55.0)***	***(50.1)***	***(55.0)***	***(55.0)***	***(52.3)***	***(45.4)***	
Output Torque in•lbs	52655	64245	70265	80265	87785	77255	82385	90265	93805	129200	141590	159290	159290	
(N•m)	*(5950)*	*(7260)*	*(7940)*	*(9070)*	*(9920)*	*(8730)*	*(9310)*	*(10200)*	*(10600)*	*(14600)*	*(16000)*	*(18000)*	*(18000)*	
Hollow Shaft OHL lbs	21375	22095	22455	22930	23155	25400	25625	26075	27200	26525	26075	25175	25175	
(N)	*(95100)*	*(98300)*	*(99900)*	*(102000)*	*(103000)*	*(113000)*	*(114000)*	*(116000)*	*(121000)*	*(118000)*	*(116000)*	*(112000)*	*(112000)*	
Solid Shaft OHL lbs	17510	17550	18270	19520	20710	22280	22760	24120	25510	27980	28900	28930	28950	
(N)	*(77880)*	*(78060)*	*(81260)*	*(86820)*	*(92110)*	*(99100)*	*(101230)*	*(107280)*	*(113460)*	*(124450)*	*(128540)*	*(128680)*	*(128760)*	

Frame Size Selection Tables 1165 RPM



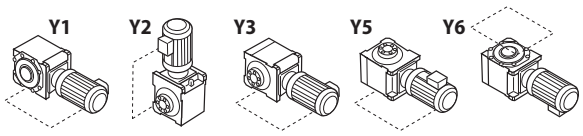
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	19.4	17.4	15.7	14.6	13.2	11.4	10.4	9.47	7.72	6.51	5.63	4.68	3.82	2.79	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	**34.6**	**30.6**	**28.0**	**25.7**	**23.5**	**20.2**	**18.4**	**16.8**	**13.7**	**11.5**	**9.96**	**8.29**	**6.76**	—	4E190
(kW)	***(25.8)***	***(22.8)***	***(20.9)***	***(19.2)***	***(17.5)***	***(15.1)***	***(13.7)***	***(12.5)***	***(10.2)***	***(8.60)***	***(7.43)***	***(6.18)***	***(5.04)***	—	
Output Torque in•lbs	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	
Hollow Shaft OHL lbs	17735	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	—	
(N)	*(78900)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	20300	20580	20810	20970	21150	21410	21550	21640	21750	21820	21880	21920	21920	—	
(N)	*(90290)*	*(91530)*	*(92560)*	*(93270)*	*(94070)*	*(95230)*	*(95850)*	*(96250)*	*(96740)*	*(97050)*	*(97320)*	*(97500)*	*(97500)*	—	
Input Power HP	**34.6**	**30.6**	**28.0**	**25.7**	**23.5**	**20.2**	**18.4**	**16.8**	**13.7**	**11.5**	**9.96**	**8.29**	**6.76**	—	4E195
(kW)	***(25.8)***	***(22.8)***	***(20.9)***	***(19.2)***	***(17.5)***	***(15.1)***	***(13.7)***	***(12.5)***	***(10.2)***	***(8.60)***	***(7.43)***	***(6.18)***	***(5.04)***	—	
Output Torque in•lbs	102665	102665	102665	102665	102665	102665	102655	102665	102665	102665	102665	102665	102665	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	
Hollow Shaft OHL lbs	17735	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	—	
(N)	*(78900)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	20300	20580	20810	20970	21150	21410	21550	21640	21750	21820	21880	21920	21920	—	
(N)	*(90290)*	*(91530)*	*(92560)*	*(93270)*	*(94070)*	*(95230)*	*(95850)*	*(96250)*	*(96740)*	*(97050)*	*(97320)*	*(97500)*	*(97500)*	—	
Input Power HP	**41.0**	**33.3**	**33.3**	**27.9**	**27.9**	**24.0**	**20.0**	**20.0**	**16.2**	**13.7**	**11.8**	**9.83**	**8.03**	—	4F180
(kW)	***(30.6)***	***(24.8)***	***(24.8)***	***(20.8)***	***(20.8)***	***(17.9)***	***(14.9)***	***(14.9)***	***(12.1)***	***(10.2)***	***(8.82)***	***(7.33)***	***(5.99)***	—	
Output Torque in•lbs	122120	111500	122120	111500	122120	121235	111500	122120	122120	122120	122120	122120	122120	—	
(N•m)	*(13800)*	*(12600)*	*(13800)*	*(12600)*	*(13800)*	*(13700)*	*(12600)*	*(13800)*	*(13800)*	*(13800)*	*(13800)*	*(13800)*	*(13800)*	—	
Hollow Shaft OHL lbs	26975	27425	26975	27425	26975	26975	27425	26975	26975	26975	26975	26975	26975	—	
(N)	*(120000)*	*(122000)*	*(120000)*	*(122000)*	*(120000)*	*(120000)*	*(122000)*	*(120000)*	*(120000)*	*(120000)*	*(120000)*	*(120000)*	*(120000)*	—	
Solid Shaft OHL lbs	28970	28970	28970	28970	28970	28970	28970	29020	29220	29360	29450	29530	29530	—	
(N)	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(129080)*	*(129970)*	*(130590)*	*(130990)*	*(131340)*	*(131340)*	—	
Input Power HP	**43.3**	**41.0**	**41.0**	**34.5**	**34.5**	**29.6**	**24.5**	**24.5**	**20.0**	**16.9**	**14.6**	**10.9**	**9.90**	—	4F185
(kW)	***(32.3)***	***(30.6)***	***(30.6)***	***(25.7)***	***(25.7)***	***(22.1)***	***(18.3)***	***(18.3)***	***(14.9)***	***(12.6)***	***(10.9)***	***(8.16)***	***(7.38)***	—	
Output Torque in•lbs	128315	137165	150440	137165	150440	150440	137165	149555	149555	150440	150440	135395	150440	—	
(N•m)	*(14500)*	*(15500)*	*(17000)*	*(15500)*	*(17000)*	*(17000)*	*(15500)*	*(16900)*	*(16900)*	*(17000)*	*(17000)*	*(15300)*	*(17000)*	—	
Hollow Shaft OHL lbs	26525	26300	25625	26300	25625	25625	26300	25625	25625	25625	25625	26300	25625	—	
(N)	*(118000)*	*(117000)*	*(114000)*	*(117000)*	*(114000)*	*(114000)*	*(117000)*	*(114000)*	*(114000)*	*(114000)*	*(114000)*	*(117000)*	*(114000)*	—	
Solid Shaft OHL lbs	28970	28970	28970	28970	28970	28970	28970	29020	29220	29360	29450	29530	29530	—	
(N)	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(129080)*	*(129970)*	*(130590)*	*(130990)*	*(131340)*	*(131340)*	—	
Input Power HP	**53.6**	**47.5**	**43.4**	**40.0**	**36.5**	**31.5**	**28.6**	**26.0**	**21.2**	**17.8**	**15.4**	**12.8**	**10.5**	—	4F190
(kW)	***(40.0)***	***(35.4)***	***(32.4)***	***(29.8)***	***(27.2)***	***(23.5)***	***(21.3)***	***(19.4)***	***(15.8)***	***(13.3)***	***(11.5)***	***(9.58)***	***(7.82)***	—	
Output Torque in•lbs	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	—	
(N•m)	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	—	
Hollow Shaft OHL lbs	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	—	
(N)	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	—	
Solid Shaft OHL lbs	28970	28970	28970	28970	28970	28970	28970	29020	29220	29360	29450	29530	29530	—	
(N)	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(129080)*	*(129970)*	*(130590)*	*(130990)*	*(131340)*	*(131340)*	—	
Input Power HP	**53.6**	**47.5**	**43.4**	**40.0**	**36.5**	**31.5**	**28.6**	**26.0**	**21.2**	**17.8**	**15.4**	**12.8**	**10.5**	—	4F195
(kW)	***(40.0)***	***(35.4)***	***(32.4)***	***(29.8)***	***(27.2)***	***(23.5)***	***(21.3)***	***(19.4)***	***(15.8)***	***(13.3)***	***(11.5)***	***(9.58)***	***(7.82)***	—	
Output Torque in•lbs	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	—	
(N•m)	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	—	
Hollow Shaft OHL lbs	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	—	
(N)	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	—	
Solid Shaft OHL lbs	28970	28970	28970	28970	28970	28970	28970	29020	29220	29360	29450	29530	29530	—	
(N)	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(129080)*	*(129970)*	*(130590)*	*(130990)*	*(131340)*	*(131340)*	—	

Frame Size Selection Tables 980 RPM

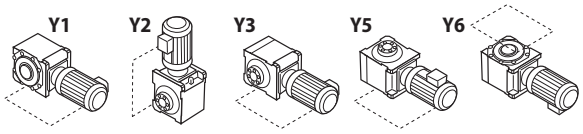
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	89.1	75.4	70.0	61.3	54.4	46.7	44.5	39.2	35.0	28.0	25.1	21.3	18.5	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	**3.15**	**3.15**	**3.15**	**3.15**	**3.15**	**3.15**	—	—	**3.15**	**3.15**	**3.15**	**2.79**	**2.41**	
(kW)	***(2.35)***	***(2.35)***	***(2.35)***	***(2.35)***	***(2.35)***	***(2.35)***	—	—	***(2.35)***	***(2.35)***	***(2.35)***	***(2.08)***	***(1.80)***	
Output Torque in•lbs	1960	2385	2615	2990	3265	3920	—	—	5230	6575	7190	7510	7510	
(N•m)	*(222)*	*(270)*	*(296)*	*(338)*	*(369)*	*(443)*	—	—	*(591)*	*(743)*	*(813)*	*(849)*	*(849)*	**4A100**
Hollow Shaft OHL lbs	4335	4560	4650	4810	4920	5125	—	—	5460	5350	5170	5055	5055	
(N)	*(19300)*	*(20300)*	*(20700)*	*(21400)*	*(21900)*	*(22800)*	—	—	*(24300)*	*(23800)*	*(23000)*	*(22500)*	*(22500)*	
Solid Shaft OHL lbs	3360	3640	3780	4010	4210	4450	—	—	4580	4580	4580	4580	4580	
(N)	*(14940)*	*(16190)*	*(16810)*	*(17830)*	*(18720)*	*(19790)*	—	—	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**4.05**	**4.05**	**4.05**	**4.05**	**4.05**	**4.05**	**—**	**—**	**3.73**	**3.84**	**3.84**	**3.34**	**2.90**	
(kW)	***(3.02)***	***(3.02)***	***(3.02)***	***(3.02)***	***(3.02)***	***(3.02)***	**—**	**—**	***(2.78)***	***(2.86)***	***(2.86)***	***(2.49)***	***(2.16)***	
Output Torque in•lbs	2520	3075	3360	3845	4200	5040	—	—	6200	8000	8750	9025	9025	
(N•m)	*(285)*	*(348)*	*(380)*	*(435)*	*(475)*	*(570)*	—	—	*(701)*	*(904)*	*(989)*	*(1020)*	*(1020)*	**4A105**
Hollow Shaft OHL lbs	4245	4470	4560	4695	4785	4965	—	—	5325	4900	4605	4515	4515	
(N)	*(18900)*	*(19900)*	*(20300)*	*(20900)*	*(21300)*	*(22100)*	—	—	*(23700)*	*(21800)*	*(20500)*	*(20100)*	*(20100)*	
Solid Shaft OHL lbs	3360	3640	3780	4010	4210	4450	—	—	4580	4580	4580	4580	4580	
(N)	*(14940)*	*(16190)*	*(16810)*	*(17830)*	*(18720)*	*(19790)*	—	—	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**—**	**—**	**—**	**—**	**—**	**4.67**	**—**	**—**	**4.76**	**4.75**	**4.75**	**4.01**	**3.47**	
(kW)	**—**	**—**	**—**	**—**	**—**	***(3.48)***	**—**	**—**	***(3.55)***	***(3.54)***	***(3.54)***	***(2.99)***	***(2.59)***	
Output Torque in•lbs	—	—	—	—	—	5810	—	—	7900	9910	10795	10795	10795	
(N•m)	—	—	—	—	—	*(657)*	—	—	*(893)*	*(1120)*	*(1220)*	*(1220)*	*(1220)*	**4A110**
Hollow Shaft OHL lbs	—	—	—	—	—	4875	—	—	4945	4090	3550	3550	3550	
(N)	—	—	—	—	—	*(21700)*	—	—	*(22000)*	*(18200)*	*(15800)*	*(15800)*	*(15800)*	
Solid Shaft OHL lbs	—	—	—	—	—	4450	—	—	4580	4580	4580	4580	4580	
(N)	—	—	—	—	—	*(19790)*	—	—	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**—**	**—**	**—**	**—**	**—**	**4.67**	**—**	**—**	**5.26**	**5.26**	**5.00**	**4.24**	**3.66**	
(kW)	**—**	**—**	**—**	**—**	**—**	***(3.48)***	**—**	**—**	***(3.92)***	***(3.92)***	***(3.73)***	***(3.16)***	***(2.73)***	
Output Torque in•lbs	—	—	—	—	—	5810	—	—	8725	10970	11415	11415	11415	
(N•m)	—	—	—	—	—	*(657)*	—	—	*(986)*	*(1240)*	*(1290)*	*(1290)*	*(1290)*	**4A115**
Hollow Shaft OHL lbs	—	—	—	—	—	4875	—	—	4630	3460	3120	3120	3120	
(N)	—	—	—	—	—	*(21700)*	—	—	*(20600)*	*(15400)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	—	—	—	—	—	4450	—	—	4580	4580	4580	4580	4580	
(N)	—	—	—	—	—	*(19790)*	—	—	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**12.9**	**12.0**	**12.0**	**11.3**	**11.0**	**8.58**	**7.98**	**7.86**	**6.88**	**5.47**	**5.00**	**4.24**	**3.66**	
(kW)	***(9.60)***	***(8.93)***	***(8.93)***	***(8.45)***	***(8.20)***	***(6.40)***	***(5.95)***	***(5.86)***	***(5.13)***	***(4.08)***	***(3.73)***	***(3.16)***	***(2.73)***	
Output Torque in•lbs	8015	9115	9910	10795	11415	10705	10615	11415	11415	11415	11415	11415	11415	
(N•m)	*(906)*	*(1030)*	*(1120)*	*(1220)*	*(1290)*	*(1210)*	*(1200)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	**4A120**
Hollow Shaft OHL lbs	3505	3640	3660	3595	3120	3640	3685	3120	3120	3120	3120	3120	3120	
(N)	*(15600)*	*(16200)*	*(16300)*	*(16000)*	*(13900)*	*(16200)*	*(16400)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	3360	3640	3780	4010	4210	4450	4510	4550	4580	4580	4580	4580	4580	
(N)	*(14940)*	*(16190)*	*(16810)*	*(17830)*	*(18720)*	*(19790)*	*(20060)*	*(20230)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**13.3**	**12.0**	**12.0**	**11.3**	**11.0**	**8.58**	**7.98**	**7.86**	**6.88**	**5.47**	**5.00**	**4.24**	**3.66**	
(kW)	***(9.90)***	***(8.93)***	***(8.93)***	***(8.45)***	***(8.20)***	***(6.40)***	***(5.95)***	***(5.86)***	***(5.13)***	***(4.08)***	***(3.73)***	***(3.16)***	***(2.73)***	
Output Torque in•lbs	8265	9115	9910	10795	11415	10705	10615	11415	11415	11415	11415	11415	11415	
(N•m)	*(934)*	*(1030)*	*(1120)*	*(1220)*	*(1290)*	*(1210)*	*(1200)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	**4A125**
Hollow Shaft OHL lbs	3460	3640	3660	3595	3120	3640	3685	3120	3120	3120	3120	3120	3120	
(N)	*(15400)*	*(16200)*	*(16300)*	*(16000)*	*(13900)*	*(16200)*	*(16400)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	3360	3640	3780	4010	4210	4450	4510	4550	4580	4580	4580	4580	4580	
(N)	*(14940)*	*(16190)*	*(16810)*	*(17830)*	*(18720)*	*(19790)*	*(20060)*	*(20230)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	

Frame Size Selection Tables 980 RPM



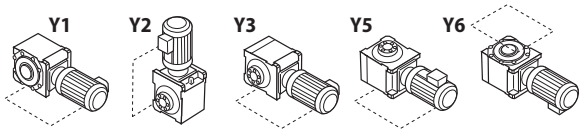
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	16.3	14.6	13.2	12.3	11.1	9.61	8.75	7.97	6.49	5.47	4.73	3.94	3.21	2.35	Frame Size
Ratio	**60**	**67**	**74**	**80**	**88**	**102**	**112**	**123**	**151**	**179**	**207**	**249**	**305**	**417**	
Input Power HP	**2.13**	**1.73**	**1.73**	**1.45**	**1.45**	**1.25**	**1.04**	**1.04**	**0.840**	**0.711**	**0.614**	**0.510**	**0.416**	**0.282**	**4A100**
(kW)	***(1.59)***	***(1.29)***	***(1.29)***	***(1.08)***	***(1.08)***	***(0.931)***	***(0.772)***	***(0.772)***	***(0.628)***	***(0.530)***	***(0.458)***	***(0.380)***	***(0.310)***	***(0.210)***	
Output Torque in•lbs	7510	6865	7510	6865	7510	7510	6865	7510	7510	7510	7510	7510	7510	6955	
(N•m)	*(849)*	*(776)*	*(849)*	*(776)*	*(849)*	*(849)*	*(776)*	*(849)*	*(849)*	*(849)*	*(849)*	*(849)*	*(849)*	*(786)*	
Hollow Shaft OHL lbs	5055	5260	5055	5260	5055	5055	5260	5055	5055	5055	5055	5055	5055	5235	
(N)	*(22500)*	*(23400)*	*(22500)*	*(23400)*	*(22500)*	*(22500)*	*(23400)*	*(22500)*	*(22500)*	*(22500)*	*(22500)*	*(22500)*	*(22500)*	*(23300)*	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4570	4570	4560	4550	4540	4540	4540	4540	4540	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	
Input Power HP	**2.56**	**2.07**	**2.07**	**1.74**	**1.74**	**1.50**	**1.24**	**1.24**	**1.01**	**0.844**	**0.711**	**0.539**	**0.499**	**0.315**	**4A105**
(kW)	***(1.91)***	***(1.54)***	***(1.54)***	***(1.30)***	***(1.30)***	***(1.12)***	***(0.926)***	***(0.926)***	***(0.754)***	***(0.629)***	***(0.530)***	***(0.402)***	***(0.372)***	***(0.235)***	
Output Torque in•lbs	9025	8245	9025	8245	9025	9025	8245	9025	9025	8935	8705	7935	9025	7765	
(N•m)	*(1020)*	*(932)*	*(1020)*	*(932)*	*(1020)*	*(1020)*	*(932)*	*(1020)*	*(1020)*	*(1010)*	*(984)*	*(897)*	*(1020)*	*(878)*	
Hollow Shaft OHL lbs	4515	4810	4515	4810	4515	4515	4810	4515	4515	4540	4630	4920	4515	4990	
(N)	*(20100)*	*(21400)*	*(20100)*	*(21400)*	*(20100)*	*(20100)*	*(21400)*	*(20100)*	*(20100)*	*(20200)*	*(20600)*	*(21900)*	*(20100)*	*(22200)*	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4570	4570	4560	4550	4540	4540	4540	4540	4540	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	
Input Power HP	**3.07**	**2.48**	**2.48**	**2.09**	**2.09**	**1.80**	**1.49**	**1.49**	**1.21**	**1.02**	**0.880**	**0.735**	**0.599**	**—**	**4A110**
(kW)	***(2.29)***	***(1.85)***	***(1.85)***	***(1.56)***	***(1.56)***	***(1.34)***	***(1.11)***	***(1.11)***	***(0.904)***	***(0.762)***	***(0.659)***	***(0.548)***	***(0.447)***	**—**	
Output Torque in•lbs	10795	9910	10795	9910	10795	10795	9910	10795	10795	10795	10795	10795	10795	—	
(N•m)	*(1220)*	*(1120)*	*(1220)*	*(1120)*	*(1220)*	*(1220)*	*(1120)*	*(1220)*	*(1220)*	*(1220)*	*(1220)*	*(1220)*	*(1220)*	—	
Hollow Shaft OHL lbs	3550	4090	3550	4090	3550	3550	4090	3550	3550	3550	3550	3550	3550	—	
(N)	*(15800)*	*(18200)*	*(15800)*	*(18200)*	*(15800)*	*(15800)*	*(18200)*	*(15800)*	*(15800)*	*(15800)*	*(15800)*	*(15800)*	*(15800)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4570	4570	4560	4550	4540	4540	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	
Input Power HP	**3.23**	**2.87**	**2.61**	**2.40**	**2.20**	**1.89**	**1.72**	**1.57**	**1.28**	**1.08**	**0.930**	**0.780**	**0.633**	**—**	**4A115**
(kW)	***(2.41)***	***(2.14)***	***(1.95)***	***(1.79)***	***(1.64)***	***(1.41)***	***(1.28)***	***(1.17)***	***(0.954)***	***(0.804)***	***(0.695)***	***(0.578)***	***(0.472)***	**—**	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4570	4570	4560	4550	4540	4540	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	
Input Power HP	**3.23**	**2.87**	**2.61**	**2.40**	**2.20**	**1.89**	**1.72**	**1.57**	**1.28**	**1.08**	**0.930**	**0.780**	**0.633**	**—**	**4A120**
(kW)	***(2.41)***	***(2.14)***	***(1.95)***	***(1.79)***	***(1.64)***	***(1.41)***	***(1.28)***	***(1.17)***	***(0.954)***	***(0.804)***	***(0.695)***	***(0.578)***	***(0.472)***	**—**	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4570	4570	4560	4550	4540	4540	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	
Input Power HP	**3.23**	**2.87**	**2.61**	**2.40**	**2.20**	**1.89**	**1.72**	**1.57**	**1.28**	**1.08**	**0.930**	**0.780**	**0.633**	**—**	**4A125**
(kW)	***(2.41)***	***(2.14)***	***(1.95)***	***(1.79)***	***(1.64)***	***(1.41)***	***(1.28)***	***(1.17)***	***(0.954)***	***(0.804)***	***(0.695)***	***(0.578)***	***(0.472)***	**—**	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4570	4570	4560	4550	4540	4540	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	

Frame Size Selection Tables 980 RPM

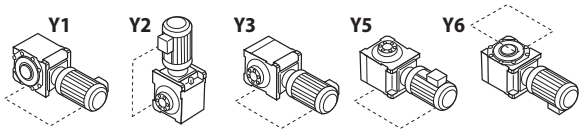
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	89.1	75.4	70.0	61.3	54.4	46.7	44.5	39.2	35.0	28.0	25.1	21.3	18.5	Frame Size
Ratio	**11**	**13**	**14**	**16**	**18**	**21**	**22**	**25**	**28**	**35**	**39**	**46**	**53**	
Input Power HP	**18.4**	**15.0**	**13.8**	**12.0**	**11.0**	**9.17**	**8.60**	**7.86**	**6.88**	**5.47**	**5.00**	**4.24**	**3.66**	**4A140**
(kW)	***(13.7)***	***(11.2)***	***(10.3)***	***(8.97)***	***(8.20)***	***(6.84)***	***(6.41)***	***(5.86)***	***(5.13)***	***(4.08)***	***(3.73)***	***(3.16)***	***(2.73)***	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	
Hollow Shaft OHL lbs	3030	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	
(N)	*(13500)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	3360	3640	3780	4010	4210	4450	4510	4550	4580	4580	4580	4580	4580	
(N)	*(14940)*	*(16190)*	*(16810)*	*(17830)*	*(18720)*	*(19790)*	*(20060)*	*(20230)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**18.4**	**15.0**	**13.8**	**12.0**	**11.0**	**9.17**	**8.60**	**7.86**	**6.88**	**5.47**	**5.00**	**4.24**	**3.66**	**4A145**
(kW)	***(13.7)***	***(11.2)***	***(10.3)***	***(8.97)***	***(8.20)***	***(6.84)***	***(6.41)***	***(5.86)***	***(5.13)***	***(4.08)***	***(3.73)***	***(3.16)***	***(2.73)***	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	
Hollow Shaft OHL lbs	3030	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	
(N)	*(13500)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	3360	3640	3780	4010	4210	4450	4510	4550	4580	4580	4580	4580	4580	
(N)	*(14940)*	*(16190)*	*(16810)*	*(17830)*	*(18720)*	*(19790)*	*(20060)*	*(20230)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**12.9**	**12.0**	**12.0**	**11.3**	**11.3**	**8.58**	**7.98**	**7.98**	**8.01**	**6.80**	**6.80**	**5.85**	**5.07**	**4B120**
(kW)	***(9.60)***	***(8.93)***	***(8.93)***	***(8.45)***	***(8.45)***	***(6.40)***	***(5.95)***	***(5.95)***	***(5.97)***	***(5.07)***	***(5.07)***	***(4.36)***	***(3.78)***	
Output Torque in•lbs	8015	9115	9910	10795	11765	10705	10615	11590	13270	14155	15485	15750	15750	
(N•m)	*(906)*	*(1030)*	*(1120)*	*(1220)*	*(1330)*	*(1210)*	*(1200)*	*(1310)*	*(1500)*	*(1600)*	*(1750)*	*(1780)*	*(1780)*	
Hollow Shaft OHL lbs	5350	5595	5710	5890	5975	6495	6650	6765	6900	7395	7505	7935	8250	
(N)	*(23800)*	*(24900)*	*(25400)*	*(26200)*	*(26600)*	*(28900)*	*(29600)*	*(30100)*	*(30700)*	*(32900)*	*(33400)*	*(35300)*	*(36700)*	
Solid Shaft OHL lbs	3510	3890	4070	4360	4460	5030	5150	5510	5800	6450	6760	7170	7360	
(N)	*(15610)*	*(17300)*	*(18100)*	*(19390)*	*(19830)*	*(22370)*	*(22900)*	*(24500)*	*(25790)*	*(28680)*	*(30060)*	*(31890)*	*(32730)*	
Input Power HP	**13.3**	**12.0**	**12.0**	**11.3**	**11.3**	**8.58**	**7.98**	**7.98**	**8.01**	**6.95**	**6.95**	**6.28**	**6.09**	**4B125**
(kW)	***(9.90)***	***(8.93)***	***(8.93)***	***(8.45)***	***(8.45)***	***(6.40)***	***(5.95)***	***(5.95)***	***(5.97)***	***(5.18)***	***(5.18)***	***(4.68)***	***(4.54)***	
Output Torque in•lbs	8265	9115	9910	10795	11765	10705	10615	11590	13270	14510	15840	16900	18935	
(N•m)	*(934)*	*(1030)*	*(1120)*	*(1220)*	*(1330)*	*(1210)*	*(1200)*	*(1310)*	*(1500)*	*(1640)*	*(1790)*	*(1910)*	*(2140)*	
Hollow Shaft OHL lbs	5325	5595	5710	5890	5975	6495	6650	6765	6900	7350	7460	7820	7325	
(N)	*(23700)*	*(24900)*	*(25400)*	*(26200)*	*(26600)*	*(28900)*	*(29600)*	*(30100)*	*(30700)*	*(32700)*	*(33200)*	*(34800)*	*(32600)*	
Solid Shaft OHL lbs	3510	3890	4070	4360	4460	5030	5150	5510	5800	6450	6760	7170	7360	
(N)	*(15610)*	*(17300)*	*(18100)*	*(19390)*	*(19830)*	*(22370)*	*(22900)*	*(24500)*	*(25790)*	*(28680)*	*(30060)*	*(31890)*	*(32730)*	
Input Power HP	**20.8**	**20.8**	**20.8**	**20.8**	**20.8**	**16.4**	**17.2**	**15.7**	**13.7**	**10.9**	**9.96**	**8.44**	**7.31**	**4B140**
(kW)	***(15.5)***	***(15.5)***	***(15.5)***	***(15.5)***	***(15.5)***	***(12.2)***	***(12.8)***	***(11.7)***	***(10.2)***	***(8.13)***	***(7.43)***	***(6.29)***	***(5.45)***	
Output Torque in•lbs	12920	15750	17255	19730	21590	20350	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(1460)*	*(1780)*	*(1950)*	*(2230)*	*(2440)*	*(2300)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	
Hollow Shaft OHL lbs	4810	4875	4900	4900	4920	5440	5325	5550	5710	5710	5710	5710	5710	
(N)	*(21400)*	*(21700)*	*(21800)*	*(21800)*	*(21900)*	*(24200)*	*(23700)*	*(24700)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	
Solid Shaft OHL lbs	3510	3890	4070	4360	4460	5030	5150	5510	5800	6450	6760	7170	7360	
(N)	*(15610)*	*(17300)*	*(18100)*	*(19390)*	*(19830)*	*(22370)*	*(22900)*	*(24500)*	*(25790)*	*(28680)*	*(30060)*	*(31890)*	*(32730)*	
Input Power HP	**20.8**	**20.8**	**20.8**	**20.8**	**20.8**	**16.4**	**17.2**	**15.7**	**13.7**	**10.9**	**9.96**	**8.44**	**7.31**	**4B145**
(kW)	***(15.5)***	***(15.5)***	***(15.5)***	***(15.5)***	***(15.5)***	***(12.2)***	***(12.8)***	***(11.7)***	***(10.2)***	***(8.13)***	***(7.43)***	***(6.29)***	***(5.45)***	
Output Torque in•lbs	12920	15750	17255	19730	21590	20350	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(1460)*	*(1780)*	*(1950)*	*(2230)*	*(2440)*	*(2300)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	
Hollow Shaft OHL lbs	4810	4875	4900	4900	4920	5440	5325	5550	5710	5710	5710	5710	5710	
(N)	*(21400)*	*(21700)*	*(21800)*	*(21800)*	*(21900)*	*(24200)*	*(23700)*	*(24700)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	
Solid Shaft OHL lbs	3510	3890	4070	4360	4460	5030	5150	5510	5800	6450	6760	7170	7360	
(N)	*(15610)*	*(17300)*	*(18100)*	*(19390)*	*(19830)*	*(22370)*	*(22900)*	*(24500)*	*(25790)*	*(28680)*	*(30060)*	*(31890)*	*(32730)*	

Frame Size Selection Tables 980 RPM



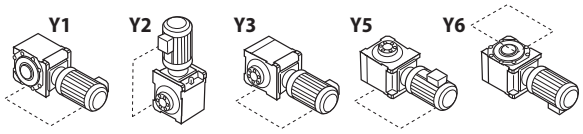
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	16.3	14.6	13.2	12.3	11.1	9.61	8.75	7.97	6.49	5.47	4.73	3.94	3.21	2.35	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	**3.23**	**2.87**	**2.61**	**2.40**	**2.20**	**1.89**	**1.72**	**1.57**	**1.28**	**1.08**	**0.932**	**0.775**	**0.633**	**—**	4A140
(kW)	***(2.41)***	***(2.14)***	***(1.95)***	***(1.79)***	***(1.64)***	***(1.41)***	***(1.28)***	***(1.17)***	***(0.954)***	***(0.804)***	***(0.695)***	***(0.578)***	***(0.472)***	**—**	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4570	4570	4560	4550	4540	4540	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	
Input Power HP	**3.23**	**2.87**	**2.61**	**2.40**	**2.20**	**1.89**	**1.72**	**1.57**	**1.28**	**1.08**	**0.932**	**0.775**	**0.633**	**—**	4A145
(kW)	***(2.41)***	***(2.14)***	***(1.95)***	***(1.79)***	***(1.64)***	***(1.41)***	***(1.28)***	***(1.17)***	***(0.954)***	***(0.804)***	***(0.695)***	***(0.578)***	***(0.472)***	**—**	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4570	4570	4560	4550	4540	4540	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	
Input Power HP	**4.43**	**3.59**	**3.59**	**3.04**	**3.04**	**2.60**	**2.17**	**2.17**	**1.77**	**1.49**	**1.29**	**1.07**	**0.874**	**—**	4B120
(kW)	***(3.30)***	***(2.68)***	***(2.68)***	***(2.27)***	***(2.27)***	***(1.94)***	***(1.62)***	***(1.62)***	***(1.32)***	***(1.11)***	***(0.961)***	***(0.799)***	***(0.652)***	**—**	
Output Torque in•lbs	15660	14335	15660	14420	15750	15660	14420	15750	15750	15750	15750	15750	15750	—	
(N•m)	*(1770)*	*(1620)*	*(1770)*	*(1630)*	*(1780)*	*(1770)*	*(1630)*	*(1780)*	*(1780)*	*(1780)*	*(1780)*	*(1780)*	*(1780)*	—	
Hollow Shaft OHL lbs	8295	8585	8270	8565	8250	8295	8565	8250	8250	8250	8250	8250	8250	—	
(N)	*(36900)*	*(38200)*	*(36800)*	*(38100)*	*(36700)*	*(36900)*	*(38100)*	*(36700)*	*(36700)*	*(36700)*	*(36700)*	*(36700)*	*(36700)*	—	
Solid Shaft OHL lbs	7430	7480	7520	7560	7590	7590	7500	7420	7270	7160	7120	7120	7120	—	
(N)	*(33040)*	*(33270)*	*(33440)*	*(33620)*	*(33760)*	*(33760)*	*(33360)*	*(33000)*	*(32330)*	*(31840)*	*(31660)*	*(31660)*	*(31660)*	—	
Input Power HP	**5.36**	**4.34**	**4.34**	**3.65**	**3.65**	**3.15**	**2.60**	**2.60**	**2.12**	**1.78**	**1.54**	**1.13**	**1.02**	**—**	4B125
(kW)	***(4.00)***	***(3.24)***	***(3.24)***	***(2.72)***	***(2.72)***	***(2.35)***	***(1.94)***	***(1.94)***	***(1.58)***	***(1.33)***	***(1.15)***	***(0.843)***	***(0.761)***	**—**	
Output Torque in•lbs	18935	17345	18935	17345	18935	18935	17345	18935	18935	18935	18935	16635	18405	—	
(N•m)	*(2140)*	*(1960)*	*(2140)*	*(1960)*	*(2140)*	*(2140)*	*(1960)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(1880)*	*(2080)*	—	
Hollow Shaft OHL lbs	7325	7845	7325	7845	7325	7325	7845	7325	7325	7325	7325	8025	7505	—	
(N)	*(32600)*	*(34900)*	*(32600)*	*(34900)*	*(32600)*	*(32600)*	*(34900)*	*(32600)*	*(32600)*	*(32600)*	*(32600)*	*(35700)*	*(33400)*	—	
Solid Shaft OHL lbs	7430	7480	7520	7560	7590	7590	7500	7420	7270	7160	7120	7120	7120	—	
(N)	*(33040)*	*(33270)*	*(33440)*	*(33620)*	*(33760)*	*(33760)*	*(33360)*	*(33000)*	*(32330)*	*(31840)*	*(31660)*	*(31660)*	*(31660)*	—	
Input Power HP	**6.45**	**5.71**	**5.22**	**4.80**	**4.39**	**3.78**	**3.42**	**3.14**	**2.55**	**2.15**	**1.86**	**1.54**	**1.26**	**—**	4B140
(kW)	***(4.81)***	***(4.26)***	***(3.89)***	***(3.58)***	***(3.27)***	***(2.82)***	***(2.55)***	***(2.34)***	***(1.90)***	***(1.60)***	***(1.39)***	***(1.15)***	***(0.939)***	**—**	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	—	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	—	
Hollow Shaft OHL lbs	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	—	
(N)	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	—	
Solid Shaft OHL lbs	7430	7480	7520	7560	7590	7590	7500	7420	7270	7160	7120	7120	7120	—	
(N)	*(33040)*	*(33270)*	*(33440)*	*(33620)*	*(33760)*	*(33760)*	*(33360)*	*(33000)*	*(32330)*	*(31840)*	*(31660)*	*(31660)*	*(31660)*	—	
Input Power HP	**6.45**	**5.71**	**5.22**	**4.80**	**4.39**	**3.78**	**3.42**	**3.14**	**2.55**	**2.15**	**1.86**	**1.54**	**1.26**	**—**	4B145
(kW)	***(4.81)***	***(4.26)***	***(3.89)***	***(3.58)***	***(3.27)***	***(2.82)***	***(2.55)***	***(2.34)***	***(1.90)***	***(1.60)***	***(1.39)***	***(1.15)***	***(0.939)***	**—**	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	—	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	—	
Hollow Shaft OHL lbs	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	—	
(N)	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	—	
Solid Shaft OHL lbs	7430	7480	7520	7560	7590	7590	7500	7420	7270	7160	7120	7120	7120	—	
(N)	*(33040)*	*(33270)*	*(33440)*	*(33620)*	*(33760)*	*(33760)*	*(33360)*	*(33000)*	*(32330)*	*(31840)*	*(31660)*	*(31660)*	*(31660)*	—	

Frame Size Selection Tables 980 RPM

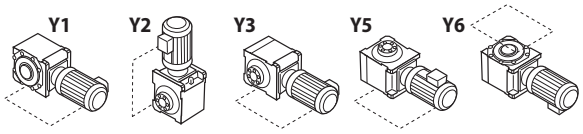
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	89.1	75.4	70.0	61.3	54.4	46.7	44.5	39.2	35.0	28.0	25.1	21.3	18.5	Frame Size
Ratio	**11**	**13**	**14**	**16**	**18**	**21**	**22**	**25**	**28**	**35**	**39**	**46**	**53**	
Input Power HP	**26.3**	**26.3**	**26.3**	**24.0**	**21.9**	**18.2**	**17.2**	**15.7**	**13.7**	**10.9**	**9.96**	**8.44**	**7.31**	**4B160**
(kW)	***(19.6)***	***(19.6)***	***(19.6)***	***(17.9)***	***(16.3)***	***(13.6)***	***(12.8)***	***(11.7)***	***(10.2)***	***(8.13)***	***(7.43)***	***(6.29)***	***(5.45)***	
Output Torque in•lbs	16370	19910	21855	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(1850)*	*(2250)*	*(2470)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	
Hollow Shaft OHL lbs	4450	4425	4425	4585	4785	5190	5325	5550	5710	5710	5710	5710	5710	
(N)	*(19800)*	*(19700)*	*(19700)*	*(20400)*	*(21300)*	*(23100)*	*(23700)*	*(24700)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	
Solid Shaft OHL lbs	3510	3890	4070	4360	4460	5030	5150	5510	5800	6450	6760	7170	7360	
(N)	*(15610)*	*(17300)*	*(18100)*	*(19390)*	*(19830)*	*(22370)*	*(22900)*	*(24500)*	*(25790)*	*(28680)*	*(30060)*	*(31890)*	*(32730)*	
Input Power HP	**26.3**	**26.3**	**26.3**	**24.0**	**21.9**	**18.2**	**17.2**	**15.7**	**13.7**	**10.9**	**9.96**	**8.44**	**7.31**	**4B165**
(kW)	***(19.6)***	***(19.6)***	***(19.6)***	***(17.9)***	***(16.3)***	***(13.6)***	***(12.8)***	***(11.7)***	***(10.2)***	***(8.13)***	***(7.43)***	***(6.29)***	***(5.45)***	
Output Torque in•lbs	16370	19910	21855	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(1850)*	*(2250)*	*(2470)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	
Hollow Shaft OHL lbs	4450	4425	4425	4585	4785	5190	5325	5550	5710	5710	5710	5710	5710	
(N)	*(19800)*	*(19700)*	*(19700)*	*(20400)*	*(21300)*	*(23100)*	*(23700)*	*(24700)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	
Solid Shaft OHL lbs	3510	3890	4070	4360	4460	5030	5150	5510	5800	6450	6760	7170	7360	
(N)	*(15610)*	*(17300)*	*(18100)*	*(19390)*	*(19830)*	*(22370)*	*(22900)*	*(24500)*	*(25790)*	*(28680)*	*(30060)*	*(31890)*	*(32730)*	
Input Power HP	**20.8**	**20.8**	**20.8**	**20.8**	**20.8**	**16.4**	**17.4**	**17.4**	**15.6**	**16.1**	**16.1**	**13.7**	**11.8**	**4C140**
(kW)	***(15.5)***	***(15.5)***	***(15.5)***	***(15.5)***	***(15.5)***	***(12.2)***	***(13.0)***	***(13.0)***	***(11.6)***	***(12.0)***	***(12.0)***	***(10.2)***	***(8.82)***	
Output Torque in•lbs	12920	15750	17255	19730	21590	20350	23185	25305	25925	33625	36810	36810	36810	
(N•m)	*(1460)*	*(1780)*	*(1950)*	*(2230)*	*(2440)*	*(2300)*	*(2620)*	*(2860)*	*(2930)*	*(3800)*	*(4160)*	*(4160)*	*(4160)*	
Hollow Shaft OHL lbs	7305	7550	7665	7800	7910	8585	8495	8610	8990	9055	9125	9755	10340	
(N)	*(32500)*	*(33600)*	*(34100)*	*(34700)*	*(35200)*	*(38200)*	*(37800)*	*(38300)*	*(40000)*	*(40300)*	*(40600)*	*(43400)*	*(46000)*	
Solid Shaft OHL lbs	4620	5090	5350	5780	6180	6710	6880	7390	7790	8750	9250	9930	10560	
(N)	*(20540)*	*(22640)*	*(23790)*	*(25700)*	*(27480)*	*(29840)*	*(30600)*	*(32870)*	*(34640)*	*(38920)*	*(41140)*	*(44160)*	*(46970)*	
Input Power HP	**20.8**	**20.8**	**20.8**	**20.8**	**20.8**	**16.4**	**18.0**	**18.0**	**15.6**	**16.2**	**16.2**	**15.3**	**13.1**	**4C145**
(kW)	***(15.5)***	***(15.5)***	***(15.5)***	***(15.5)***	***(15.5)***	***(12.2)***	***(13.4)***	***(13.4)***	***(11.6)***	***(12.1)***	***(12.1)***	***(11.4)***	***(9.78)***	
Output Torque in•lbs	12920	15750	17255	19730	21590	20350	23980	26190	25925	33715	36900	41150	40795	
(N•m)	*(1460)*	*(1780)*	*(1950)*	*(2230)*	*(2440)*	*(2300)*	*(2710)*	*(2960)*	*(2930)*	*(3810)*	*(4170)*	*(4650)*	*(4610)*	
Hollow Shaft OHL lbs	7305	7550	7665	7800	7910	8585	8430	8520	8990	9055	9100	9350	9955	
(N)	*(32500)*	*(33600)*	*(34100)*	*(34700)*	*(35200)*	*(38200)*	*(37500)*	*(37900)*	*(40000)*	*(40300)*	*(40500)*	*(41600)*	*(44300)*	
Solid Shaft OHL lbs	4620	5090	5350	5780	6180	6710	6880	7390	7790	8750	9250	9930	10560	
(N)	*(20540)*	*(22640)*	*(23790)*	*(25700)*	*(27480)*	*(29840)*	*(30600)*	*(32870)*	*(34640)*	*(38920)*	*(41140)*	*(44160)*	*(46970)*	
Input Power HP	**33.9**	**33.9**	**33.9**	**33.9**	**33.9**	**31.9**	**27.2**	**27.2**	**26.4**	**21.9**	**20.0**	**16.9**	**14.6**	**4C160**
(kW)	***(25.3)***	***(25.3)***	***(25.3)***	***(25.3)***	***(25.3)***	***(23.8)***	***(20.3)***	***(20.3)***	***(19.7)***	***(16.3)***	***(14.9)***	***(12.6)***	***(10.9)***	
Output Torque in•lbs	21150	25750	28140	32210	35220	39820	36190	39555	43890	45485	45485	45485	45485	
(N•m)	*(2390)*	*(2910)*	*(3180)*	*(3640)*	*(3980)*	*(4500)*	*(4090)*	*(4470)*	*(4960)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	
Hollow Shaft OHL lbs	6540	6605	6630	6605	6605	6740	7260	7260	7305	7935	8295	8945	9415	
(N)	*(29100)*	*(29400)*	*(29500)*	*(29400)*	*(29400)*	*(30000)*	*(32300)*	*(32300)*	*(32500)*	*(35300)*	*(36900)*	*(39800)*	*(41900)*	
Solid Shaft OHL lbs	4620	5090	5350	5780	6180	6710	6880	7390	7790	8750	9250	9930	10560	
(N)	*(20540)*	*(22640)*	*(23790)*	*(25700)*	*(27480)*	*(29840)*	*(30600)*	*(32870)*	*(34640)*	*(38920)*	*(41140)*	*(44160)*	*(46970)*	
Input Power HP	**40.2**	**40.2**	**40.2**	**40.2**	**40.2**	**31.9**	**32.3**	**31.4**	**27.4**	**21.9**	**20.0**	**16.9**	**14.6**	**4C165**
(kW)	***(30.0)***	***(30.0)***	***(30.0)***	***(30.0)***	***(30.0)***	***(23.8)***	***(24.1)***	***(23.4)***	***(20.4)***	***(16.3)***	***(14.9)***	***(12.6)***	***(10.9)***	
Output Torque in•lbs	25040	30530	33360	38140	41770	39820	42920	45485	45485	45485	45485	45485	45485	
(N•m)	*(2830)*	*(3450)*	*(3770)*	*(4310)*	*(4720)*	*(4500)*	*(4850)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	
Hollow Shaft OHL lbs	6155	6135	6135	6045	6000	6740	6630	6695	7145	7935	8295	8945	9415	
(N)	*(27400)*	*(27300)*	*(27300)*	*(26900)*	*(26700)*	*(30000)*	*(29500)*	*(29800)*	*(31800)*	*(35300)*	*(36900)*	*(39800)*	*(41900)*	
Solid Shaft OHL lbs	4620	5090	5350	5780	6180	6710	6880	7390	7790	8750	9250	9930	10560	
(N)	*(20540)*	*(22640)*	*(23790)*	*(25700)*	*(27480)*	*(29840)*	*(30600)*	*(32870)*	*(34640)*	*(38920)*	*(41140)*	*(44160)*	*(46970)*	

Frame Size Selection Tables 980 RPM



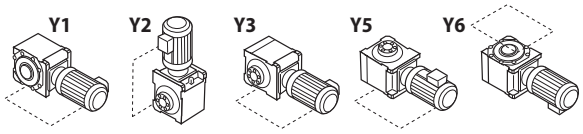
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	16.3	14.6	13.2	12.3	11.1	9.61	8.75	7.97	6.49	5.47	4.73	3.94	3.21	2.35	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	**6.45**	**5.71**	**5.22**	**4.80**	**4.39**	**3.78**	**3.42**	**3.14**	**2.55**	**2.15**	**1.86**	**1.54**	**1.26**	—	
(kW)	***(4.81)***	***(4.26)***	***(3.89)***	***(3.58)***	***(3.27)***	***(2.82)***	***(2.55)***	***(2.34)***	***(1.90)***	***(1.60)***	***(1.39)***	***(1.15)***	***(0.939)***	—	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	—	**4B160**
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	—	
Hollow Shaft OHL lbs	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	—	
(N)	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	—	
Solid Shaft OHL lbs	7430	7480	7520	7560	7590	7590	7500	7420	7270	7160	7120	7120	7120	—	
(N)	*(33040)*	*(33270)*	*(33440)*	*(33620)*	*(33760)*	*(33760)*	*(33360)*	*(33000)*	*(32330)*	*(31840)*	*(31660)*	*(31660)*	*(31660)*	—	
Input Power HP	**6.45**	**5.71**	**5.22**	**4.80**	**4.39**	**3.78**	**3.42**	**3.14**	**2.55**	**2.15**	**1.86**	**1.54**	**1.26**	—	
(kW)	***(4.81)***	***(4.26)***	***(3.89)***	***(3.58)***	***(3.27)***	***(2.82)***	***(2.55)***	***(2.34)***	***(1.90)***	***(1.60)***	***(1.39)***	***(1.15)***	***(0.939)***	—	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	—	**4B165**
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	—	
Hollow Shaft OHL lbs	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	—	
(N)	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	—	
Solid Shaft OHL lbs	7430	7480	7520	7560	7590	7590	7500	7420	7270	7160	7120	7120	7120	—	
(N)	*(33040)*	*(33270)*	*(33440)*	*(33620)*	*(33760)*	*(33760)*	*(33360)*	*(33000)*	*(32330)*	*(31840)*	*(31660)*	*(31660)*	*(31660)*	—	
Input Power HP	**10.43**	**8.45**	**8.45**	**7.09**	**7.09**	**6.12**	**5.07**	**5.07**	**4.13**	**3.47**	**3.00**	**2.49**	**2.04**	—	
(kW)	***(7.78)***	***(6.30)***	***(6.30)***	***(5.29)***	***(5.29)***	***(4.56)***	***(3.78)***	***(3.78)***	***(3.08)***	***(2.59)***	***(2.24)***	***(1.86)***	***(1.52)***	—	
Output Torque in•lbs	36810	33625	36810	33625	36810	36810	33625	36810	36810	36810	36810	36810	36810	—	**4C140**
(N•m)	*(4160)*	*(3800)*	*(4160)*	*(3800)*	*(4160)*	*(4160)*	*(3800)*	*(4160)*	*(4160)*	*(4160)*	*(4160)*	*(4160)*	*(4160)*	—	
Hollow Shaft OHL lbs	10880	11690	11825	12475	12160	12160	12900	12160	12160	12160	12160	12160	12160	—	
(N)	*(48400)*	*(52000)*	*(52600)*	*(55500)*	*(54100)*	*(54100)*	*(57400)*	*(54100)*	*(54100)*	*(54100)*	*(54100)*	*(54100)*	*(54100)*	—	
Solid Shaft OHL lbs	11140	11600	11970	12230	12530	12810	12760	12720	12630	12570	12550	12550	12550	—	
(N)	*(49550)*	*(51590)*	*(53240)*	*(54390)*	*(55730)*	*(56970)*	*(56750)*	*(56570)*	*(56170)*	*(55910)*	*(55820)*	*(55820)*	*(55820)*	—	
Input Power HP	**11.7**	**9.23**	**9.23**	**7.94**	**7.94**	**6.84**	**5.67**	**5.67**	**4.61**	**3.67**	**3.16**	**2.60**	**2.08**	—	
(kW)	***(8.70)***	***(6.88)***	***(6.88)***	***(5.92)***	***(5.92)***	***(5.10)***	***(4.23)***	***(4.23)***	***(3.44)***	***(2.74)***	***(2.36)***	***(1.94)***	***(1.55)***	—	
Output Torque in•lbs	41150	36810	40265	37610	41150	41150	37610	41150	41150	38935	38760	38405	37520	—	**4C145**
(N•m)	*(4650)*	*(4160)*	*(4550)*	*(4250)*	*(4650)*	*(4650)*	*(4250)*	*(4650)*	*(4650)*	*(4400)*	*(4380)*	*(4340)*	*(4240)*	—	
Hollow Shaft OHL lbs	10475	11395	11240	11955	10945	10945	11955	10945	10945	11620	11665	11755	11980	—	
(N)	*(46600)*	*(50700)*	*(50000)*	*(53200)*	*(48700)*	*(48700)*	*(53200)*	*(48700)*	*(48700)*	*(51700)*	*(51900)*	*(52300)*	*(53300)*	—	
Solid Shaft OHL lbs	11140	11600	11970	12230	12530	12810	12760	12720	12630	12570	12550	12550	12550	—	
(N)	*(49550)*	*(51590)*	*(53240)*	*(54390)*	*(55730)*	*(56970)*	*(56750)*	*(56570)*	*(56170)*	*(55910)*	*(55820)*	*(55820)*	*(55820)*	—	
Input Power HP	**12.9**	**11.4**	**10.4**	**9.59**	**8.77**	**7.56**	**6.85**	**6.26**	**5.10**	**4.29**	**3.71**	**3.08**	**2.52**	—	
(kW)	***(9.61)***	***(8.51)***	***(7.78)***	***(7.15)***	***(6.54)***	***(5.64)***	***(5.11)***	***(4.67)***	***(3.80)***	***(3.20)***	***(2.77)***	***(2.30)***	***(1.88)***	—	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	—	**4C160**
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	—	
Hollow Shaft OHL lbs	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	—	
(N)	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	—	
Solid Shaft OHL lbs	11140	11600	11970	12230	12530	12810	12760	12720	12630	12570	12550	12550	12550	—	
(N)	*(49550)*	*(51590)*	*(53240)*	*(54390)*	*(55730)*	*(56970)*	*(56750)*	*(56570)*	*(56170)*	*(55910)*	*(55820)*	*(55820)*	*(55820)*	—	
Input Power HP	**12.9**	**11.4**	**10.4**	**9.59**	**8.77**	**7.56**	**6.85**	**6.26**	**5.10**	**4.29**	**3.71**	**3.08**	**2.52**	—	
(kW)	***(9.61)***	***(8.51)***	***(7.78)***	***(7.15)***	***(6.54)***	***(5.64)***	***(5.11)***	***(4.67)***	***(3.80)***	***(3.20)***	***(2.77)***	***(2.30)***	***(1.88)***	—	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	—	**4C165**
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	—	
Hollow Shaft OHL lbs	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	—	
(N)	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	—	
Solid Shaft OHL lbs	11140	11600	11970	12230	12530	12810	12760	12720	12630	12570	12550	12550	12550	—	
(N)	*(49550)*	*(51590)*	*(53240)*	*(54390)*	*(55730)*	*(56970)*	*(56750)*	*(56570)*	*(56170)*	*(55910)*	*(55820)*	*(55820)*	*(55820)*	—	

Frame Size Selection Tables 980 RPM

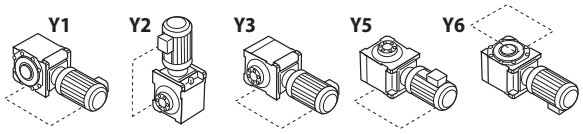
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	89.1	75.4	70.0	61.3	54.4	46.7	44.5	39.2	35.0	28.0	25.1	21.3	18.5	Frame Size
Ratio	**11**	**13**	**14**	**16**	**18**	**21**	**22**	**25**	**28**	**35**	**39**	**46**	**53**	
Input Power HP	**55.7**	**52.2**	**48.9**	**45.1**	**42.2**	**32.6**	**32.6**	**31.4**	**27.4**	**21.9**	**20.0**	**16.9**	**14.6**	
(kW)	***(41.5)***	***(38.9)***	***(36.5)***	***(33.6)***	***(31.5)***	***(24.3)***	***(24.3)***	***(23.4)***	***(20.4)***	***(16.3)***	***(14.9)***	***(12.6)***	***(10.9)***	
Output Torque in•lbs	34695	39650	40625	42750	43810	40615	43360	45485	45485	45485	45485	45485	45485	
(N•m)	*(3920)*	*(4480)*	*(4590)*	*(4830)*	*(4950)*	*(4590)*	*(4900)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	**4C170**
Hollow Shaft OHL lbs	5260	5305	5460	5460	5800	6675	6605	6695	7145	7935	8295	8945	9415	
(N)	*(23400)*	*(23600)*	*(24300)*	*(25100)*	*(25800)*	*(29700)*	*(29400)*	*(29800)*	*(31800)*	*(35300)*	*(36900)*	*(39800)*	*(41900)*	
Solid Shaft OHL lbs	6710	6710	6710	6710	6710	6710	6880	7390	7790	8750	9250	9930	10560	
(N)	*(29840)*	*(29840)*	*(29840)*	*(29840)*	*(29840)*	*(29840)*	*(30600)*	*(32870)*	*(34640)*	*(38920)*	*(41140)*	*(44160)*	*(46970)*	
Input Power HP	**56.5**	**52.2**	**48.9**	**45.1**	**42.2**	**32.6**	**32.6**	**31.4**	**27.4**	**21.9**	**20.0**	**16.9**	**14.6**	
(kW)	***(42.1)***	***(38.9)***	***(36.5)***	***(33.6)***	***(31.5)***	***(24.3)***	***(24.3)***	***(23.4)***	***(20.4)***	***(16.3)***	***(14.9)***	***(12.6)***	***(10.9)***	
Output Torque in•lbs	35135	39650	40625	42750	43810	40615	43360	45485	45485	45485	45485	45485	45485	
(N•m)	*(3970)*	*(4480)*	*(4590)*	*(4830)*	*(4950)*	*(4590)*	*(4900)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	**4C175**
Hollow Shaft OHL lbs	5215	5305	5460	5640	5800	6675	6605	6695	7145	7935	8295	8945	9415	
(N)	*(23200)*	*(23600)*	*(24300)*	*(25100)*	*(25800)*	*(29700)*	*(29400)*	*(29800)*	*(31800)*	*(35300)*	*(36900)*	*(39800)*	*(41900)*	
Solid Shaft OHL lbs	6710	6710	6710	6710	6710	6710	6880	7390	7790	8750	9250	9930	10560	
(N)	*(29840)*	*(29840)*	*(29840)*	*(29840)*	*(29840)*	*(29840)*	*(30600)*	*(32870)*	*(34640)*	*(38920)*	*(41140)*	*(44160)*	*(46970)*	
Input Power HP	**—**	**—**	**—**	**—**	**—**	**31.9**	**27.2**	**27.2**	**26.4**	**23.1**	**23.1**	**19.6**	**16.9**	
(kW)	**—**	**—**	**—**	**—**	**—**	***(23.8)***	***(20.3)***	***(20.3)***	***(19.7)***	***(17.2)***	***(17.2)***	***(14.6)***	***(12.6)***	
Output Torque in•lbs	—	—	—	—	—	39820	36190	39555	43890	48230	52740	52740	52740	
(N•m)	—	—	—	—	—	*(4500)*	*(4090)*	*(4470)*	*(4960)*	*(5450)*	*(5960)*	*(5960)*	*(5960)*	**4D160**
Hollow Shaft OHL lbs	—	—	—	—	—	11955	12540	12700	13015	13800	13960	14880	15735	
(N)	—	—	—	—	—	*(53200)*	*(55800)*	*(56500)*	*(57900)*	*(61400)*	*(62100)*	*(66200)*	*(70000)*	
Solid Shaft OHL lbs	—	—	—	—	—	9580	9820	10550	11130	12530	13260	14230	14890	
(N)	—	—	—	—	—	*(42610)*	*(43670)*	*(46920)*	*(49500)*	*(55730)*	*(58980)*	*(63290)*	*(66230)*	
Input Power HP	**—**	**—**	**—**	**—**	**—**	**31.9**	**32.3**	**32.3**	**30.2**	**27.6**	**27.6**	**23.3**	**20.2**	
(kW)	**—**	**—**	**—**	**—**	**—**	***(23.8)***	***(24.1)***	***(24.1)***	***(22.5)***	***(20.6)***	***(20.6)***	***(17.4)***	***(15.1)***	
Output Torque in•lbs	—	—	—	—	—	39820	42920	46990	50175	57695	63095	63095	63095	
(N•m)	—	—	—	—	—	*(4500)*	*(4850)*	*(5310)*	*(5670)*	*(6520)*	*(7130)*	*(7130)*	*(7130)*	**4D165**
Hollow Shaft OHL lbs	—	—	—	—	—	11955	12000	12115	12495	13035	13125	14050	14880	
(N)	—	—	—	—	—	*(53200)*	*(53400)*	*(53900)*	*(55600)*	*(58000)*	*(58400)*	*(62500)*	*(66200)*	
Solid Shaft OHL lbs	—	—	—	—	—	9580	9820	10550	11130	12530	13260	14230	14890	
(N)	—	—	—	—	—	*(42610)*	*(43670)*	*(46920)*	*(49500)*	*(55730)*	*(58980)*	*(63290)*	*(66230)*	
Input Power HP	**55.7**	**55.7**	**55.7**	**55.7**	**55.7**	**44.8**	**45.5**	**45.5**	**45.5**	**33.3**	**33.3**	**28.2**	**24.4**	
(kW)	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(33.4)***	***(33.9)***	***(33.9)***	***(33.9)***	***(24.8)***	***(24.8)***	***(21.0)***	***(18.2)***	
Output Torque in•lbs	34690	42210	46190	52830	57785	55840	60350	66015	75485	69555	76015	75925	76015	
(N•m)	*(3920)*	*(4770)*	*(5220)*	*(5970)*	*(6530)*	*(6310)*	*(6820)*	*(7460)*	*(8530)*	*(7860)*	*(8590)*	*(8580)*	*(8590)*	**4D170**
Hollow Shaft OHL lbs	9530	9665	9710	9730	9712	10675	10585	10585	10475	12070	11825	11865	11825	
(N)	*(42400)*	*(43000)*	*(43200)*	*(43300)*	*(43200)*	*(47500)*	*(47100)*	*(47100)*	*(46600)*	*(53700)*	*(52600)*	*(52800)*	*(52600)*	
Solid Shaft OHL lbs	6520	7250	7620	8230	8820	9580	9820	10550	11130	12530	13260	14230	14890	
(N)	*(29000)*	*(32240)*	*(33890)*	*(36600)*	*(39230)*	*(42610)*	*(43670)*	*(46920)*	*(49500)*	*(55730)*	*(58980)*	*(63290)*	*(66230)*	
Input Power HP	**56.5**	**56.5**	**56.5**	**56.5**	**56.5**	**44.8**	**49.6**	**49.6**	**46.4**	**37.0**	**33.8**	**28.6**	**24.8**	
(kW)	***(42.1)***	***(42.1)***	***(42.1)***	***(42.1)***	***(42.1)***	***(33.4)***	***(37.0)***	***(37.0)***	***(34.6)***	***(27.6)***	***(25.2)***	***(21.3)***	***(18.5)***	
Output Torque in•lbs	35130	42830	46900	53540	58580	55840	65925	72035	77165	77165	77165	77165	77165	
(N•m)	*(3970)*	*(4840)*	*(5300)*	*(6050)*	*(6620)*	*(6310)*	*(7450)*	*(8140)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	**4D175**
Hollow Shaft OHL lbs	9485	9620	9665	9665	9640	10675	10135	10090	10340	11375	11375	11375	11375	
(N)	*(42200)*	*(42800)*	*(43000)*	*(43000)*	*(42900)*	*(47500)*	*(45100)*	*(44900)*	*(46000)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	
Solid Shaft OHL lbs	6520	7250	7620	8230	8820	9580	9820	10550	11130	12530	13260	14230	14890	
(N)	*(29000)*	*(32240)*	*(33890)*	*(36600)*	*(39230)*	*(42610)*	*(43670)*	*(46920)*	*(49500)*	*(55730)*	*(58980)*	*(63290)*	*(66230)*	

Frame Size Selection Tables 980 RPM



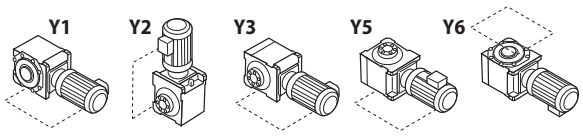
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	16.3	14.6	13.2	12.3	11.14	9.61	8.75	7.97	6.49	5.47	4.73	3.94	3.21	2.35	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	**12.9**	**11.4**	**10.4**	**9.59**	**8.77**	**7.56**	**6.85**	**6.26**	**5.10**	**4.29**	**3.71**	**3.08**	**2.52**	**—**	4C170
(kW)	***(9.61)***	***(8.51)***	***(7.78)***	***(7.15)***	***(6.54)***	***(5.64)***	***(5.11)***	***(4.67)***	***(3.80)***	***(3.20)***	***(2.77)***	***(2.30)***	***(1.88)***	**—**	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	—	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	—	
Hollow Shaft OHL lbs	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	—	
(N)	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	—	
Solid Shaft OHL lbs	11140	11600	11970	12230	12530	12810	12760	12720	12630	12570	12550	12550	12550	—	
(N)	*(49550)*	*(51590)*	*(53240)*	*(54390)*	*(55730)*	*(56970)*	*(56750)*	*(56570)*	*(56170)*	*(55910)*	*(55820)*	*(55820)*	*(55820)*	—	
Input Power HP	**12.9**	**11.4**	**10.4**	**9.59**	**8.77**	**7.56**	**6.85**	**6.26**	**5.10**	**4.29**	**3.71**	**3.08**	**2.52**	**—**	4C175
(kW)	***(9.61)***	***(8.51)***	***(7.78)***	***(7.15)***	***(6.54)***	***(5.64)***	***(5.11)***	***(4.67)***	***(3.80)***	***(3.20)***	***(2.77)***	***(2.30)***	***(1.88)***	**—**	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	—	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	—	
Hollow Shaft OHL lbs	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	—	
(N)	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	—	
Solid Shaft OHL lbs	11140	11600	11970	12230	12530	12810	12760	12720	12630	12570	12550	12550	12550	—	
(N)	*(49550)*	*(51590)*	*(53240)*	*(54390)*	*(55730)*	*(56970)*	*(56750)*	*(56570)*	*(56170)*	*(55910)*	*(55820)*	*(55820)*	*(55820)*	—	
Input Power HP	**15.0**	**12.1**	**12.1**	**10.2**	**10.2**	**8.77**	**7.27**	**7.27**	**5.85**	**4.99**	**4.30**	**3.58**	**2.92**	**—**	4D160
(kW)	***(11.2)***	***(9.03)***	***(9.03)***	***(7.58)***	***(7.58)***	***(6.54)***	***(5.42)***	***(5.42)***	***(4.36)***	***(3.72)***	***(3.21)***	***(2.67)***	***(2.18)***	**—**	
Output Torque in•lbs	52740	48230	52740	48230	52740	52740	48230	52740	52120	52740	52740	52740	52740	—	
(N•m)	*(5960)*	*(5450)*	*(5960)*	*(5450)*	*(5960)*	*(5960)*	*(5450)*	*(5960)*	*(5890)*	*(5960)*	*(5960)*	*(5960)*	*(5960)*	—	
Hollow Shaft OHL lbs	16500	17600	17845	18680	17915	17915	18680	17915	18025	17915	17915	17915	17915	—	
(N)	*(73400)*	*(78300)*	*(79400)*	*(83100)*	*(79700)*	*(79700)*	*(83100)*	*(79700)*	*(80200)*	*(79700)*	*(79700)*	*(79700)*	*(79700)*	—	
Solid Shaft OHL lbs	15350	15710	16000	16220	16450	16690	16670	16650	16610	16590	16580	16580	16580	—	
(N)	*(68270)*	*(69870)*	*(71160)*	*(72140)*	*(73160)*	*(74230)*	*(74140)*	*(74050)*	*(73880)*	*(73790)*	*(73740)*	*(73740)*	*(73740)*	—	
Input Power HP	**17.8**	**14.5**	**14.5**	**12.2**	**12.2**	**10.5**	**8.69**	**8.69**	**7.08**	**5.97**	**5.15**	**4.28**	**3.42**	**—**	4D165
(kW)	***(13.3)***	***(10.8)***	***(10.8)***	***(9.07)***	***(9.07)***	***(7.82)***	***(6.48)***	***(6.48)***	***(5.28)***	***(4.45)***	***(3.84)***	***(3.19)***	***(2.55)***	**—**	
Output Torque in•lbs	63095	57695	63095	57695	63095	63095	57695	63095	63095	63095	63095	63095	61680	—	
(N•m)	*(7130)*	*(6520)*	*(7130)*	*(6520)*	*(7130)*	*(7130)*	*(6520)*	*(7130)*	*(7130)*	*(7130)*	*(7130)*	*(7130)*	*(6970)*	—	
Hollow Shaft OHL lbs	15645	16835	15755	16970	15755	15755	16970	15755	15755	15755	15755	15755	16115	—	
(N)	*(69600)*	*(74900)*	*(70100)*	*(75500)*	*(70100)*	*(70100)*	*(75500)*	*(70100)*	*(70100)*	*(70100)*	*(70100)*	*(70100)*	*(71700)*	—	
Solid Shaft OHL lbs	15350	15710	16000	16220	16450	16690	16670	16650	16610	16590	16580	16580	16580	—	
(N)	*(68270)*	*(69870)*	*(71160)*	*(72140)*	*(73160)*	*(74230)*	*(74140)*	*(74050)*	*(73880)*	*(73790)*	*(73740)*	*(73740)*	*(73740)*	—	
Input Power HP	**21.6**	**17.4**	**17.4**	**14.6**	**14.6**	**12.6**	**10.5**	**10.5**	**8.53**	**7.19**	**6.21**	**5.16**	**4.21**	**—**	4D170
(kW)	***(16.1)***	***(13.0)***	***(13.0)***	***(10.9)***	***(10.9)***	***(9.42)***	***(7.81)***	***(7.81)***	***(6.36)***	***(5.36)***	***(4.63)***	***(3.85)***	***(3.14)***	**—**	
Output Torque in•lbs	76015	69555	76015	69555	76015	76015	69555	76015	76015	76015	76015	76015	76015	—	
(N•m)	*(8590)*	*(7860)*	*(8590)*	*(7860)*	*(8590)*	*(8590)*	*(7860)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	—	
Hollow Shaft OHL lbs	11825	14050	11825	14050	11825	11825	14050	11825	11825	11825	11825	11825	11825	—	
(N)	*(52600)*	*(62500)*	*(52600)*	*(62500)*	*(52600)*	*(52600)*	*(62500)*	*(52600)*	*(52600)*	*(52600)*	*(52600)*	*(52600)*	*(52600)*	—	
Solid Shaft OHL lbs	15350	15710	16000	16220	16450	16690	16670	16650	16610	16590	16580	16580	16580	—	
(N)	*(68270)*	*(69870)*	*(71160)*	*(72140)*	*(73160)*	*(74230)*	*(74140)*	*(74050)*	*(73880)*	*(73790)*	*(73740)*	*(73740)*	*(73740)*	—	
Input Power HP	**21.9**	**19.3**	**17.7**	**16.2**	**14.9**	**12.8**	**11.6**	**10.6**	**8.65**	**7.30**	**6.30**	**5.24**	**4.28**	**—**	4D175
(kW)	***(16.3)***	***(14.4)***	***(13.2)***	***(12.1)***	***(11.1)***	***(9.56)***	***(8.67)***	***(7.92)***	***(6.45)***	***(5.44)***	***(4.70)***	***(3.91)***	***(3.19)***	**—**	
Output Torque in•lbs	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	—	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	—	
Hollow Shaft OHL lbs	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	—	
(N)	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	—	
Solid Shaft OHL lbs	15350	15710	16000	16220	16450	16690	16670	16650	16610	16590	16580	16580	16580	—	
(N)	*(68270)*	*(69870)*	*(71160)*	*(72140)*	*(73160)*	*(74230)*	*(74140)*	*(74050)*	*(73880)*	*(73790)*	*(73740)*	*(73740)*	*(73740)*	—	

Frame Size Selection Tables 980 RPM

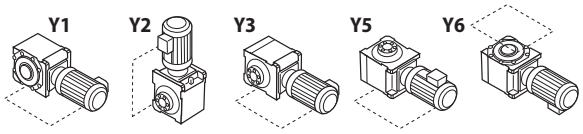
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	89.1	75.4	70.0	61.3	54.4	46.7	44.5	39.2	35.0	28.0	25.1	21.3	18.5	Frame Size
Ratio	**11**	**13**	**14**	**16**	**18**	**21**	**22**	**25**	**28**	**35**	**39**	**46**	**53**	
Input Power HP	**71.6**	**71.6**	**71.6**	**71.6**	**67.2**	**55.7**	**50.2**	**50.2**	**44.7**	**37.0**	**33.8**	**28.6**	**24.8**	
(kW)	***(53.4)***	***(53.4)***	***(53.4)***	***(53.4)***	***(50.1)***	***(41.5)***	***(37.4)***	***(37.4)***	***(33.3)***	***(27.6)***	***(25.2)***	***(21.3)***	***(18.5)***	
Output Torque in•lbs	44600	54335	59475	67970	69740	69300	66645	72840	74165	77175	77175	77165	77165	
(N•m)	*(5040)*	*(6140)*	*(6270)*	*(7680)*	*(7880)*	*(7830)*	*(7530)*	*(8230)*	*(8380)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	**4D180**
Hollow Shaft OHL lbs	8745	8700	8655	8520	8745	9595	10090	10025	10585	11375	11375	11375	11375	
(N)	*(38900)*	*(38700)*	*(38500)*	*(37900)*	*(38900)*	*(42700)*	*(44900)*	*(44600)*	*(47100)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	
Solid Shaft OHL lbs	6520	7250	7620	8230	8820	9580	9820	10550	11130	12530	13260	14230	14890	
(N)	*(29000)*	*(32240)*	*(33890)*	*(36600)*	*(39230)*	*(42610)*	*(43670)*	*(46920)*	*(49500)*	*(55730)*	*(58980)*	*(63290)*	*(66230)*	
Input Power HP	**75.0**	**75.0**	**75.0**	**73.1**	**67.2**	**57.1**	**51.0**	**51.0**	**45.3**	**37.0**	**33.8**	**28.6**	**24.8**	
(kW)	***(55.9)***	***(55.9)***	***(55.9)***	***(54.5)***	***(50.1)***	***(42.6)***	***(38.0)***	***(38.0)***	***(33.8)***	***(27.6)***	***(25.2)***	***(21.3)***	***(18.5)***	
Output Torque in•lbs	46635	56910	62220	69390	69740	71160	67705	73990	75230	77165	77165	77165	77165	
(N•m)	*(5270)*	*(6430)*	*(7030)*	*(7840)*	*(7880)*	*(8040)*	*(7650)*	*(8360)*	*(8500)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	**4D185**
Hollow Shaft OHL lbs	8565	8494	8430	8408	8745	9442	10026	9937	10499	11375	11375	11375	11375	
(N)	*(38100)*	*(37800)*	*(37500)*	*(37400)*	*(38900)*	*(42000)*	*(44600)*	*(44200)*	*(46700)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	
Solid Shaft OHL lbs	6520	7250	7620	8230	8820	9580	9820	10550	11130	12530	13260	14230	14890	
(N)	*(29000)*	*(32240)*	*(33890)*	*(36600)*	*(39230)*	*(42610)*	*(43670)*	*(46920)*	*(49500)*	*(55730)*	*(58980)*	*(63290)*	*(66230)*	
Input Power HP	**55.7**	**55.7**	**55.7**	**55.7**	**55.7**	**44.8**	**45.5**	**45.5**	**45.5**	**33.3**	**33.3**	**28.2**	**24.4**	
(kW)	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(41.5)***	***(33.4)***	***(33.9)***	***(33.9)***	***(33.9)***	***(24.8)***	***(24.8)***	***(21.0)***	***(18.2)***	
Output Torque in•lbs	34690	42210	46190	52830	57785	55840	60350	66015	75485	69555	76015	75925	76015	
(N•m)	*(3920)*	*(4770)*	*(5220)*	*(5970)*	*(6530)*	*(6310)*	*(6820)*	*(7460)*	*(8530)*	*(7860)*	*(8590)*	*(8580)*	*(8590)*	**4E170**
Hollow Shaft OHL lbs	13285	13690	13845	14070	14205	15375	15395	15555	15690	17600	17780	18995	19940	
(N)	*(59100)*	*(60900)*	*(61600)*	*(62600)*	*(63200)*	*(68400)*	*(68500)*	*(69200)*	*(69800)*	*(78300)*	*(79100)*	*(84500)*	*(88700)*	
Solid Shaft OHL lbs	9830	10760	11230	12000	12770	13770	14080	15010	15750	17570	18520	19780	20420	
(N)	*(43720)*	*(47860)*	*(49950)*	*(53370)*	*(56800)*	*(61240)*	*(62620)*	*(66760)*	*(70050)*	*(78150)*	*(82370)*	*(87980)*	*(90820)*	
Input Power HP	**56.5**	**56.5**	**56.5**	**56.5**	**56.5**	**44.8**	**49.6**	**49.6**	**47.1**	**40.4**	**38.1**	**32.2**	**27.9**	
(kW)	***(42.1)***	***(42.1)***	***(42.1)***	***(42.1)***	***(42.1)***	***(33.4)***	***(37.0)***	***(37.0)***	***(35.1)***	***(30.1)***	***(28.4)***	***(24.0)***	***(20.8)***	
Output Torque in•lbs	35130	42830	46900	53540	58580	55840	65925	72035	78230	84245	86990	86990	86990	
(N•m)	*(3970)*	*(4840)*	*(5300)*	*(6050)*	*(6620)*	*(6310)*	*(7450)*	*(8140)*	*(8840)*	*(9520)*	*(9830)*	*(9830)*	*(9830)*	**4E175**
Hollow Shaft OHL lbs	13240	13645	13800	14025	14140	15375	14990	15105	15485	16500	16970	18185	19240	
(N)	*(58900)*	*(60700)*	*(61400)*	*(62400)*	*(62900)*	*(68400)*	*(66700)*	*(67200)*	*(68900)*	*(73400)*	*(75500)*	*(80900)*	*(85600)*	
Solid Shaft OHL lbs	9830	10760	11230	12000	12770	13770	14080	15010	15750	17570	18520	19780	20420	
(N)	*(43720)*	*(47860)*	*(49950)*	*(53370)*	*(56800)*	*(61240)*	*(62620)*	*(66760)*	*(70050)*	*(78150)*	*(82370)*	*(87980)*	*(90820)*	
Input Power HP	**71.6**	**71.6**	**71.6**	**71.6**	**71.6**	**55.7**	**50.2**	**50.2**	**44.7**	**49.2**	**44.9**	**38.1**	**33.0**	
(kW)	***(53.4)***	***(53.4)***	***(53.4)***	***(53.4)***	***(53.4)***	***(41.5)***	***(37.4)***	***(37.4)***	***(33.3)***	***(36.7)***	***(33.5)***	***(28.4)***	***(24.6)***	
Output Torque in•lbs	44600	54335	59465	67960	74335	69290	66635	72830	74155	102665	102665	102665	102665	
(N•m)	*(5040)*	*(6140)*	*(6720)*	*(7680)*	*(8400)*	*(7830)*	*(7530)*	*(8230)*	*(8380)*	*(11600)*	*(11600)*	*(11600)*	*(9830)*	**4E180**
Hollow Shaft OHL lbs	12540	12790	12880	12970	12990	14385	14950	15040	15800	15195	15825	17015	18095	
(N)	*(55800)*	*(56900)*	*(57300)*	*(57700)*	*(57800)*	*(64000)*	*(66500)*	*(66900)*	*(70300)*	*(67600)*	*(70400)*	*(75700)*	*(80500)*	
Solid Shaft OHL lbs	9830	10760	11230	12000	12770	13770	14080	15010	15750	17570	18520	19780	20420	
(N)	*(43720)*	*(47860)*	*(49950)*	*(53370)*	*(56800)*	*(61240)*	*(62620)*	*(66760)*	*(70050)*	*(78150)*	*(82370)*	*(87980)*	*(90820)*	
Input Power HP	**75.0**	**75.0**	**75.0**	**75.0**	**75.0**	**57.4**	**51.0**	**51.0**	**45.3**	**49.2**	**44.9**	**38.1**	**33.0**	
(kW)	***(55.9)***	***(55.9)***	***(55.9)***	***(55.9)***	***(55.9)***	***(42.8)***	***(38.0)***	***(38.0)***	***(33.8)***	***(36.7)***	***(33.5)***	***(28.4)***	***(24.6)***	
Output Torque in•lbs	46635	56900	62210	71150	77785	71500	67695	73980	75220	102665	102665	102665	102665	
(N•m)	*(5270)*	*(6430)*	*(7030)*	*(8040)*	*(8790)*	*(8080)*	*(7650)*	*(8360)*	*(8500)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	**4E185**
Hollow Shaft OHL lbs	12385	12610	12675	12720	12720	14230	14880	14970	15710	15195	15825	17015	18095	
(N)	*(55100)*	*(56100)*	*(56400)*	*(56600)*	*(56600)*	*(63300)*	*(66200)*	*(66600)*	*(69900)*	*(67600)*	*(70400)*	*(75700)*	*(80500)*	
Solid Shaft OHL lbs	9830	10760	11230	12000	12770	13770	14080	15010	15750	17570	18520	19780	20420	
(N)	*(43720)*	*(47860)*	*(49950)*	*(53370)*	*(56800)*	*(61240)*	*(62620)*	*(66760)*	*(70050)*	*(78150)*	*(82370)*	*(87980)*	*(90820)*	

Frame Size Selection Tables 980 RPM



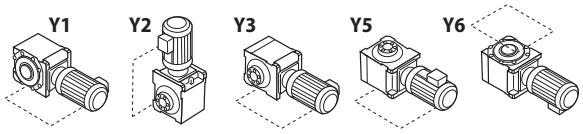
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	16.3	14.6	13.2	12.3	11.1	9.61	8.75	7.97	6.49	5.47	4.73	3.94	3.21	2.35	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	**21.9**	**19.3**	**17.7**	**16.2**	**14.9**	**12.8**	**11.6**	**10.6**	**8.65**	**7.30**	**6.30**	**5.24**	**4.28**	—	4D180
(kW)	***(16.3)***	***(14.4)***	***(13.2)***	***(12.1)***	***(11.1)***	***(9.56)***	***(8.67)***	***(7.92)***	***(6.45)***	***(5.44)***	***(4.70)***	***(3.91)***	***(3.19)***	—	
Output Torque in•lbs	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	—	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	—	
Hollow Shaft OHL lbs	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	—	
(N)	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	—	
Solid Shaft OHL lbs	15350	15710	16000	16220	16450	16690	16670	16650	16610	16590	16580	16580	16580	—	
(N)	*(68270)*	*(69870)*	*(71160)*	*(72140)*	*(73160)*	*(74230)*	*(74140)*	*(74050)*	*(73880)*	*(73790)*	*(73740)*	*(73740)*	*(73740)*	—	
Input Power HP	**21.9**	**19.3**	**17.7**	**16.2**	**14.9**	**12.8**	**11.6**	**10.6**	**8.65**	**7.30**	**6.30**	**5.24**	**4.28**	—	4D185
(kW)	***(16.3)***	***(14.4)***	***(13.2)***	***(12.1)***	***(11.1)***	***(9.56)***	***(8.67)***	***(7.92)***	***(6.45)***	***(5.44)***	***(4.70)***	***(3.91)***	***(3.19)***	—	
Output Torque in•lbs	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	—	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	—	
Hollow Shaft OHL lbs	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	—	
(N)	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	—	
Solid Shaft OHL lbs	15350	15710	16000	16220	16450	16690	16670	16650	16610	16590	16580	16580	16580	—	
(N)	*(68270)*	*(69870)*	*(71160)*	*(72140)*	*(73160)*	*(74230)*	*(74140)*	*(74050)*	*(73880)*	*(73790)*	*(73740)*	*(73740)*	*(73740)*	—	
Input Power HP	**21.6**	**17.4**	**17.4**	**14.6**	**14.6**	**12.6**	**10.5**	**10.5**	**8.53**	**7.19**	**6.21**	**5.16**	**4.21**	—	4E170
(kW)	***(16.1)***	***(13.0)***	***(13.0)***	***(10.9)***	***(10.9)***	***(9.42)***	***(7.81)***	***(7.81)***	***(6.36)***	***(5.36)***	***(4.63)***	***(3.85)***	***(3.14)***	—	
Output Torque in•lbs	76015	69555	76015	69555	76015	76015	69555	76015	76015	76015	76015	76015	76015	—	
(N•m)	*(8590)*	*(7860)*	*(8590)*	*(7860)*	*(8590)*	*(8590)*	*(7860)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	—	
Hollow Shaft OHL lbs	19940	20275	19940	20275	19940	19940	20275	19940	19940	19940	19940	19940	19940	—	
(N)	*(88700)*	*(90200)*	*(88700)*	*(90200)*	*(88700)*	*(88700)*	*(90200)*	*(88700)*	*(88700)*	*(88700)*	*(88700)*	*(88700)*	*(88700)*	—	
Solid Shaft OHL lbs	20720	20960	21150	21290	21450	21630	21680	21730	21820	21890	21920	21920	21920	—	
(N)	*(92160)*	*(93230)*	*(94070)*	*(94690)*	*(95400)*	*(96210)*	*(96430)*	*(96650)*	*(97050)*	*(97360)*	*(97500)*	*(97500)*	*(97500)*	—	
Input Power HP	**24.7**	**21.7**	**20.0**	**18.2**	**16.8**	**14.5**	**13.0**	**13.0**	**10.6**	**8.94**	**7.74**	**6.42**	**5.24**	—	4E175
(kW)	***(18.4)***	***(16.2)***	***(14.9)***	***(13.6)***	***(12.5)***	***(10.8)***	***(9.72)***	***(9.72)***	***(7.91)***	***(6.67)***	***(5.77)***	***(4.79)***	***(3.91)***	—	
Output Torque in•lbs	86990	86545	86990	86545	86990	86990	86545	94690	94690	94690	94690	94690	94690	—	
(N•m)	*(9830)*	*(9780)*	*(9830)*	*(9780)*	*(9830)*	*(9830)*	*(9780)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	—	
Hollow Shaft OHL lbs	19400	19420	19400	19420	19400	19400	19420	18995	18995	18995	18995	18995	18995	—	
(N)	*(86300)*	*(86400)*	*(86300)*	*(86400)*	*(86300)*	*(86300)*	*(86400)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	—	
Solid Shaft OHL lbs	20720	20960	21150	21290	21450	21630	21680	21730	21820	21890	21920	21920	21920	—	
(N)	*(92160)*	*(93230)*	*(94070)*	*(94690)*	*(95400)*	*(96210)*	*(96430)*	*(96650)*	*(97050)*	*(97360)*	*(97500)*	*(97500)*	*(97500)*	—	
Input Power HP	**29.1**	**25.7**	**23.6**	**21.6**	**19.8**	**17.0**	**15.4**	**14.1**	**11.5**	**9.70**	**8.38**	**6.97**	**5.69**	—	4E180
(kW)	***(21.7)***	***(19.2)***	***(17.6)***	***(16.1)***	***(14.8)***	***(12.7)***	***(11.5)***	***(10.5)***	***(8.58)***	***(7.23)***	***(6.25)***	***(5.20)***	***(4.24)***	—	
Output Torque in•lbs	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	
Hollow Shaft OHL lbs	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	—	
(N)	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	20720	20960	21150	21290	21450	21630	21680	21730	21820	21890	21920	21920	21920	—	
(N)	*(92160)*	*(93230)*	*(94070)*	*(94690)*	*(95400)*	*(96210)*	*(96430)*	*(96650)*	*(97050)*	*(97360)*	*(97500)*	*(97500)*	*(97500)*	—	
Input Power HP	**29.1**	**25.7**	**23.6**	**21.6**	**19.8**	**17.0**	**15.4**	**14.1**	**11.5**	**9.70**	**8.38**	**6.97**	**5.69**	—	4E185
(kW)	***(21.7)***	***(19.2)***	***(17.6)***	***(16.1)***	***(14.8)***	***(12.7)***	***(11.5)***	***(10.5)***	***(8.58)***	***(7.23)***	***(6.25)***	***(5.20)***	***(4.24)***	—	
Output Torque in•lbs	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	
Hollow Shaft OHL lbs	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	—	
(N)	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	20720	20960	21150	21290	21450	21630	21680	21730	21820	21890	21920	21920	21920	—	
(N)	*(92160)*	*(93230)*	*(94070)*	*(94690)*	*(95400)*	*(96210)*	*(96430)*	*(96650)*	*(97050)*	*(97360)*	*(97500)*	*(97500)*	*(97500)*	—	

Frame Size Selection Tables 980 RPM

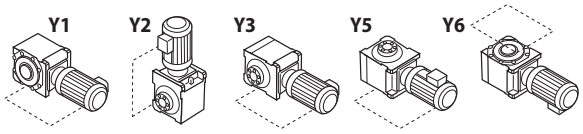
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	89.1	75.4	70.0	61.3	54.4	46.7	44.5	39.2	35.0	28.0	25.1	21.3	18.5	Frame Size
Ratio	**11**	**13**	**14**	**16**	**18**	**21**	**22**	**25**	**28**	**35**	**39**	**46**	**53**	
Input Power HP	**91.7**	**91.7**	**91.7**	**91.7**	**89.0**	**67.9**	**62.4**	**62.4**	**55.4**	**49.2**	**44.9**	**38.1**	**33.0**	
(kW)	***(68.4)***	***(68.4)***	***(68.4)***	***(68.4)***	***(66.4)***	***(50.6)***	***(46.5)***	***(46.5)***	***(41.3)***	***(36.7)***	***(33.5)***	***(28.4)***	***(24.6)***	
Output Torque in•lbs	57075	69645	76115	87000	92045	84525	82840	90275	92045	102665	102665	102665	102665	
(N•m)	*(6450)*	*(7870)*	*(8600)*	*(9830)*	*(10400)*	*(9550)*	*(9360)*	*(10200)*	*(10400)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	**4E190**
Hollow Shaft OHL lbs	11620	11665	11665	11555	11655	13285	13780	13755	14475	15195	15825	17015	18095	
(N)	*(51700)*	*(51900)*	*(51900)*	*(51400)*	*(51900)*	*(59100)*	*(61300)*	*(61200)*	*(64400)*	*(67600)*	*(70400)*	*(75700)*	*(80500)*	
Solid Shaft OHL lbs	9830	10760	11230	12000	12770	13770	14080	15010	15750	17570	18520	19780	20420	
(N)	*(43720)*	*(47860)*	*(49950)*	*(53370)*	*(56800)*	*(61240)*	*(62620)*	*(66760)*	*(70050)*	*(78150)*	*(82370)*	*(87980)*	*(90820)*	
Input Power HP	**100.6**	**100.6**	**100.4**	**96.7**	**89.0**	**72.0**	**63.6**	**63.6**	**56.5**	**49.2**	**44.9**	**38.1**	**33.0**	
(kW)	***(75.0)***	***(75.0)***	***(74.9)***	***(72.1)***	***(66.4)***	***(53.7)***	***(47.4)***	***(47.4)***	***(42.1)***	***(36.7)***	***(33.5)***	***(28.4)***	***(24.6)***	
Output Torque in•lbs	62655	76380	83460	92045	92045	89390	84435	92045	93815	102665	102665	102665	102665	
(N•m)	*(7080)*	*(8630)*	*(9430)*	*(10400)*	*(10400)*	*(10100)*	*(9540)*	*(10400)*	*(10600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	**4E195**
Hollow Shaft OHL lbs	11215	11170	11125	11215	11665	12900	13665	13620	14365	15195	15825	17015	18095	
(N)	*(49900)*	*(49700)*	*(49500)*	*(49900)*	*(51900)*	*(57400)*	*(60800)*	*(60600)*	*(63900)*	*(67600)*	*(70400)*	*(75700)*	*(80500)*	
Solid Shaft OHL lbs	9830	10760	11230	12000	12770	13770	14080	15010	15750	17570	18520	19780	20420	
(N)	*(43720)*	*(47860)*	*(49950)*	*(53370)*	*(56800)*	*(61240)*	*(62620)*	*(66760)*	*(70050)*	*(78150)*	*(82370)*	*(87980)*	*(90820)*	
Input Power HP	**71.6**	**71.6**	**71.6**	**71.6**	**71.6**	**55.7**	**50.2**	**50.2**	**44.7**	**53.5**	**53.5**	**45.2**	**39.2**	
(kW)	***(53.4)***	***(53.4)***	***(53.4)***	***(53.4)***	***(53.4)***	***(41.5)***	***(37.4)***	***(37.4)***	***(33.3)***	***(39.9)***	***(39.9)***	***(33.7)***	***(29.2)***	
Output Torque in•lbs	44600	54335	59465	67960	74335	69290	66635	72830	74155	111500	122120	122120	122120	
(N•m)	*(5040)*	*(6140)*	*(6720)*	*(7680)*	*(8400)*	*(7830)*	*(7530)*	*(8230)*	*(8380)*	*(12600)*	*(13800)*	*(13800)*	*(13800)*	**4F180**
Hollow Shaft OHL lbs	23155	24050	24725	25175	25625	27650	28325	29000	29000	27425	26975	26975	26975	
(N)	*(103000)*	*(107000)*	*(110000)*	*(112000)*	*(114000)*	*(123000)*	*(126000)*	*(129000)*	*(129000)*	*(122000)*	*(120000)*	*(120000)*	*(120000)*	
Solid Shaft OHL lbs	17610	19150	19930	21220	22480	24100	24620	26240	27510	28910	28930	28960	28970	
(N)	*(78320)*	*(85170)*	*(88640)*	*(94380)*	*(99990)*	*(107190)*	*(109500)*	*(116710)*	*(122360)*	*(128590)*	*(128680)*	*(128810)*	*(128850)*	
Input Power HP	**75.0**	**75.0**	**75.0**	**75.0**	**75.0**	**57.4**	**51.0**	**51.0**	**45.3**	**59.4**	**59.4**	**53.2**	**40.0**	
(kW)	***(55.9)***	***(55.9)***	***(55.9)***	***(55.9)***	***(55.9)***	***(42.8)***	***(38.0)***	***(38.0)***	***(33.8)***	***(44.3)***	***(44.3)***	***(39.7)***	***(29.8)***	
Output Torque in•lbs	46635	56900	62210	71150	77785	71500	67695	73980	75220	123890	135395	143360	124775	
(N•m)	*(5270)*	*(6430)*	*(7030)*	*(8040)*	*(8790)*	*(8080)*	*(7650)*	*(8360)*	*(8500)*	*(14000)*	*(15300)*	*(16200)*	*(14100)*	**4F185**
Hollow Shaft OHL lbs	23155	24050	24500	24950	25400	27425	28325	28775	29000	26750	26300	25850	26750	
(N)	*(103000)*	*(107000)*	*(109000)*	*(111000)*	*(113000)*	*(122000)*	*(126000)*	*(128000)*	*(129000)*	*(119000)*	*(117000)*	*(115000)*	*(119000)*	
Solid Shaft OHL lbs	17610	19150	19930	21220	22480	24100	24620	26240	27510	28910	28930	28960	28970	
(N)	*(78320)*	*(85170)*	*(88640)*	*(94380)*	*(99990)*	*(107190)*	*(109500)*	*(116710)*	*(122360)*	*(128590)*	*(128680)*	*(128810)*	*(128850)*	
Input Power HP	**91.7**	**91.7**	**91.7**	**91.7**	**91.7**	**67.9**	**62.4**	**62.4**	**55.4**	**67.9**	**67.9**	**59.0**	**51.2**	
(kW)	***(68.4)***	***(68.4)***	***(68.4)***	***(68.4)***	***(68.4)***	***(50.6)***	***(46.5)***	***(46.5)***	***(41.3)***	***(50.6)***	***(50.6)***	***(44.0)***	***(38.2)***	
Output Torque in•lbs	57075	69645	76105	86990	95575	84510	82830	90265	92035	141590	154885	159290	159290	
(N•m)	*(6450)*	*(7870)*	*(8600)*	*(9830)*	*(10800)*	*(9550)*	*(9360)*	*(10200)*	*(10400)*	*(16000)*	*(17500)*	*(18000)*	*(18000)*	**4F190**
Hollow Shaft OHL lbs	22410	23155	23605	23825	24275	26750	27425	27875	28100	26075	25400	25175	25175	
(N)	*(99700)*	*(103000)*	*(105000)*	*(106000)*	*(108000)*	*(119000)*	*(122000)*	*(124000)*	*(125000)*	*(116000)*	*(113000)*	*(112000)*	*(112000)*	
Solid Shaft OHL lbs	17610	19150	19930	21220	22480	24100	24620	26240	27510	28910	28930	28960	28970	
(N)	*(78320)*	*(85170)*	*(88640)*	*(94380)*	*(99990)*	*(107190)*	*(109500)*	*(116710)*	*(122360)*	*(128590)*	*(128680)*	*(128810)*	*(128850)*	
Input Power HP	**101**	**101**	**101**	**101**	**101**	**72.0**	**63.6**	**63.6**	**56.5**	**73.8**	**69.7**	**59.0**	**51.2**	
(kW)	***(75.0)***	***(75.0)***	***(75.0)***	***(75.0)***	***(75.0)***	***(53.7)***	***(47.4)***	***(47.4)***	***(42.1)***	***(55.0)***	***(52.0)***	***(44.0)***	***(38.2)***	
Output Torque in•lbs	62655	76370	83450	95575	104425	89380	84425	92035	93805	153980	159290	159290	159290	
(N•m)	*(7080)*	*(8630)*	*(9430)*	*(10800)*	*(11800)*	*(10100)*	*(9540)*	*(10400)*	*(10600)*	*(17400)*	*(18000)*	*(18000)*	*(18000)*	**4F195**
Hollow Shaft OHL lbs	22050	22705	22930	23380	23605	26300	27200	27650	28100	25400	25175	25175	25175	
(N)	*(98100)*	*(101000)*	*(102000)*	*(104000)*	*(105000)*	*(117000)*	*(121000)*	*(123000)*	*(125000)*	*(113000)*	*(112000)*	*(112000)*	*(112000)*	
Solid Shaft OHL lbs	17610	19150	19930	21220	22480	24100	24620	26240	27510	28910	28930	28960	28970	
(N)	*(78320)*	*(85170)*	*(88640)*	*(94380)*	*(99990)*	*(107190)*	*(109500)*	*(116710)*	*(122360)*	*(128590)*	*(128680)*	*(128810)*	*(128850)*	

Frame Size Selection Tables 980 RPM



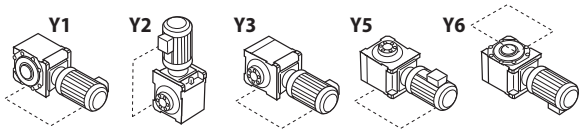
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	16.3	14.6	13.2	12.3	11.1	9.61	8.75	7.97	6.49	5.47	4.73	3.94	3.21	2.35	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	**29.1**	**25.7**	**23.6**	**21.6**	**19.8**	**17.0**	**15.4**	**14.1**	**11.5**	**9.70**	**8.38**	**6.97**	**5.69**	—	4E190
(kW)	***(21.7)***	***(19.2)***	***(17.6)***	***(16.1)***	***(14.8)***	***(12.7)***	***(11.5)***	***(10.5)***	***(8.58)***	***(7.23)***	***(6.25)***	***(5.20)***	***(4.24)***	—	
Output Torque in•lbs	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	
Hollow Shaft OHL lbs	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	—	
(N)	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	20720	20960	21150	21290	21450	21630	21680	21730	21820	21890	21920	21920	21920	—	
(N)	*(92160)*	*(93230)*	*(94070)*	*(94690)*	*(95400)*	*(96210)*	*(96430)*	*(96650)*	*(97050)*	*(97360)*	*(97500)*	*(97500)*	*(97500)*	—	
Input Power HP	**29.1**	**25.7**	**23.6**	**21.6**	**19.8**	**17.0**	**15.4**	**14.1**	**11.5**	**9.70**	**8.38**	**6.97**	**5.69**	—	4E195
(kW)	***(21.7)***	***(19.2)***	***(17.6)***	***(16.1)***	***(14.8)***	***(12.7)***	***(11.5)***	***(10.5)***	***(8.58)***	***(7.23)***	***(6.25)***	***(5.20)***	***(4.24)***	—	
Output Torque in•lbs	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	
Hollow Shaft OHL lbs	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	—	
(N)	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	20720	20960	21150	21290	21450	21630	21680	21730	21820	21890	21920	21920	21920	—	
(N)	*(92160)*	*(93230)*	*(94070)*	*(94690)*	*(95400)*	*(96210)*	*(96430)*	*(96650)*	*(97050)*	*(97360)*	*(97500)*	*(97500)*	*(97500)*	—	
Input Power HP	**34.6**	**27.9**	**27.9**	**23.5**	**23.5**	**20.2**	**16.8**	**16.8**	**13.7**	**11.5**	**9.95**	**8.26**	**6.76**	—	4F180
(kW)	***(25.8)***	***(20.8)***	***(20.8)***	***(17.5)***	***(17.5)***	***(15.1)***	***(12.5)***	***(12.5)***	***(10.2)***	***(8.58)***	***(7.42)***	***(6.16)***	***(5.04)***	—	
Output Torque in•lbs	122120	111500	121235	111500	122120	122120	111500	122120	122120	122120	122120	122120	122120	—	
(N•m)	*(13800)*	*(12600)*	*(13700)*	*(12600)*	*(13800)*	*(13800)*	*(12600)*	*(13800)*	*(13800)*	*(13800)*	*(13800)*	*(13800)*	*(13800)*	—	
Hollow Shaft OHL lbs	26975	27425	26975	27425	26975	26975	27425	26975	26975	26975	26975	26975	26975	—	
(N)	*(120000)*	*(122000)*	*(120000)*	*(122000)*	*(120000)*	*(120000)*	*(122000)*	*(120000)*	*(120000)*	*(120000)*	*(120000)*	*(120000)*	*(120000)*	—	
Solid Shaft OHL lbs	28970	28970	28970	28970	28970	29010	29110	29190	29360	29470	29530	29530	29530	—	
(N)	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(129030)*	*(129480)*	*(129830)*	*(130590)*	*(131080)*	*(131340)*	*(131340)*	*(131340)*	—	
Input Power HP	**38.0**	**34.5**	**34.5**	**29.0**	**29.0**	**24.9**	**20.7**	**20.7**	**16.9**	**14.2**	**12.3**	**9.21**	**8.33**	—	4F185
(kW)	***(28.3)***	***(25.7)***	***(25.7)***	***(21.6)***	***(21.6)***	***(18.6)***	***(15.4)***	***(15.4)***	***(12.6)***	***(10.6)***	***(9.15)***	***(6.87)***	***(6.21)***	—	
Output Torque in•lbs	133625	137165	150440	137165	150440	150440	137165	149555	150440	150440	150440	135395	150440	—	
(N•m)	*(15100)*	*(15500)*	*(17000)*	*(15500)*	*(17000)*	*(17000)*	*(15500)*	*(16900)*	*(17000)*	*(17000)*	*(17000)*	*(15300)*	*(17000)*	—	
Hollow Shaft OHL lbs	26300	26300	25625	26300	25625	25625	26300	25625	25625	25625	25625	26300	25625	—	
(N)	*(117000)*	*(117000)*	*(114000)*	*(117000)*	*(114000)*	*(114000)*	*(117000)*	*(114000)*	*(114000)*	*(114000)*	*(114000)*	*(117000)*	*(114000)*	—	
Solid Shaft OHL lbs	28970	28970	28970	28970	28970	29010	29110	29190	29360	29470	29530	29530	29530	—	
(N)	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(129030)*	*(129480)*	*(129830)*	*(130590)*	*(131080)*	*(131340)*	*(131340)*	*(131340)*	—	
Input Power HP	**45.2**	**40.0**	**36.6**	**33.5**	**30.7**	**26.4**	**24.0**	**22.0**	**17.8**	**15.0**	**13.0**	**10.8**	**8.82**	—	4F190
(kW)	***(33.7)***	***(29.8)***	***(27.3)***	***(25.0)***	***(22.9)***	***(19.7)***	***(17.9)***	***(16.4)***	***(13.3)***	***(11.2)***	***(9.70)***	***(8.06)***	***(6.58)***	—	
Output Torque in•lbs	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	—	
(N•m)	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	—	
Hollow Shaft OHL lbs	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	—	
(N)	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	—	
Solid Shaft OHL lbs	28970	28970	28970	28970	28970	29010	29110	29190	29360	29470	29530	29530	29530	—	
(N)	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(129030)*	*(129480)*	*(129830)*	*(130590)*	*(131080)*	*(131340)*	*(131340)*	*(131340)*	—	
Input Power HP	**45.2**	**40.0**	**36.6**	**33.5**	**30.7**	**26.4**	**24.0**	**22.0**	**17.8**	**15.0**	**13.0**	**10.8**	**8.82**	—	4F195
(kW)	***(33.7)***	***(29.8)***	***(27.3)***	***(25.0)***	***(22.9)***	***(19.7)***	***(17.9)***	***(16.4)***	***(13.3)***	***(11.2)***	***(9.70)***	***(8.06)***	***(6.58)***	—	
Output Torque in•lbs	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	—	
(N•m)	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	—	
Hollow Shaft OHL lbs	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	—	
(N)	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	—	
Solid Shaft OHL lbs	28970	28970	28970	28970	28970	29010	29110	29190	29360	29470	29530	29530	29530	—	
(N)	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(129030)*	*(129480)*	*(129830)*	*(130590)*	*(131080)*	*(131340)*	*(131340)*	*(131340)*	—	

Frame Size Selection Tables 870 RPM

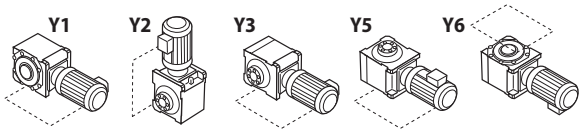
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	79.1	66.9	62.1	54.4	48.3	41.4	39.5	34.8	31.1	24.9	22.3	18.9	16.4	Frame Size
Ratio	**11**	**13**	**14**	**16**	**18**	**21**	**22**	**25**	**28**	**35**	**39**	**46**	**53**	
Input Power HP	**3.15**	**3.15**	**3.15**	**3.15**	**3.15**	**3.15**	—	—	**3.15**	**2.92**	**2.92**	**2.47**	**2.15**	
(kW)	***(2.35)***	***(2.35)***	***(2.35)***	***(2.35)***	***(2.35)***	***(2.35)***	—	—	***(2.35)***	***(2.18)***	***(2.18)***	***(1.84)***	***(1.60)***	
Output Torque in•lbs	2210	2690	2945	3370	3680	4415	—	—	5890	6865	7510	7510	7510	
(N•m)	*(250)*	*(304)*	*(333)*	*(381)*	*(416)*	*(499)*	—	—	*(666)*	*(776)*	*(849)*	*(849)*	*(849)*	**4A100**
Hollow Shaft OHL lbs	4470	4695	4810	4945	5055	5260	—	—	5505	5260	5055	5055	5055	
(N)	*(19900)*	*(20900)*	*(21400)*	*(22000)*	*(22500)*	*(23400)*	—	—	*(24500)*	*(23400)*	*(22500)*	*(22500)*	*(22500)*	
Solid Shaft OHL lbs	3560	3860	3990	4210	4400	4530	—	—	4580	4580	4580	4580	4580	
(N)	*(15830)*	*(17160)*	*(17740)*	*(18720)*	*(19570)*	*(20140)*	—	—	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**3.66**	**3.66**	**3.66**	**3.66**	**3.66**	**3.66**	**—**	**—**	**3.41**	**3.50**	**3.50**	**2.96**	**2.57**	
(kW)	***(2.73)***	***(2.73)***	***(2.73)***	***(2.73)***	***(2.73)***	***(2.73)***	**—**	**—**	***(2.54)***	***(2.61)***	***(2.61)***	***(2.21)***	***(1.92)***	
Output Torque in•lbs	2565	3120	3415	3910	4270	5130	—	—	6370	8230	9025	9025	9025	
(N•m)	*(290)*	*(353)*	*(386)*	*(442)*	*(483)*	*(580)*	—	—	*(720)*	*(930)*	*(1020)*	*(1020)*	*(1020)*	**4A105**
Hollow Shaft OHL lbs	4425	4630	4740	4875	4965	5170	—	—	5395	4810	4515	4515	4515	
(N)	*(19700)*	*(20600)*	*(21100)*	*(21700)*	*(22100)*	*(23000)*	—	—	*(24000)*	*(21400)*	*(20100)*	*(20100)*	*(20100)*	
Solid Shaft OHL lbs	3560	3860	3990	4210	4400	4530	—	—	4580	4580	4580	4580	4580	
(N)	*(15830)*	*(17160)*	*(17740)*	*(18720)*	*(19570)*	*(20140)*	—	—	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**—**	**—**	**—**	**—**	**—**	**4.14**	**—**	**—**	**4.76**	**4.21**	**4.21**	**3.57**	**3.08**	
(kW)	**—**	**—**	**—**	**—**	**—**	***(3.09)***	**—**	**—**	***(3.55)***	***(3.14)***	***(3.14)***	***(2.66)***	***(2.30)***	
Output Torque in•lbs	—	—	—	—	—	5810	—	—	8935	9910	10795	10795	10795	
(N•m)	—	—	—	—	—	*(657)*	—	—	*(1010)*	*(1120)*	*(1220)*	*(1220)*	*(1220)*	**4A110**
Hollow Shaft OHL lbs	—	—	—	—	—	5080	—	—	4560	4090	3550	3550	3550	
(N)	—	—	—	—	—	*(22600)*	—	—	*(20300)*	*(18200)*	*(15800)*	*(15800)*	*(15800)*	
Solid Shaft OHL lbs	—	—	—	—	—	4530	—	—	4580	4580	4580	4580	4580	
(N)	—	—	—	—	—	*(20140)*	—	—	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**—**	**—**	**—**	**—**	**—**	**4.14**	**—**	**—**	**5.26**	**4.85**	**4.44**	**3.75**	**3.26**	
(kW)	**—**	**—**	**—**	**—**	**—**	***(3.09)***	**—**	**—**	***(3.92)***	***(3.62)***	***(3.31)***	***(2.80)***	***(2.43)***	
Output Torque in•lbs	—	—	—	—	—	5810	—	—	9820	11415	11415	11415	11415	
(N•m)	—	—	—	—	—	*(657)*	—	—	*(1110)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	**4A115**
Hollow Shaft OHL lbs	—	—	—	—	—	5080	—	—	4135	3120	3120	3120	3120	
(N)	—	—	—	—	—	*(22600)*	—	—	*(18400)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	—	—	—	—	—	4530	—	—	4580	4580	4580	4580	4580	
(N)	—	—	—	—	—	*(20140)*	—	—	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**11.8**	**11.0**	**11.0**	**10.4**	**9.76**	**7.83**	**7.28**	**6.97**	**6.10**	**4.85**	**4.44**	**3.75**	**3.26**	
(kW)	***(8.79)***	***(8.21)***	***(8.21)***	***(7.78)***	***(7.28)***	***(5.84)***	***(5.43)***	***(5.20)***	***(4.55)***	***(3.62)***	***(3.31)***	***(2.80)***	***(2.43)***	
Output Torque in•lbs	8265	9380	10265	11150	11415	10970	10885	11415	11415	11415	11415	11415	11415	
(N•m)	*(934)*	*(1060)*	*(1160)*	*(1260)*	*(1290)*	*(1240)*	*(1230)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	**4A120**
Hollow Shaft OHL lbs	3640	3750	3795	3325	3120	3435	3505	3120	3120	3120	3120	3120	3120	
(N)	*(16200)*	*(16700)*	*(16900)*	*(14800)*	*(13900)*	*(15300)*	*(15600)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	3560	3860	3990	4210	4400	4530	4540	4580	4580	4580	4580	4580	4580	
(N)	*(15830)*	*(17160)*	*(17740)*	*(18720)*	*(19570)*	*(20140)*	*(20190)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**11.8**	**11.0**	**11.0**	**10.4**	**9.76**	**7.83**	**7.28**	**6.97**	**6.10**	**4.85**	**4.44**	**3.75**	**3.26**	
(kW)	***(8.79)***	***(8.21)***	***(8.21)***	***(7.78)***	***(7.28)***	***(5.84)***	***(5.43)***	***(5.20)***	***(4.55)***	***(3.62)***	***(3.31)***	***(2.80)***	***(2.43)***	
Output Torque in•lbs	8265	9380	10265	11150	11415	10970	10885	11415	11415	11415	11415	11415	11415	
(N•m)	*(934)*	*(1060)*	*(1160)*	*(1260)*	*(1290)*	*(1240)*	*(1230)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	**4A125**
Hollow Shaft OHL lbs	3640	3750	3795	3325	3120	3435	3505	3120	3120	3120	3120	3120	3120	
(N)	*(16200)*	*(16700)*	*(16900)*	*(14800)*	*(13900)*	*(15300)*	*(15600)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	3560	3860	3990	4210	4400	4530	4540	4580	4580	4580	4580	4580	4580	
(N)	*(15830)*	*(17160)*	*(17740)*	*(18720)*	*(19570)*	*(20140)*	*(20190)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	

Frame Size Selection Tables 870 RPM



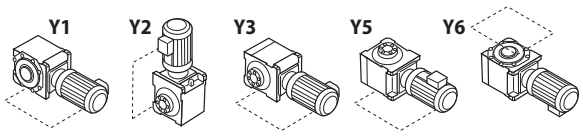
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	14.5	13.0	11.8	10.9	9.89	8.53	7.77	7.07	5.76	4.86	4.20	3.49	2.85	2.09	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	**1.89**	**1.53**	**1.53**	**1.29**	**1.29**	**1.11**	**0.92**	**0.92**	**0.750**	**0.630**	**0.544**	**0.453**	**0.370**	**0.270**	
(kW)	***(1.41)***	***(1.14)***	***(1.14)***	***(0.959)***	***(0.959)***	***(0.827)***	***(0.685)***	***(0.685)***	***(0.558)***	***(0.47)***	***(0.406)***	***(0.338)***	***(0.276)***	***(0.201)***	
Output Torque in•lbs	7510	6865	7510	6865	7510	7510	6865	7510	7510	7510	7510	7510	7510	7510	
(N•m)	*(849)*	*(776)*	*(849)*	*(776)*	*(849)*	*(849)*	*(776)*	*(849)*	*(849)*	*(849)*	*(849)*	*(849)*	*(849)*	*(849)*	**4A100**
Hollow Shaft OHL lbs	5055	5260	5055	5260	5055	5055	5260	5055	5055	5055	5055	5055	5055	5055	
(N)	*(22500)*	*(23400)*	*(22500)*	*(23400)*	*(22500)*	*(22500)*	*(23400)*	*(22500)*	*(22500)*	*(22500)*	*(22500)*	*(22500)*	*(22500)*	*(22500)*	
Solid Shaft OHL lbs	4580	4580	4580	4580	4570	4560	4560	4550	4540	4540	4540	4540	4540	4540	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	
Input Power HP	**2.27**	**1.84**	**1.84**	**1.54**	**1.54**	**1.33**	**1.10**	**1.10**	**0.900**	**0.748**	**0.645**	**0.479**	**0.444**	**0.279**	
(kW)	***(1.69)***	***(1.37)***	***(1.37)***	***(1.15)***	***(1.15)***	***(0.992)***	***(0.822)***	***(0.822)***	***(0.669)***	***(0.558)***	***(0.481)***	***(0.357)***	***(0.331)***	***(0.208)***	
Output Torque in•lbs	9025	8245	9025	8245	9025	9025	8245	9025	9025	8935	8935	7935	9025	7765	
(N•m)	*(1020)*	*(932)*	*(1020)*	*(932)*	*(1020)*	*(1020)*	*(932)*	*(1020)*	*(1020)*	*(1010)*	*(1010)*	*(897)*	*(1020)*	*(878)*	**4A105**
Hollow Shaft OHL lbs	4515	4810	4515	4810	4515	4515	4810	4515	4515	4540	4560	4920	4515	4990	
(N)	*(20100)*	*(21400)*	*(20100)*	*(21400)*	*(20100)*	*(20100)*	*(21400)*	*(20100)*	*(20100)*	*(20200)*	*(20300)*	*(21900)*	*(20100)*	*(22200)*	
Solid Shaft OHL lbs	4580	4580	4580	4580	4570	4560	4560	4550	4540	4540	4540	4540	4540	4540	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	
Input Power HP	**2.72**	**2.20**	**2.20**	**1.85**	**1.85**	**1.60**	**1.32**	**1.32**	**1.08**	**0.910**	**0.780**	**0.652**	**0.532**	**—**	
(kW)	***(2.03)***	***(1.64)***	***(1.64)***	***(1.38)***	***(1.38)***	***(1.19)***	***(0.986)***	***(0.986)***	***(0.803)***	***(0.677)***	***(0.585)***	***(0.486)***	***(0.397)***	**—**	
Output Torque in•lbs	10795	9910	10795	9910	10795	10795	9910	10795	10795	10795	10795	10795	10795	—	
(N•m)	*(1220)*	*(1120)*	*(1220)*	*(1120)*	*(1220)*	*(1220)*	*(1120)*	*(1220)*	*(1220)*	*(1220)*	*(1220)*	*(1220)*	*(1220)*	—	**4A110**
Hollow Shaft OHL lbs	3550	4090	3550	4090	3550	3550	4090	3550	3550	3550	3550	3550	3550	—	
(N)	*(15800)*	*(18200)*	*(15800)*	*(18200)*	*(15800)*	*(15800)*	*(18200)*	*(15800)*	*(15800)*	*(15800)*	*(15800)*	*(15800)*	*(15800)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4570	4560	4560	4550	4540	4540	4540	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	
Input Power HP	**2.87**	**2.55**	**2.32**	**2.13**	**1.96**	**1.69**	**1.53**	**1.39**	**1.14**	**0.960**	**0.830**	**0.690**	**0.562**	**—**	
(kW)	***(2.14)***	***(1.90)***	***(1.73)***	***(1.59)***	***(1.46)***	***(1.26)***	***(1.14)***	***(1.04)***	***(0.847)***	***(0.714)***	***(0.617)***	***(0.513)***	***(0.419)***	**—**	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	**4A115**
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4570	4560	4560	4550	4540	4540	4540	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	
Input Power HP	**2.87**	**2.55**	**2.32**	**2.13**	**1.96**	**1.69**	**1.53**	**1.39**	**1.14**	**0.960**	**0.830**	**0.690**	**0.562**	**—**	
(kW)	***(2.14)***	***(1.90)***	***(1.73)***	***(1.59)***	***(1.46)***	***(1.26)***	***(1.14)***	***(1.04)***	***(0.847)***	***(0.714)***	***(0.617)***	***(0.513)***	***(0.419)***	**—**	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	**4A120**
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4570	4560	4560	4550	4540	4540	4540	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	
Input Power HP	**2.87**	**2.55**	**2.32**	**2.13**	**1.96**	**1.69**	**1.53**	**1.39**	**1.14**	**0.960**	**0.830**	**0.690**	**0.562**	**—**	
(kW)	***(2.14)***	***(1.90)***	***(1.73)***	***(1.59)***	***(1.46)***	***(1.26)***	***(1.14)***	***(1.04)***	***(0.847)***	***(0.714)***	***(0.617)***	***(0.513)***	***(0.419)***	**—**	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	**4A125**
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4570	4560	4560	4550	4540	4540	4540	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	

Frame Size Selection Tables 870 RPM

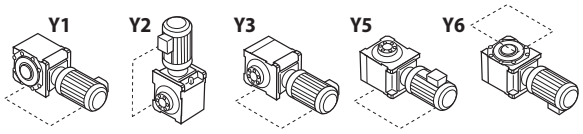
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	79.1	66.9	62.1	54.4	48.3	41.4	39.5	34.8	31.1	24.9	22.3	18.9	16.4	Frame Size
Ratio	**11**	**13**	**14**	**16**	**18**	**21**	**22**	**25**	**28**	**35**	**39**	**46**	**53**	
Input Power HP	**16.2**	**13.4**	**12.2**	**10.7**	**9.76**	**8.14**	**7.63**	**6.97**	**6.10**	**4.85**	**4.44**	**3.75**	**3.26**	
(kW)	***(12.1)***	***(9.96)***	***(9.10)***	***(7.97)***	***(7.28)***	***(6.07)***	***(5.69)***	***(5.20)***	***(4.55)***	***(3.62)***	***(3.31)***	***(2.80)***	***(2.43)***	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	**4A140**
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	3560	3860	3990	4210	4400	4530	4540	4580	4580	4580	4580	4580	4580	
(N)	*(15830)*	*(17160)*	*(17740)*	*(18720)*	*(19570)*	*(20140)*	*(20190)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**16.2**	**13.4**	**12.2**	**10.7**	**9.76**	**8.14**	**7.63**	**6.97**	**6.10**	**4.85**	**4.44**	**3.75**	**3.26**	
(kW)	***(12.1)***	***(9.96)***	***(9.10)***	***(7.97)***	***(7.28)***	***(6.07)***	***(5.69)***	***(5.20)***	***(4.55)***	***(3.62)***	***(3.31)***	***(2.80)***	***(2.43)***	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	**4A145**
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	3560	3860	3990	4210	4400	4530	4540	4580	4580	4580	4580	4580	4580	
(N)	*(15830)*	*(17160)*	*(17740)*	*(18720)*	*(19570)*	*(20140)*	*(20190)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**11.8**	**11.0**	**11.0**	**10.4**	**10.4**	**7.83**	**7.28**	**7.28**	**7.31**	**6.14**	**6.14**	**5.19**	**4.51**	
(kW)	***(8.79)***	***(8.21)***	***(8.21)***	***(7.78)***	***(7.78)***	***(5.84)***	***(5.43)***	***(5.43)***	***(5.45)***	***(4.58)***	***(4.58)***	***(3.87)***	***(3.36)***	
Output Torque in•lbs	8265	9380	10265	11150	12210	10970	10885	11945	13715	14420	15750	15750	15750	
(N•m)	*(934)*	*(1060)*	*(1160)*	*(1260)*	*(1380)*	*(1240)*	*(1230)*	*(1350)*	*(1550)*	*(1630)*	*(1780)*	*(1780)*	*(1780)*	**4B120**
Hollow Shaft OHL lbs	5550	5800	5910	6090	6180	6740	6900	7010	7170	7685	7800	8250	8250	
(N)	*(24700)*	*(25800)*	*(26300)*	*(27100)*	*(27500)*	*(30000)*	*(30700)*	*(31200)*	*(31900)*	*(34200)*	*(34700)*	*(36700)*	*(36700)*	
Solid Shaft OHL lbs	3780	4170	4330	4660	4940	5360	5490	5810	6140	6790	7070	7350	7430	
(N)	*(16810)*	*(18540)*	*(19250)*	*(20720)*	*(21970)*	*(23840)*	*(24410)*	*(25840)*	*(27310)*	*(30200)*	*(31440)*	*(32690)*	*(33040)*	
Input Power HP	**11.8**	**11.0**	**11.0**	**10.4**	**10.4**	**7.83**	**7.28**	**7.28**	**7.31**	**6.34**	**6.34**	**5.73**	**5.40**	
(kW)	***(8.79)***	***(8.21)***	***(8.21)***	***(7.78)***	***(7.78)***	***(5.84)***	***(5.43)***	***(5.43)***	***(5.45)***	***(4.73)***	***(4.73)***	***(4.27)***	***(4.03)***	
Output Torque in•lbs	8265	9380	10265	11150	12210	10970	10885	11945	13715	14865	16280	17430	18935	
(N•m)	*(934)*	*(1060)*	*(1160)*	*(1260)*	*(1380)*	*(1240)*	*(1230)*	*(1350)*	*(1550)*	*(1680)*	*(1840)*	*(1970)*	*(2140)*	**4B125**
Hollow Shaft OHL lbs	5550	5800	5910	6090	6180	6740	6900	7010	7170	7640	7755	7800	7325	
(N)	*(24700)*	*(25800)*	*(26300)*	*(27100)*	*(27500)*	*(30000)*	*(30700)*	*(31200)*	*(31900)*	*(34000)*	*(34500)*	*(34700)*	*(32600)*	
Solid Shaft OHL lbs	3780	4170	4330	4660	4940	5360	5490	5810	6140	6790	7070	7350	7430	
(N)	*(16810)*	*(18540)*	*(19250)*	*(20720)*	*(21970)*	*(23840)*	*(24410)*	*(25840)*	*(27310)*	*(30200)*	*(31440)*	*(32690)*	*(33040)*	
Input Power HP	**18.5**	**18.5**	**18.5**	**18.5**	**18.5**	**15.0**	**15.2**	**13.9**	**12.2**	**9.67**	**8.85**	**7.48**	**6.49**	
(kW)	***(13.8)***	***(13.8)***	***(13.8)***	***(13.8)***	***(13.8)***	***(11.2)***	***(11.3)***	***(10.4)***	***(9.07)***	***(7.21)***	***(6.60)***	***(5.58)***	***(4.84)***	
Output Torque in•lbs	12920	15750	17255	19730	21590	20970	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(1460)*	*(1780)*	*(1950)*	*(2230)*	*(2440)*	*(2370)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	**4B140**
Hollow Shaft OHL lbs	5035	5125	5145	5170	5170	5665	5620	5710	5710	5710	5710	5710	5710	
(N)	*(22400)*	*(22800)*	*(22900)*	*(23000)*	*(23000)*	*(25200)*	*(25000)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	
Solid Shaft OHL lbs	3780	4170	4330	4660	4940	5360	5490	5810	6140	6790	7070	7350	7430	
(N)	*(16810)*	*(18540)*	*(19250)*	*(20720)*	*(21970)*	*(23840)*	*(24410)*	*(25840)*	*(27310)*	*(30200)*	*(31440)*	*(32690)*	*(33040)*	
Input Power HP	**18.5**	**18.5**	**18.5**	**18.5**	**18.5**	**15.0**	**15.2**	**13.9**	**12.2**	**9.67**	**8.85**	**7.48**	**6.49**	
(kW)	***(13.8)***	***(13.8)***	***(13.8)***	***(13.8)***	***(13.8)***	***(11.2)***	***(11.3)***	***(10.4)***	***(9.07)***	***(7.21)***	***(6.60)***	***(5.58)***	***(4.84)***	
Output Torque in•lbs	12920	15750	17255	19730	21590	20970	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(1460)*	*(1780)*	*(1950)*	*(2230)*	*(2440)*	*(2370)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	**4B145**
Hollow Shaft OHL lbs	5035	5125	5145	5170	5170	5665	5620	5710	5710	5710	5710	5710	5710	
(N)	*(22400)*	*(22800)*	*(22900)*	*(23000)*	*(23000)*	*(25200)*	*(25000)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	
Solid Shaft OHL lbs	3780	4170	4330	4660	4940	5360	5490	5810	6140	6790	7070	7350	7430	
(N)	*(16810)*	*(18540)*	*(19250)*	*(20720)*	*(21970)*	*(23840)*	*(24410)*	*(25840)*	*(27310)*	*(30200)*	*(31440)*	*(32690)*	*(33040)*	

Frame Size Selection Tables 870 RPM



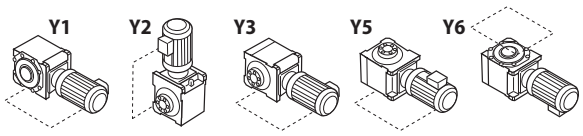
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	14.5	13.0	11.8	10.9	9.89	8.53	7.77	7.07	5.76	4.86	4.20	3.49	2.85	2.09	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	**2.87**	**2.55**	**2.32**	**2.13**	**1.96**	**1.69**	**1.53**	**1.39**	**1.14**	**0.957**	**0.827**	**0.688**	**0.562**	**—**	**4A140**
(kW)	***(2.14)***	***(1.90)***	***(1.73)***	***(1.59)***	***(1.46)***	***(1.26)***	***(1.14)***	***(1.04)***	***(0.847)***	***(0.714)***	***(0.617)***	***(0.513)***	***(0.419)***	**—**	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4570	4560	4560	4550	4540	4540	4540	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	
Input Power HP	**2.87**	**2.55**	**2.32**	**2.13**	**1.96**	**1.69**	**1.53**	**1.39**	**1.14**	**0.957**	**0.827**	**0.688**	**0.562**	**—**	**4A145**
(kW)	***(2.14)***	***(1.90)***	***(1.73)***	***(1.59)***	***(1.46)***	***(1.26)***	***(1.14)***	***(1.04)***	***(0.847)***	***(0.714)***	***(0.617)***	***(0.513)***	***(0.419)***	**—**	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4570	4560	4560	4550	4540	4540	4540	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	
Input Power HP	**3.93**	**3.19**	**3.19**	**2.70**	**2.70**	**2.31**	**1.93**	**1.93**	**1.57**	**1.32**	**1.14**	**0.951**	**0.776**	**—**	**4B120**
(kW)	***(2.93)***	***(2.38)***	***(2.38)***	***(2.01)***	***(2.01)***	***(1.72)***	***(1.44)***	***(1.44)***	***(1.17)***	***(0.987)***	***(0.853)***	***(0.709)***	***(0.579)***	**—**	
Output Torque in•lbs	15660	14335	15660	14420	15750	15660	14420	15750	15750	15750	15750	15750	15750	—	
(N•m)	*(1770)*	*(1620)*	*(1770)*	*(1630)*	*(1780)*	*(1770)*	*(1630)*	*(1780)*	*(1780)*	*(1780)*	*(1780)*	*(1780)*	*(1780)*	—	
Hollow Shaft OHL lbs	8295	8585	8270	8565	8250	8295	8565	8250	8250	8250	8250	8250	8250	—	
(N)	*(36900)*	*(38200)*	*(36800)*	*(38100)*	*(36700)*	*(36900)*	*(38100)*	*(36700)*	*(36700)*	*(36700)*	*(36700)*	*(36700)*	*(36700)*	—	
Solid Shaft OHL lbs	7490	7530	7576	7600	7610	7480	7400	7330	7190	7120	7120	7120	7120	—	
(N)	*(33310)*	*(33490)*	*(33690)*	*(33800)*	*(33840)*	*(33270)*	*(32910)*	*(32600)*	*(31980)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	—	
Input Power HP	**4.76**	**3.86**	**3.86**	**3.25**	**3.25**	**2.79**	**2.32**	**2.32**	**1.88**	**1.58**	**1.37**	**1.03**	**0.931**	**—**	**4B125**
(kW)	***(3.55)***	***(2.88)***	***(2.88)***	***(2.42)***	***(2.42)***	***(2.08)***	***(1.73)***	***(1.73)***	***(1.40)***	***(1.18)***	***(1.02)***	***(0.770)***	***(0.694)***	**—**	
Output Torque in•lbs	18935	17345	18935	17345	18935	18935	17345	18935	18935	18935	18935	17165	18935	—	
(N•m)	*(2140)*	*(1960)*	*(2140)*	*(1960)*	*(2140)*	*(2140)*	*(1960)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(1940)*	*(2140)*	—	
Hollow Shaft OHL lbs	7325	7845	7325	7845	7325	7325	7845	7325	7325	7325	7325	7890	7325	—	
(N)	*(32600)*	*(34900)*	*(32600)*	*(34900)*	*(32600)*	*(32600)*	*(34900)*	*(32600)*	*(32600)*	*(32600)*	*(32600)*	*(35100)*	*(32600)*	—	
Solid Shaft OHL lbs	7490	7530	7576	7600	7610	7480	7400	7330	7190	7120	7120	7120	7120	—	
(N)	*(33310)*	*(33490)*	*(33690)*	*(33800)*	*(33840)*	*(33270)*	*(32910)*	*(32600)*	*(31980)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	—	
Input Power HP	**5.73**	**5.07**	**4.63**	**4.25**	**3.89**	**3.35**	**3.04**	**2.78**	**2.27**	**1.90**	**1.65**	**1.37**	**1.12**	**—**	**4B140**
(kW)	***(4.27)***	***(3.78)***	***(3.45)***	***(3.17)***	***(2.90)***	***(2.50)***	***(2.27)***	***(2.07)***	***(1.69)***	***(1.42)***	***(1.23)***	***(1.02)***	***(0.834)***	**—**	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	—	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	—	
Hollow Shaft OHL lbs	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	—	
(N)	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	—	
Solid Shaft OHL lbs	7490	7530	7576	7600	7610	7480	7400	7330	7190	7120	7120	7120	7120	—	
(N)	*(33310)*	*(33490)*	*(33690)*	*(33800)*	*(33840)*	*(33270)*	*(32910)*	*(32600)*	*(31980)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	—	
Input Power HP	**5.73**	**5.07**	**4.63**	**4.25**	**3.89**	**3.35**	**3.04**	**2.78**	**2.27**	**1.90**	**1.65**	**1.37**	**1.12**	**—**	**4B145**
(kW)	***(4.27)***	***(3.78)***	***(3.45)***	***(3.17)***	***(2.90)***	***(2.50)***	***(2.27)***	***(2.07)***	***(1.69)***	***(1.42)***	***(1.23)***	***(1.02)***	***(0.834)***	**—**	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	—	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	—	
Hollow Shaft OHL lbs	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	—	
(N)	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	—	
Solid Shaft OHL lbs	7490	7530	7576	7600	7610	7480	7400	7330	7190	7120	7120	7120	7120	—	
(N)	*(33310)*	*(33490)*	*(33690)*	*(33800)*	*(33840)*	*(33270)*	*(32910)*	*(32600)*	*(31980)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	—	

Frame Size Selection Tables 870 RPM

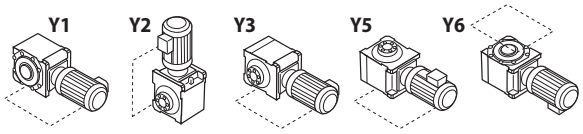
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	79.1	66.9	62.1	54.4	48.3	41.4	39.5	34.8	31.1	24.9	22.3	18.9	16.4	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	**23.3**	**23.3**	**23.3**	**21.3**	**19.4**	**16.2**	**15.2**	**13.9**	**12.2**	**9.67**	**8.85**	**7.48**	**6.49**	
(kW)	***(17.4)***	***(17.4)***	***(17.4)***	***(15.9)***	***(14.5)***	***(12.1)***	***(11.3)***	***(10.4)***	***(9.07)***	***(7.21)***	***(6.60)***	***(5.58)***	***(4.84)***	
Output Torque in•lbs	16370	19910	21855	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(1850)*	*(2250)*	*(2470)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	**4B160**
Hollow Shaft OHL lbs	4675	4650	4675	4830	5055	5460	5620	5710	5710	5710	5710	5710	5710	
(N)	*(20800)*	*(20700)*	*(20800)*	*(21500)*	*(22500)*	*(24300)*	*(25000)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	
Solid Shaft OHL lbs	3780	4170	4330	4660	4940	5360	5490	5810	6140	6790	7070	7350	7430	
(N)	*(16810)*	*(18540)*	*(19250)*	*(20720)*	*(21970)*	*(23840)*	*(24410)*	*(25840)*	*(27310)*	*(30200)*	*(31440)*	*(32690)*	*(33040)*	
Input Power HP	**23.3**	**23.3**	**23.3**	**21.3**	**19.4**	**16.2**	**15.2**	**13.9**	**12.2**	**9.67**	**8.85**	**7.48**	**6.49**	
(kW)	***(17.4)***	***(17.4)***	***(17.4)***	***(15.9)***	***(14.5)***	***(12.1)***	***(11.3)***	***(10.4)***	***(9.07)***	***(7.21)***	***(6.60)***	***(5.58)***	***(4.84)***	
Output Torque in•lbs	16370	19910	21855	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(1850)*	*(2250)*	*(2470)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	**4B165**
Hollow Shaft OHL lbs	4675	4650	4675	4830	5055	5460	5620	5710	5710	5710	5710	5710	5710	
(N)	*(20800)*	*(20700)*	*(20800)*	*(21500)*	*(22500)*	*(24300)*	*(25000)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	
Solid Shaft OHL lbs	3780	4170	4330	4660	4940	5360	5490	5810	6140	6790	7070	7350	7430	
(N)	*(16810)*	*(18540)*	*(19250)*	*(20720)*	*(21970)*	*(23840)*	*(24410)*	*(25840)*	*(27310)*	*(30200)*	*(31440)*	*(32690)*	*(33040)*	
Input Power HP	**18.5**	**18.5**	**18.5**	**18.5**	**18.5**	**15.0**	**16.5**	**16.5**	**14.2**	**14.3**	**14.3**	**12.1**	**10.5**	
(kW)	***(13.8)***	***(13.8)***	***(13.8)***	***(13.8)***	***(13.8)***	***(11.2)***	***(12.3)***	***(12.3)***	***(10.6)***	***(10.7)***	***(10.7)***	***(9.04)***	***(7.83)***	
Output Torque in•lbs	12920	15750	17255	19730	21590	20970	24600	26900	26635	33625	36810	36810	36810	
(N•m)	*(1460)*	*(1780)*	*(1950)*	*(2230)*	*(2440)*	*(2370)*	*(2780)*	*(3040)*	*(3010)*	*(3800)*	*(4160)*	*(4160)*	*(4160)*	**4C140**
Hollow Shaft OHL lbs	7620	7890	8000	8160	8270	8900	8745	8855	9350	9505	9575	10250	10855	
(N)	*(33900)*	*(35100)*	*(35600)*	*(36300)*	*(36800)*	*(39600)*	*(38900)*	*(39400)*	*(41600)*	*(42300)*	*(42600)*	*(45600)*	*(48300)*	
Solid Shaft OHL lbs	4960	5500	5740	6190	6580	7170	7350	7810	8260	9300	9750	10450	11120	
(N)	*(22060)*	*(24460)*	*(25530)*	*(27530)*	*(29260)*	*(31890)*	*(32690)*	*(34730)*	*(36740)*	*(41360)*	*(43360)*	*(46480)*	*(49460)*	
Input Power HP	**18.5**	**18.5**	**18.5**	**18.5**	**18.5**	**15.0**	**16.5**	**16.5**	**14.2**	**14.8**	**14.8**	**13.5**	**11.6**	
(kW)	***(13.8)***	***(13.8)***	***(13.8)***	***(13.8)***	***(13.8)***	***(11.2)***	***(12.3)***	***(12.3)***	***(10.6)***	***(11.0)***	***(11.0)***	***(10.1)***	***(8.68)***	
Output Torque in•lbs	12920	15750	17255	19730	21590	20970	24600	26900	26635	34690	37960	41150	40795	
(N•m)	*(1460)*	*(1780)*	*(1950)*	*(2230)*	*(2440)*	*(2370)*	*(2780)*	*(3040)*	*(3010)*	*(3920)*	*(4290)*	*(4650)*	*(4610)*	**4C145**
Hollow Shaft OHL lbs	7620	7890	8000	8160	8270	8900	8745	8855	9350	9395	9460	9845	10475	
(N)	*(33900)*	*(35100)*	*(35600)*	*(36300)*	*(36800)*	*(39600)*	*(38900)*	*(39400)*	*(41600)*	*(41800)*	*(42100)*	*(43800)*	*(46600)*	
Solid Shaft OHL lbs	4960	5500	5740	6190	6580	7170	7350	7810	8260	9300	9750	10450	11120	
(N)	*(22060)*	*(24460)*	*(25530)*	*(27530)*	*(29260)*	*(31890)*	*(32690)*	*(34730)*	*(36740)*	*(41360)*	*(43360)*	*(46480)*	*(49460)*	
Input Power HP	**33.9**	**33.9**	**33.9**	**33.9**	**33.9**	**28.4**	**27.2**	**27.2**	**24.3**	**19.3**	**17.7**	**15.0**	**13.0**	
(kW)	***(25.3)***	***(25.3)***	***(25.3)***	***(25.3)***	***(25.3)***	***(21.2)***	***(20.3)***	***(20.3)***	***(18.1)***	***(14.4)***	***(13.2)***	***(11.2)***	***(9.67)***	
Output Torque in•lbs	23805	29025	31680	36280	39645	39820	40705	44510	45485	45485	45485	45485	45485	
(N•m)	*(2690)*	*(3280)*	*(3580)*	*(4100)*	*(4480)*	*(4500)*	*(4600)*	*(5030)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	**4C160**
Hollow Shaft OHL lbs	6585	6630	6630	6585	6560	7125	7215	7190	7575	8385	8745	9415	9415	
(N)	*(29300)*	*(29500)*	*(29500)*	*(29300)*	*(29200)*	*(31700)*	*(32100)*	*(32000)*	*(33700)*	*(37300)*	*(38900)*	*(41900)*	*(41900)*	
Solid Shaft OHL lbs	4960	5500	5740	6190	6580	7170	7350	7810	8260	9300	9750	10450	11120	
(N)	*(22060)*	*(24460)*	*(25530)*	*(27530)*	*(29260)*	*(31890)*	*(32690)*	*(34730)*	*(36740)*	*(41360)*	*(43360)*	*(46480)*	*(49460)*	
Input Power HP	**40.2**	**40.2**	**40.2**	**37.7**	**37.7**	**28.4**	**29.0**	**27.8**	**24.3**	**19.3**	**17.7**	**15.0**	**13.0**	
(kW)	***(30.0)***	***(30.0)***	***(30.0)***	***(28.1)***	***(28.1)***	***(21.2)***	***(21.6)***	***(20.7)***	***(18.1)***	***(14.4)***	***(13.2)***	***(11.2)***	***(9.67)***	
Output Torque in•lbs	28230	34420	37610	40265	44070	39820	43360	45485	45485	45485	45485	45485	45485	
(N•m)	*(3190)*	*(3890)*	*(4250)*	*(4550)*	*(4980)*	*(4500)*	*(4900)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	**4C165**
Hollow Shaft OHL lbs	6180	6110	6090	6180	6135	7125	6965	7100	7575	8385	8745	9415	9415	
(N)	*(27500)*	*(27200)*	*(27100)*	*(27500)*	*(27300)*	*(31700)*	*(31000)*	*(31600)*	*(33700)*	*(37300)*	*(38900)*	*(41900)*	*(41900)*	
Solid Shaft OHL lbs	4960	5500	5740	6190	6580	7170	7350	7810	8260	9300	9750	10450	11120	
(N)	*(22060)*	*(24460)*	*(25530)*	*(27530)*	*(29260)*	*(31890)*	*(32690)*	*(34730)*	*(36740)*	*(41360)*	*(43360)*	*(46480)*	*(49460)*	

Frame Size Selection Tables 870 RPM



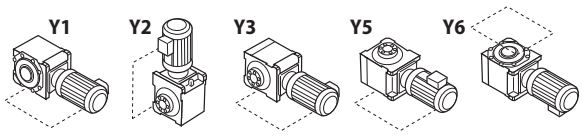
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	14.5	13.0	11.8	10.9	9.89	8.53	7.77	7.07	5.76	4.86	4.20	3.49	2.85	2.09	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	**5.73**	**5.07**	**4.63**	**4.25**	**3.89**	**3.35**	**3.04**	**2.78**	**2.27**	**1.90**	**1.65**	**1.37**	**1.12**	**—**	**4B160**
(kW)	***(4.27)***	***(3.78)***	***(3.45)***	***(3.17)***	***(2.90)***	***(2.50)***	***(2.27)***	***(2.07)***	***(1.69)***	***(1.42)***	***(1.23)***	***(1.02)***	***(0.834)***	**—**	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	—	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	—	
Hollow Shaft OHL lbs	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	—	
(N)	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	—	
Solid Shaft OHL lbs	7490	7530	7576	7600	7610	7480	7400	7330	7190	7120	7120	7120	7120	—	
(N)	*(33310)*	*(33490)*	*(33690)*	*(33800)*	*(33840)*	*(33270)*	*(32910)*	*(32600)*	*(31980)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	—	
Input Power HP	**5.73**	**5.07**	**4.63**	**4.25**	**3.89**	**3.35**	**3.04**	**2.78**	**2.27**	**1.90**	**1.65**	**1.37**	**1.12**	**—**	**4B165**
(kW)	***(4.27)***	***(3.78)***	***(3.45)***	***(3.17)***	***(2.90)***	***(2.50)***	***(2.27)***	***(2.07)***	***(1.69)***	***(1.42)***	***(1.23)***	***(1.02)***	***(0.834)***	**—**	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	—	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	—	
Hollow Shaft OHL lbs	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	—	
(N)	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	—	
Solid Shaft OHL lbs	7490	7530	7576	7600	7610	7480	7400	7330	7190	7120	7120	7120	7120	—	
(N)	*(33310)*	*(33490)*	*(33690)*	*(33800)*	*(33840)*	*(33270)*	*(32910)*	*(32600)*	*(31980)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	—	
Input Power HP	**9.27**	**7.50**	**7.50**	**6.30**	**6.30**	**5.43**	**4.51**	**4.51**	**3.66**	**3.08**	**2.67**	**2.21**	**1.81**	**—**	**4C140**
(kW)	***(6.91)***	***(5.59)***	***(5.59)***	***(4.70)***	***(4.70)***	***(4.05)***	***(3.36)***	***(3.36)***	***(2.73)***	***(2.30)***	***(1.99)***	***(1.65)***	***(1.35)***	**—**	
Output Torque in•lbs	36810	33625	36810	33625	36810	36810	33625	36810	36810	36810	36810	36810	36810	—	
(N•m)	*(4160)*	*(3800)*	*(4160)*	*(3800)*	*(4160)*	*(4160)*	*(3800)*	*(4160)*	*(4160)*	*(4160)*	*(4160)*	*(4160)*	*(4160)*	—	
Hollow Shaft OHL lbs	11395	12225	12160	12900	12160	12160	12900	12160	12160	12160	12160	12160	12160	—	
(N)	*(50700)*	*(54400)*	*(54100)*	*(57400)*	*(54100)*	*(54100)*	*(57400)*	*(54100)*	*(54100)*	*(54100)*	*(54100)*	*(54100)*	*(54100)*	—	
Solid Shaft OHL lbs	11630	12040	12360	12600	12830	12750	12710	12670	12590	12550	12550	12550	12550	—	
(N)	*(51730)*	*(53550)*	*(54970)*	*(56040)*	*(57060)*	*(56710)*	*(56530)*	*(56350)*	*(56000)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	—	
Input Power HP	**10.4**	**8.19**	**8.19**	**7.05**	**7.05**	**6.07**	**5.03**	**5.03**	**4.10**	**3.35**	**2.88**	**2.37**	**1.85**	**—**	**4C145**
(kW)	***(7.72)***	***(6.11)***	***(6.11)***	***(5.26)***	***(5.26)***	***(4.53)***	***(3.75)***	***(3.75)***	***(3.06)***	***(2.50)***	***(2.15)***	***(1.77)***	***(1.38)***	**—**	
Output Torque in•lbs	41150	36810	40265	37610	41150	41150	37610	41150	41150	40000	39820	39465	37520	—	
(N•m)	*(4650)*	*(4160)*	*(4550)*	*(4250)*	*(4650)*	*(4650)*	*(4250)*	*(4650)*	*(4650)*	*(4520)*	*(4500)*	*(4460)*	*(4240)*	—	
Hollow Shaft OHL lbs	10945	11935	11240	11955	10945	10945	11955	10945	10945	11285	11350	11440	11980	—	
(N)	*(48700)*	*(53100)*	*(50000)*	*(53200)*	*(48700)*	*(48700)*	*(53200)*	*(48700)*	*(48700)*	*(50200)*	*(50500)*	*(50900)*	*(53300)*	—	
Solid Shaft OHL lbs	11630	12040	12360	12600	12830	12750	12710	12670	12590	12550	12550	12550	12550	—	
(N)	*(51730)*	*(53550)*	*(54970)*	*(56040)*	*(57060)*	*(56710)*	*(56530)*	*(56350)*	*(56000)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	—	
Input Power HP	**11.5**	**10.1**	**9.27**	**8.52**	**7.78**	**6.71**	**6.07**	**5.57**	**4.52**	**3.82**	**3.30**	**2.74**	**2.24**	**—**	**4C160**
(kW)	***(8.54)***	***(7.56)***	***(6.91)***	***(6.35)***	***(5.80)***	***(4.53)***	***(4.53)***	***(4.15)***	***(3.37)***	***(2.85)***	***(2.46)***	***(2.04)***	***(1.67)***	**—**	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	—	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	—	
Hollow Shaft OHL lbs	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	—	
(N)	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	—	
Solid Shaft OHL lbs	11630	12040	12360	12600	12830	12750	12710	12670	12590	12550	12550	12550	12550	—	
(N)	*(51730)*	*(53550)*	*(54970)*	*(56040)*	*(57060)*	*(56710)*	*(56530)*	*(56350)*	*(56000)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	—	
Input Power HP	**11.5**	**10.1**	**9.27**	**8.52**	**7.78**	**6.71**	**6.07**	**5.57**	**4.52**	**3.82**	**3.30**	**2.74**	**2.24**	**—**	**4C165**
(kW)	***(8.54)***	***(7.56)***	***(6.91)***	***(6.35)***	***(5.80)***	***(5.00)***	***(4.53)***	***(4.15)***	***(3.37)***	***(2.85)***	***(2.46)***	***(2.04)***	***(1.67)***	**—**	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	—	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	—	
Hollow Shaft OHL lbs	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	—	
(N)	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	—	
Solid Shaft OHL lbs	11630	12040	12360	12600	12830	12750	12710	12670	12590	12550	12550	12550	12550	—	
(N)	*(51730)*	*(53550)*	*(54970)*	*(56040)*	*(57060)*	*(56710)*	*(56530)*	*(56350)*	*(56000)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	—	

Frame Size Selection Tables 870 RPM

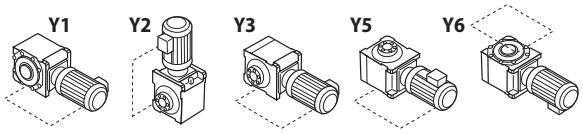
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	79.1	66.9	62.1	54.4	48.3	41.4	39.5	34.8	31.1	24.9	22.3	18.9	16.4	Frame Size
Ratio	**11**	**13**	**14**	**16**	**18**	**21**	**22**	**25**	**28**	**35**	**39**	**46**	**53**	
Input Power HP	**50.2**	**48.0**	**45.1**	**41.4**	**37.5**	**29.0**	**29.0**	**27.8**	**24.3**	**19.3**	**17.7**	**15.0**	**13.0**	
(kW)	***(37.4)***	***(35.8)***	***(33.6)***	***(30.9)***	***(28.0)***	***(21.6)***	***(21.6)***	***(20.7)***	***(18.1)***	***(14.4)***	***(13.2)***	***(11.2)***	***(9.67)***	
Output Torque in•lbs	35135	41065	42130	44250	43900	40615	43360	45485	45485	45485	45485	45485	45485	
(N•m)	*(3970)*	*(4640)*	*(4760)*	*(5000)*	*(4960)*	*(4590)*	*(4900)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	**4C170**
Hollow Shaft OHL lbs	5530	5485	5665	5845	6160	7035	6990	7100	7575	8385	8745	9415	9415	
(N)	*(24600)*	*(24400)*	*(25200)*	*(26000)*	*(27400)*	*(31300)*	*(31100)*	*(31600)*	*(33700)*	*(37300)*	*(38900)*	*(41900)*	*(41900)*	
Solid Shaft OHL lbs	4960	5500	5740	6190	6580	7170	7350	7810	8260	9300	9750	10450	11120	
(N)	*(22060)*	*(24460)*	*(25530)*	*(27530)*	*(29260)*	*(31890)*	*(32690)*	*(34730)*	*(36740)*	*(41360)*	*(43360)*	*(46480)*	*(49460)*	
Input Power HP	**50.2**	**48.0**	**45.1**	**41.4**	**37.5**	**29.0**	**29.0**	**27.8**	**24.3**	**19.3**	**17.7**	**15.0**	**13.0**	
(kW)	***(37.4)***	***(35.8)***	***(33.6)***	***(30.9)***	***(28.0)***	***(21.6)***	***(21.6)***	***(20.7)***	***(18.1)***	***(14.4)***	***(13.2)***	***(11.2)***	***(9.67)***	
Output Torque in•lbs	35135	41065	42130	44250	43900	40615	43360	45485	45485	45485	45485	45485	45485	
(N•m)	*(3970)*	*(4640)*	*(4760)*	*(5000)*	*(4960)*	*(4590)*	*(4900)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	**4C175**
Hollow Shaft OHL lbs	5530	5485	5665	5845	6160	7035	6990	7100	7575	8385	8745	9415	9415	
(N)	*(24600)*	*(24400)*	*(25200)*	*(26000)*	*(27400)*	*(31300)*	*(31100)*	*(31600)*	*(33700)*	*(37300)*	*(38900)*	*(41900)*	*(41900)*	
Solid Shaft OHL lbs	4960	5500	5740	6190	6580	7170	7350	7810	8260	9300	9750	10450	11120	
(N)	*(22060)*	*(24460)*	*(25530)*	*(27530)*	*(29260)*	*(31890)*	*(32690)*	*(34730)*	*(36740)*	*(41360)*	*(43360)*	*(46480)*	*(49460)*	
Input Power HP	**—**	**—**	**—**	**—**	**—**	**28.4**	**27.2**	**27.2**	**26.4**	**20.5**	**20.5**	**17.3**	**15.0**	
(kW)	**—**	**—**	**—**	**—**	**—**	***(21.2)***	***(20.3)***	***(20.3)***	***(19.7)***	***(15.3)***	***(15.3)***	***(12.9)***	***(11.2)***	
Output Torque in•lbs	—	—	—	—	—	39820	40705	44510	49380	48230	52740	52740	52740	
(N•m)	—	—	—	—	—	*(4500)*	*(4600)*	*(5030)*	*(5580)*	*(5450)*	*(5960)*	*(5960)*	*(5960)*	**4D160**
Hollow Shaft OHL lbs	—	—	—	—	—	12520	12720	12880	13170	14455	14610	15575	16455	
(N)	—	—	—	—	—	*(55700)*	*(56600)*	*(57300)*	*(58600)*	*(64300)*	*(65000)*	*(69300)*	*(73200)*	
Solid Shaft OHL lbs	—	—	—	—	—	10240	10500	11160	11820	13330	13980	14800	15330	
(N)	—	—	—	—	—	*(45540)*	*(46700)*	*(49630)*	*(52570)*	*(59290)*	*(62180)*	*(65830)*	*(68180)*	
Input Power HP	**—**	**—**	**—**	**—**	**—**	**28.4**	**30.4**	**30.4**	**27.6**	**24.5**	**24.5**	**20.8**	**18.0**	
(kW)	**—**	**—**	**—**	**—**	**—**	***(21.2)***	***(22.7)***	***(22.7)***	***(20.6)***	***(18.3)***	***(18.3)***	***(15.5)***	***(13.4)***	
Output Torque in•lbs	—	—	—	—	—	39820	45575	49910	51590	57695	63095	63095	63095	
(N•m)	—	—	—	—	—	*(4500)*	*(5150)*	*(5640)*	*(5830)*	*(6520)*	*(7130)*	*(7130)*	*(7130)*	**4D165**
Hollow Shaft OHL lbs	—	—	—	—	—	12520	12340	12450	12990	13690	13780	14745	15620	
(N)	—	—	—	—	—	*(55700)*	*(54900)*	*(55400)*	*(57800)*	*(60900)*	*(61300)*	*(65600)*	*(69500)*	
Solid Shaft OHL lbs	—	—	—	—	—	10240	10500	11160	11820	13330	13980	14800	15330	
(N)	—	—	—	—	—	*(45540)*	*(46700)*	*(49630)*	*(52570)*	*(59290)*	*(62180)*	*(65830)*	*(68180)*	
Input Power HP	**50.2**	**50.2**	**50.2**	**50.2**	**50.2**	**39.8**	**45.5**	**45.5**	**40.6**	**29.6**	**29.6**	**24.9**	**21.7**	
(kW)	***(37.4)***	***(37.4)***	***(37.4)***	***(37.4)***	***(37.4)***	***(29.7)***	***(33.9)***	***(33.9)***	***(30.3)***	***(22.1)***	***(22.1)***	***(18.6)***	***(16.2)***	
Output Torque in•lbs	35130	42920	46900	53625	58580	55840	68050	74425	76015	69555	76015	75925	76015	
(N•m)	*(3970)*	*(4850)*	*(5300)*	*(6060)*	*(6620)*	*(6310)*	*(7690)*	*(8410)*	*(8590)*	*(7860)*	*(8590)*	*(8580)*	*(8590)*	**4D170**
Hollow Shaft OHL lbs	9935	10115	10160	10180	10180	11240	10520	10475	11015	12720	11825	11865	11825	
(N)	*(44200)*	*(45000)*	*(45200)*	*(45300)*	*(45300)*	*(50000)*	*(46800)*	*(46600)*	*(49000)*	*(56600)*	*(52600)*	*(52800)*	*(52600)*	
Solid Shaft OHL lbs	7060	7840	8170	8830	9400	10240	10500	11160	11820	13330	13980	14800	15330	
(N)	*(31400)*	*(34870)*	*(36340)*	*(39270)*	*(41810)*	*(45540)*	*(46700)*	*(49630)*	*(52570)*	*(59290)*	*(62180)*	*(65830)*	*(68180)*	
Input Power HP	**50.2**	**50.2**	**50.2**	**50.2**	**50.2**	**39.8**	**49.6**	**46.9**	**41.3**	**32.9**	**30.0**	**25.3**	**22.0**	
(kW)	***(37.4)***	***(37.4)***	***(37.4)***	***(37.4)***	***(37.4)***	***(29.7)***	***(37.0)***	***(35.0)***	***(30.8)***	***(24.5)***	***(22.4)***	***(18.9)***	***(16.4)***	
Output Torque in•lbs	35130	42920	46900	53625	58580	55840	74245	76810	77165	77165	77165	77165	77165	
(N•m)	*(3970)*	*(4850)*	*(5300)*	*(6060)*	*(6620)*	*(6310)*	*(8390)*	*(8680)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	**4D175**
Hollow Shaft OHL lbs	9935	10115	10160	10180	10180	11240	10025	10295	10925	11375	11375	11375	11375	
(N)	*(44200)*	*(45000)*	*(45200)*	*(45300)*	*(45300)*	*(50000)*	*(44600)*	*(45800)*	*(48600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	
Solid Shaft OHL lbs	7060	7840	8170	8830	9400	10240	10500	11160	11820	13330	13980	14800	15330	
(N)	*(31400)*	*(34870)*	*(36340)*	*(39270)*	*(41810)*	*(45540)*	*(46700)*	*(49630)*	*(52570)*	*(59290)*	*(62180)*	*(65830)*	*(68180)*	

Frame Size Selection Tables 870 RPM



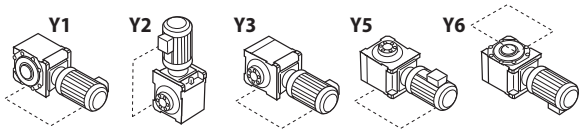
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	14.5	13.0	11.8	10.9	9.89	8.53	7.77	7.07	5.76	4.86	4.20	3.49	2.85	2.09	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	**11.5**	**10.1**	**9.27**	**8.52**	**7.78**	**6.71**	**6.07**	**5.57**	**4.52**	**3.82**	**3.30**	**2.74**	**2.24**	—	4C170
(kW)	***(8.54)***	***(7.56)***	***(6.91)***	***(6.35)***	***(5.80)***	***(5.00)***	***(4.53)***	***(4.15)***	***(3.37)***	***(2.85)***	***(2.46)***	***(2.04)***	***(1.67)***	—	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	—	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	—	
Hollow Shaft OHL lbs	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	—	
(N)	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	—	
Solid Shaft OHL lbs	11630	12040	12360	12600	12830	12750	12710	12670	12590	12550	12550	12550	12550	—	
(N)	*(51730)*	*(53550)*	*(54970)*	*(56040)*	*(57060)*	*(56710)*	*(56530)*	*(56350)*	*(56000)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	—	
Input Power HP	**11.5**	**10.1**	**9.27**	**8.52**	**7.78**	**6.71**	**6.07**	**5.57**	**4.52**	**3.82**	**3.30**	**2.74**	**2.24**	—	4C175
(kW)	***(8.54)***	***(7.56)***	***(6.91)***	***(6.35)***	***(5.80)***	***(5.00)***	***(4.53)***	***(4.15)***	***(3.37)***	***(2.85)***	***(2.46)***	***(2.04)***	***(1.67)***	—	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	—	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	—	
Hollow Shaft OHL lbs	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	—	
(N)	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	—	
Solid Shaft OHL lbs	11630	12040	12360	12600	12830	12750	12710	12670	12590	12550	12550	12550	12550	—	
(N)	*(51730)*	*(53550)*	*(54970)*	*(56040)*	*(57060)*	*(56710)*	*(56530)*	*(56350)*	*(56000)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	—	
Input Power HP	**13.3**	**10.7**	**10.7**	**9.03**	**9.03**	**7.78**	**6.45**	**6.45**	**5.19**	**4.43**	**3.82**	**3.18**	**2.59**	—	4D160
(kW)	***(9.90)***	***(8.01)***	***(8.01)***	***(6.73)***	***(6.73)***	***(5.80)***	***(4.81)***	***(4.81)***	***(3.87)***	***(3.30)***	***(2.85)***	***(2.37)***	***(1.93)***	—	
Output Torque in•lbs	52740	48230	52740	48230	52740	52740	48230	52740	52120	52740	52740	52740	52740	—	
(N•m)	*(5960)*	*(5450)*	*(5960)*	*(5450)*	*(5960)*	*(5960)*	*(5450)*	*(5960)*	*(5890)*	*(5960)*	*(5960)*	*(5960)*	*(5960)*	—	
Hollow Shaft OHL lbs	17240	18385	17915	18680	17915	17915	18680	17915	18025	17915	17915	17915	17915	—	
(N)	*(76700)*	*(81800)*	*(79700)*	*(83100)*	*(79700)*	*(79700)*	*(83100)*	*(79700)*	*(80200)*	*(79700)*	*(79700)*	*(79700)*	*(79700)*	—	
Solid Shaft OHL lbs	15740	16060	16320	16510	16690	16660	16640	16620	16590	16580	16580	16580	16580	—	
(N)	*(70010)*	*(71430)*	*(72590)*	*(73430)*	*(74230)*	*(74100)*	*(74010)*	*(73920)*	*(73790)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	—	
Input Power HP	**15.8**	**12.9**	**12.9**	**10.8**	**10.8**	**9.31**	**7.71**	**7.71**	**6.28**	**5.30**	**4.57**	**3.81**	**3.03**	—	4D165
(kW)	***(11.8)***	***(9.59)***	***(9.59)***	***(8.06)***	***(8.06)***	***(6.94)***	***(5.75)***	***(5.75)***	***(4.68)***	***(3.95)***	***(3.41)***	***(2.84)***	***(2.26)***	—	
Output Torque in•lbs	63095	57695	63095	57695	63095	63095	57695	63095	63095	63095	63095	63095	61680	—	
(N•m)	*(7130)*	*(6520)*	*(7130)*	*(6520)*	*(7130)*	*(7130)*	*(6520)*	*(7130)*	*(7130)*	*(7130)*	*(7130)*	*(7130)*	*(6970)*	—	
Hollow Shaft OHL lbs	15755	16970	15755	16970	15755	15755	16970	15755	15755	15755	15755	15755	16115	—	
(N)	*(70100)*	*(75500)*	*(70100)*	*(75500)*	*(70100)*	*(70100)*	*(75500)*	*(70100)*	*(70100)*	*(70100)*	*(70100)*	*(70100)*	*(71700)*	—	
Solid Shaft OHL lbs	15740	16060	16320	16510	16690	16660	16640	16620	16590	16580	16580	16580	16580	—	
(N)	*(70010)*	*(71430)*	*(72590)*	*(73430)*	*(74230)*	*(74100)*	*(74010)*	*(73920)*	*(73790)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	—	
Input Power HP	**19.2**	**15.6**	**15.6**	**13.0**	**13.0**	**11.2**	**9.29**	**9.29**	**7.56**	**6.38**	**5.51**	**4.59**	**3.74**	—	4D170
(kW)	***(14.3)***	***(11.6)***	***(11.6)***	***(9.70)***	***(9.70)***	***(8.37)***	***(6.93)***	***(6.93)***	***(5.64)***	***(4.76)***	***(4.11)***	***(3.42)***	***(2.79)***	—	
Output Torque in•lbs	76015	69555	76015	69555	76015	76015	69555	76015	76015	76015	76015	76015	76015	—	
(N•m)	*(8590)*	*(7860)*	*(8590)*	*(7860)*	*(8590)*	*(8590)*	*(7860)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	—	
Hollow Shaft OHL lbs	11825	14050	11825	14050	11825	11825	14050	11825	11825	11825	11825	11825	11825	—	
(N)	*(52600)*	*(62500)*	*(52600)*	*(62500)*	*(52600)*	*(52600)*	*(62500)*	*(52600)*	*(52600)*	*(52600)*	*(52600)*	*(52600)*	*(52600)*	—	
Solid Shaft OHL lbs	15740	16060	16320	16510	16690	16660	16640	16620	16590	16580	16580	16580	16580	—	
(N)	*(70010)*	*(71430)*	*(72590)*	*(73430)*	*(74230)*	*(74100)*	*(74010)*	*(73920)*	*(73790)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	—	
Input Power HP	**19.4**	**17.2**	**15.7**	**14.5**	**13.2**	**11.4**	**10.3**	**9.43**	**7.67**	**6.48**	**5.59**	**4.65**	**3.80**	—	4D175
(kW)	***(14.5)***	***(12.8)***	***(11.7)***	***(10.8)***	***(9.85)***	***(8.49)***	***(7.69)***	***(7.03)***	***(5.72)***	***(4.83)***	***(4.17)***	***(3.47)***	***(2.83)***	—	
Output Torque in•lbs	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	—	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	—	
Hollow Shaft OHL lbs	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	—	
(N)	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	—	
Solid Shaft OHL lbs	15740	16060	16320	16510	16690	16660	16640	16620	16590	16580	16580	16580	16580	—	
(N)	*(70010)*	*(71430)*	*(72590)*	*(73430)*	*(74230)*	*(74100)*	*(74010)*	*(73920)*	*(73790)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	—	

Frame Size Selection Tables 870 RPM

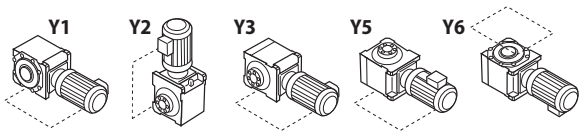
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	79.1	66.9	62.1	54.4	48.3	41.4	39.5	34.8	31.1	24.9	22.3	18.9	16.4	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	**66.5**	**66.5**	**66.5**	**66.5**	**61.8**	**50.2**	**44.5**	**44.5**	**39.6**	**32.9**	**30.0**	**25.3**	**22.0**	
(kW)	***(49.6)***	***(49.6)***	***(49.6)***	***(49.6)***	***(46.1)***	***(37.4)***	***(33.2)***	***(33.2)***	***(29.5)***	***(24.5)***	***(22.4)***	***(18.9)***	***(16.4)***	
Output Torque in•lbs	46635	56900	62220	71070	72310	70360	66635	72840	73990	77165	77165	77165	77165	
(N•m)	*(5270)*	*(6430)*	*(7030)*	*(8030)*	*(8170)*	*(7950)*	*(7530)*	*(8230)*	*(8360)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	**4D180**
Hollow Shaft OHL lbs	9015	8970	8925	8765	9080	10070	10655	10610	11170	11375	11375	11375	11375	
(N)	*(40100)*	*(39900)*	*(39700)*	*(39000)*	*(40400)*	*(44800)*	*(47400)*	*(47200)*	*(49700)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	
Solid Shaft OHL lbs	7060	7840	8170	8830	9400	10240	10500	11160	11820	13330	13980	14800	15330	
(N)	*(31400)*	*(34870)*	*(36340)*	*(39270)*	*(41810)*	*(45540)*	*(46700)*	*(49630)*	*(52570)*	*(59290)*	*(62180)*	*(65830)*	*(68180)*	
Input Power HP	**66.5**	**66.5**	**66.5**	**66.5**	**61.8**	**51.0**	**45.2**	**45.2**	**40.2**	**32.9**	**30.0**	**25.3**	**22.0**	
(kW)	***(49.6)***	***(49.6)***	***(49.6)***	***(49.6)***	***(46.1)***	***(38.0)***	***(33.7)***	***(33.7)***	***(30.0)***	***(24.5)***	***(22.4)***	***(18.9)***	***(16.4)***	
Output Torque in•lbs	46635	56900	62220	71070	72310	71510	67620	73990	75230	77165	77165	77165	77165	
(N•m)	*(5270)*	*(6430)*	*(7030)*	*(8030)*	*(8170)*	*(8080)*	*(7640)*	*(8360)*	*(8500)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	**4D185**
Hollow Shaft OHL lbs	9015	8970	8925	8765	9080	9980	10585	10520	11080	11375	11375	11375	11375	
(N)	*(40100)*	*(39900)*	*(39700)*	*(39000)*	*(40400)*	*(44400)*	*(47100)*	*(46800)*	*(49300)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	
Solid Shaft OHL lbs	7060	7840	8170	8830	9400	10240	10500	11160	11820	13330	13980	14800	15330	
(N)	*(31400)*	*(34870)*	*(36340)*	*(39270)*	*(41810)*	*(45540)*	*(46700)*	*(49630)*	*(52570)*	*(59290)*	*(62180)*	*(65830)*	*(68180)*	
Input Power HP	**50.2**	**50.2**	**50.2**	**50.2**	**50.2**	**39.8**	**45.5**	**45.5**	**40.6**	**29.6**	**29.6**	**24.9**	**21.7**	
(kW)	***(37.4)***	***(37.4)***	***(37.4)***	***(37.4)***	***(37.4)***	***(29.7)***	***(33.9)***	***(33.9)***	***(30.3)***	***(22.1)***	***(22.1)***	***(18.6)***	***(16.2)***	
Output Torque in•lbs	35130	42920	46900	53625	58580	55840	68050	74425	76015	69555	76015	75925	76015	
(N•m)	*(3970)*	*(4850)*	*(5300)*	*(6060)*	*(6620)*	*(6310)*	*(7690)*	*(8410)*	*(8590)*	*(7860)*	*(8590)*	*(8580)*	*(8590)*	**4E170**
Hollow Shaft OHL lbs	13825	14250	14430	14680	14815	16095	15555	15690	16430	18430	18635	19870	19940	
(N)	*(61500)*	*(63400)*	*(64200)*	*(65300)*	*(65900)*	*(71600)*	*(69200)*	*(69800)*	*(73100)*	*(82000)*	*(82900)*	*(88400)*	*(88700)*	
Solid Shaft OHL lbs	10510	11500	11920	12780	13530	14630	14950	15790	16660	18610	19450	20370	20710	
(N)	*(46740)*	*(51150)*	*(53020)*	*(56840)*	*(60180)*	*(65070)*	*(66490)*	*(70230)*	*(74100)*	*(82770)*	*(86510)*	*(90600)*	*(92110)*	
Input Power HP	**50.2**	**50.2**	**50.2**	**50.2**	**50.2**	**39.8**	**49.6**	**49.6**	**41.8**	**36.9**	**33.8**	**28.6**	**24.8**	
(kW)	***(37.4)***	***(37.4)***	***(37.4)***	***(37.4)***	***(37.4)***	***(29.7)***	***(37.0)***	***(37.0)***	***(31.2)***	***(27.5)***	***(25.2)***	***(21.3)***	***(18.5)***	
Output Torque in•lbs	35130	42920	46900	53625	58580	55840	74245	81150	78230	86545	86990	86990	86990	
(N•m)	*(3970)*	*(4850)*	*(5300)*	*(6060)*	*(6620)*	*(6310)*	*(8390)*	*(9170)*	*(8840)*	*(9780)*	*(9830)*	*(9830)*	*(9830)*	**4E175**
Hollow Shaft OHL lbs	13825	14250	14430	14680	14815	16095	15080	15170	16250	17175	17825	19060	19400	
(N)	*(61500)*	*(63400)*	*(64200)*	*(65300)*	*(65900)*	*(71600)*	*(67100)*	*(67500)*	*(72300)*	*(76400)*	*(79300)*	*(84800)*	*(86300)*	
Solid Shaft OHL lbs	10510	11500	11920	12780	13530	14630	14950	15790	16660	18610	19450	20370	20710	
(N)	*(46740)*	*(51150)*	*(53020)*	*(56840)*	*(60180)*	*(65070)*	*(66490)*	*(70230)*	*(74100)*	*(82770)*	*(86510)*	*(90600)*	*(92110)*	
Input Power HP	**66.5**	**66.5**	**66.5**	**66.5**	**66.5**	**50.2**	**44.5**	**44.5**	**39.6**	**43.7**	**40.0**	**33.8**	**29.2**	
(kW)	***(49.6)***	***(49.6)***	***(49.6)***	***(49.6)***	***(49.6)***	***(37.4)***	***(33.2)***	***(33.2)***	***(29.5)***	***(32.6)***	***(29.8)***	***(25.2)***	***(21.8)***	
Output Torque in•lbs	46635	56900	62210	71060	77695	70350	66635	72830	73980	102665	102665	102665	102665	
(N•m)	*(5270)*	*(6430)*	*(7030)*	*(8030)*	*(8780)*	*(7950)*	*(7530)*	*(8230)*	*(8360)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	**4E180**
Hollow Shaft OHL lbs	12970	13215	13305	13375	13400	15015	15690	15780	16565	16025	16680	17915	18430	
(N)	*(57700)*	*(58800)*	*(59200)*	*(59500)*	*(59600)*	*(66800)*	*(69800)*	*(70200)*	*(73700)*	*(71300)*	*(74200)*	*(79700)*	*(82000)*	
Solid Shaft OHL lbs	10510	11500	11920	12780	13530	14630	14950	15790	16660	18610	19450	20370	20710	
(N)	*(46740)*	*(51150)*	*(53020)*	*(56840)*	*(60180)*	*(65070)*	*(66490)*	*(70230)*	*(74100)*	*(82770)*	*(86510)*	*(90600)*	*(92110)*	
Input Power HP	**66.5**	**66.5**	**66.5**	**66.5**	**66.5**	**51.0**	**45.2**	**45.2**	**40.2**	**43.7**	**40.0**	**33.8**	**29.2**	
(kW)	***(49.6)***	***(49.6)***	***(49.6)***	***(49.6)***	***(49.6)***	***(38.0)***	***(33.7)***	***(33.7)***	***(30.0)***	***(32.6)***	***(29.8)***	***(25.2)***	***(21.8)***	
Output Torque in•lbs	46635	56900	62210	71060	77695	71500	67610	73980	75220	102665	102665	102665	102665	
(N•m)	*(5270)*	*(6430)*	*(7030)*	*(8030)*	*(8780)*	*(8080)*	*(7640)*	*(8360)*	*(8500)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	**4E185**
Hollow Shaft OHL lbs	12970	13215	13305	13375	13400	14950	15600	15710	16475	16025	16680	17915	18430	
(N)	*(57700)*	*(58800)*	*(59200)*	*(59500)*	*(59600)*	*(66500)*	*(69400)*	*(69900)*	*(73300)*	*(71300)*	*(74200)*	*(79700)*	*(82000)*	
Solid Shaft OHL lbs	10510	11500	11920	12780	13530	14630	14950	15790	16660	18610	19450	20370	20710	
(N)	*(46740)*	*(51150)*	*(53020)*	*(56840)*	*(60180)*	*(65070)*	*(66490)*	*(70230)*	*(74100)*	*(82770)*	*(86510)*	*(90600)*	*(92110)*	

Frame Size Selection Tables 870 RPM



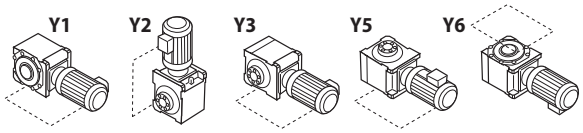
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	14.5	13.0	11.8	10.9	9.89	8.53	7.77	7.07	5.76	4.86	4.20	3.49	2.85	2.09	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	**19.4**	**17.2**	**15.7**	**14.5**	**13.2**	**11.4**	**10.3**	**9.43**	**7.67**	**6.48**	**5.59**	**4.65**	**3.80**	—	
(kW)	***(14.5)***	***(12.8)***	***(11.7)***	***(10.8)***	***(9.85)***	***(8.49)***	***(7.69)***	***(7.03)***	***(5.72)***	***(4.83)***	***(4.17)***	***(3.47)***	***(2.83)***	—	
Output Torque in•lbs	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	—	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	—	
Hollow Shaft OHL lbs	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	—	4D180
(N)	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	—	
Solid Shaft OHL lbs	15740	16060	16320	16510	16690	16660	16640	16620	16590	16580	16580	16580	16580	—	
(N)	*(70010)*	*(71430)*	*(72590)*	*(73430)*	*(74230)*	*(74100)*	*(74010)*	*(73920)*	*(73790)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	—	
Input Power HP	**19.4**	**17.2**	**15.7**	**14.5**	**13.2**	**11.4**	**10.3**	**9.43**	**7.67**	**6.48**	**5.59**	**4.65**	**3.80**	—	
(kW)	***(14.5)***	***(12.8)***	***(11.7)***	***(10.8)***	***(9.85)***	***(8.49)***	***(7.69)***	***(7.03)***	***(5.72)***	***(4.83)***	***(4.17)***	***(3.47)***	***(2.83)***	—	
Output Torque in•lbs	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	—	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	—	
Hollow Shaft OHL lbs	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	—	4D185
(N)	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	—	
Solid Shaft OHL lbs	15740	16060	16320	16510	16690	16660	16640	16620	16590	16580	16580	16580	16580	—	
(N)	*(70010)*	*(71430)*	*(72590)*	*(73430)*	*(74230)*	*(74100)*	*(74010)*	*(73920)*	*(73790)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	—	
Input Power HP	**19.2**	**15.6**	**15.6**	**13.0**	**13.0**	**11.2**	**9.29**	**9.29**	**7.56**	**6.38**	**5.51**	**4.59**	**3.74**	—	
(kW)	***(14.3)***	***(11.6)***	***(11.6)***	***(9.70)***	***(9.70)***	***(8.37)***	***(6.93)***	***(6.93)***	***(5.64)***	***(4.76)***	***(4.11)***	***(3.42)***	***(2.79)***	—	
Output Torque in•lbs	76015	69555	76015	69555	76015	76015	69555	76015	76015	76015	76015	76015	76015	—	
(N•m)	*(8590)*	*(7860)*	*(8590)*	*(7860)*	*(8590)*	*(8590)*	*(7860)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	—	
Hollow Shaft OHL lbs	19940	20275	19940	20275	19940	19940	20275	19940	19940	19940	19940	19940	19940	—	4E170
(N)	*(88700)*	*(90200)*	*(88700)*	*(90200)*	*(88700)*	*(88700)*	*(90200)*	*(88700)*	*(88700)*	*(88700)*	*(88700)*	*(88700)*	*(88700)*	—	
Solid Shaft OHL lbs	20980	21190	21360	21480	21610	21700	21740	21790	21870	21920	21920	21920	21920	—	
(N)	*(93310)*	*(94250)*	*(95000)*	*(95540)*	*(96120)*	*(96520)*	*(96690)*	*(96920)*	*(97270)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	—	
Input Power HP	**21.9**	**19.3**	**17.7**	**16.2**	**14.9**	**12.8**	**11.6**	**11.6**	**9.41**	**7.94**	**6.87**	**5.70**	**4.65**	—	
(kW)	***(16.3)***	***(14.4)***	***(13.2)***	***(12.1)***	***(11.1)***	***(9.57)***	***(8.63)***	***(8.63)***	***(7.02)***	***(5.92)***	***(5.12)***	***(4.25)***	***(3.47)***	—	
Output Torque in•lbs	86990	86545	86990	86545	86990	86990	86545	94690	94690	94690	94690	94690	94690	—	
(N•m)	*(9830)*	*(9780)*	*(9830)*	*(9780)*	*(9830)*	*(9830)*	*(9780)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	—	
Hollow Shaft OHL lbs	19400	19420	19400	19420	19400	19400	19420	18995	18995	18995	18995	18995	18995	—	4E175
(N)	*(86300)*	*(86400)*	*(86300)*	*(86400)*	*(86300)*	*(86300)*	*(86400)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	—	
Solid Shaft OHL lbs	20980	21190	21360	21480	21610	21700	21740	21790	21870	21920	21920	21920	21920	—	
(N)	*(93310)*	*(94250)*	*(95000)*	*(95540)*	*(96120)*	*(96520)*	*(96690)*	*(96920)*	*(97270)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	—	
Input Power HP	**25.9**	**22.9**	**20.9**	**19.2**	**17.6**	**15.2**	**13.7**	**12.6**	**10.2**	**8.61**	**7.44**	**6.18**	**5.04**	—	
(kW)	***(19.3)***	***(17.1)***	***(15.6)***	***(14.3)***	***(13.1)***	***(11.3)***	***(10.2)***	***(9.36)***	***(7.62)***	***(6.42)***	***(5.55)***	***(4.61)***	***(3.76)***	—	
Output Torque in•lbs	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	
Hollow Shaft OHL lbs	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	—	4E180
(N)	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	20980	21190	21360	21480	21610	21700	21740	21790	21870	21920	21920	21920	21920	—	
(N)	*(93310)*	*(94250)*	*(95000)*	*(95540)*	*(96120)*	*(96520)*	*(96690)*	*(96920)*	*(97270)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	—	
Input Power HP	**25.9**	**22.9**	**20.9**	**19.2**	**17.6**	**15.2**	**13.7**	**12.6**	**10.2**	**8.61**	**7.44**	**6.18**	**5.04**	—	
(kW)	***(19.3)***	***(17.1)***	***(15.6)***	***(14.3)***	***(13.1)***	***(11.3)***	***(10.2)***	***(9.36)***	***(7.62)***	***(6.42)***	***(5.55)***	***(4.61)***	***(3.76)***	—	
Output Torque in•lbs	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	
Hollow Shaft OHL lbs	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	—	4E185
(N)	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	20980	21190	21360	21480	21610	21700	21740	21790	21870	21920	21920	21920	21920	—	
(N)	*(93310)*	*(94250)*	*(95000)*	*(95540)*	*(96120)*	*(96520)*	*(96690)*	*(96920)*	*(97270)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	—	

Frame Size Selection Tables 870 RPM

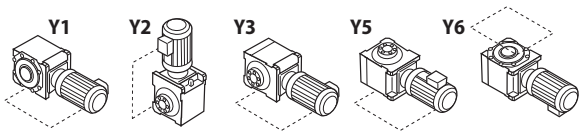
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	79.1	66.9	62.1	54.4	48.3	41.4	39.5	34.8	31.1	24.9	22.3	18.9	16.4	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	**91.7**	**91.7**	**91.7**	**88.9**	**81.9**	**62.6**	**55.4**	**55.4**	**49.2**	**43.7**	**40.0**	**33.8**	**29.2**	
(kW)	***(68.4)***	***(68.4)***	***(68.4)***	***(66.3)***	***(61.1)***	***(46.7)***	***(41.3)***	***(41.3)***	***(36.7)***	***(32.6)***	***(29.8)***	***(25.2)***	***(21.8)***	
Output Torque in•lbs	64335	78418	85764	94703	95588	87888	82830	90278	92048	102665	102665	102665	102665	
(N•m)	*(7270)*	*(8860)*	*(9690)*	*(10700)*	*(10800)*	*(9930)*	*(9360)*	*(10200)*	*(10400)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	4E190
Hollow Shaft OHL lbs	11655	11645	11575	11620	12095	13735	14500	14500	15265	16025	16680	17915	18430	
(N)	*(51900)*	*(51800)*	*(51500)*	*(51700)*	*(53800)*	*(61100)*	*(64500)*	*(64500)*	*(67900)*	*(71300)*	*(74200)*	*(79700)*	*(82000)*	
Solid Shaft OHL lbs	10510	11500	11920	12780	13530	14630	14950	15790	16660	18610	19450	20370	20710	
(N)	*(46740)*	*(51150)*	*(53020)*	*(56840)*	*(60180)*	*(65070)*	*(66490)*	*(70230)*	*(74100)*	*(82770)*	*(86510)*	*(90600)*	*(92110)*	
Input Power HP	**99.9**	**100.3**	**92.4**	**88.9**	**81.9**	**63.8**	**56.5**	**56.5**	**50.2**	**43.7**	**40.0**	**33.8**	**29.2**	
(kW)	***(74.5)***	***(74.8)***	***(68.9)***	***(66.3)***	***(61.1)***	***(47.6)***	***(42.1)***	***(42.1)***	***(37.4)***	***(32.6)***	***(29.8)***	***(25.2)***	***(21.8)***	
Output Torque in•lbs	70095	85760	86470	94700	95585	89390	84425	92045	93815	102665	102665	102665	102665	
(N•m)	*(7920)*	*(9690)*	*(9770)*	*(10700)*	*(10800)*	*(10100)*	*(9540)*	*(10400)*	*(10600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	4E195
Hollow Shaft OHL lbs	11240	11105	11530	11620	12095	13600	14385	14365	15130	16025	16680	17915	18430	
(N)	*(50000)*	*(49400)*	*(51300)*	*(51700)*	*(53800)*	*(60500)*	*(64000)*	*(63900)*	*(67300)*	*(71300)*	*(74200)*	*(79700)*	*(82000)*	
Solid Shaft OHL lbs	10510	11500	11920	12780	13530	14630	14950	15790	16660	18610	19450	20370	20710	
(N)	*(46740)*	*(51150)*	*(53020)*	*(56840)*	*(60180)*	*(65070)*	*(66490)*	*(70230)*	*(74100)*	*(82770)*	*(86510)*	*(90600)*	*(92110)*	
Input Power HP	**66.5**	**66.5**	**66.5**	**66.5**	**66.5**	**50.2**	**44.5**	**44.5**	**39.6**	**47.5**	**47.5**	**40.1**	**34.9**	
(kW)	***(49.6)***	***(49.6)***	***(49.6)***	***(49.6)***	***(49.6)***	***(37.4)***	***(33.2)***	***(33.2)***	***(29.5)***	***(35.4)***	***(35.4)***	***(29.9)***	***(26.0)***	
Output Torque in•lbs	46635	56900	62210	71060	77695	70350	66635	72830	73980	111500	122120	122120	122120	
(N•m)	*(5270)*	*(6430)*	*(7030)*	*(8030)*	*(8780)*	*(7950)*	*(7530)*	*(8230)*	*(8360)*	*(12600)*	*(13800)*	*(13800)*	*(13800)*	4F180
Hollow Shaft OHL lbs	24050	24950	25400	26075	26525	28775	29225	29000	29000	27425	26975	26975	26975	
(N)	*(107000)*	*(111000)*	*(113000)*	*(116000)*	*(118000)*	*(128000)*	*(130000)*	*(129000)*	*(129000)*	*(122000)*	*(120000)*	*(120000)*	*(120000)*	
Solid Shaft OHL lbs	18730	20390	21090	22490	23720	25560	26130	27560	28600	28930	28950	28970	28970	
(N)	*(83310)*	*(90690)*	*(93800)*	*(100030)*	*(105500)*	*(113690)*	*(116220)*	*(122580)*	*(127210)*	*(128680)*	*(128760)*	*(128850)*	*(128850)*	
Input Power HP	**66.5**	**66.5**	**66.5**	**66.5**	**66.5**	**51.0**	**45.2**	**45.2**	**40.2**	**54.2**	**54.2**	**48.5**	**36.5**	
(kW)	***(49.6)***	***(49.6)***	***(49.6)***	***(49.6)***	***(49.6)***	***(38.0)***	***(33.7)***	***(33.7)***	***(30.0)***	***(40.4)***	***(40.4)***	***(36.2)***	***(27.2)***	
Output Torque in•lbs	46635	56900	62210	71060	77695	71500	67610	73980	75220	127430	138935	147785	128315	
(N•m)	*(5270)*	*(6430)*	*(7030)*	*(8030)*	*(8780)*	*(8080)*	*(7640)*	*(8360)*	*(8500)*	*(14400)*	*(15700)*	*(16700)*	*(14500)*	4F185
Hollow Shaft OHL lbs	24050	24950	25400	26075	26525	28775	29225	29000	29000	26750	26075	25850	26525	
(N)	*(107000)*	*(111000)*	*(113000)*	*(116000)*	*(118000)*	*(128000)*	*(130000)*	*(129000)*	*(129000)*	*(119000)*	*(116000)*	*(115000)*	*(118000)*	
Solid Shaft OHL lbs	18730	20390	21090	22490	23720	25560	26130	27560	28600	28930	28950	28970	28970	
(N)	*(83310)*	*(90690)*	*(93800)*	*(100030)*	*(105500)*	*(113690)*	*(116220)*	*(122580)*	*(127210)*	*(128680)*	*(128760)*	*(128850)*	*(128850)*	
Input Power HP	**91.7**	**91.7**	**91.7**	**91.7**	**91.7**	**62.6**	**55.4**	**55.4**	**49.2**	**67.7**	**62.0**	**52.4**	**45.5**	
(kW)	***(68.4)***	***(68.4)***	***(68.4)***	***(68.4)***	***(68.4)***	***(46.7)***	***(41.3)***	***(41.3)***	***(36.7)***	***(50.5)***	***(46.2)***	***(39.1)***	***(33.9)***	
Output Torque in•lbs	64335	78405	85750	98230	107080	87875	82830	90265	92035	159290	159290	159290	159290	
(N•m)	*(7270)*	*(8860)*	*(9690)*	*(11100)*	*(12100)*	*(9930)*	*(9360)*	*(10200)*	*(10400)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	4F190
Hollow Shaft OHL lbs	22930	23605	23825	24275	24500	27650	28550	28325	28100	25175	25175	25175	25175	
(N)	*(102000)*	*(105000)*	*(106000)*	*(108000)*	*(109000)*	*(123000)*	*(127000)*	*(126000)*	*(125000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	
Solid Shaft OHL lbs	18730	20390	21090	22490	23720	25560	26130	27560	28600	28930	28950	28970	28970	
(N)	*(83310)*	*(90690)*	*(93800)*	*(100030)*	*(105500)*	*(113690)*	*(116220)*	*(122580)*	*(127210)*	*(128680)*	*(128760)*	*(128850)*	*(128850)*	
Input Power HP	**99.9**	**101**	**101**	**95.2**	**95.2**	**63.8**	**56.5**	**56.5**	**50.2**	**67.7**	**62.0**	**52.4**	**45.5**	
(kW)	***(74.5)***	***(75.0)***	***(75.0)***	***(71.0)***	***(71.0)***	***(47.6)***	***(42.1)***	***(42.1)***	***(37.4)***	***(50.5)***	***(46.2)***	***(39.1)***	***(33.9)***	
Output Torque in•lbs	70085	86015	93805	101780	111515	89380	84425	92035	93805	159290	159290	159290	159290	
(N•m)	*(7920)*	*(9720)*	*(10600)*	*(11500)*	*(12600)*	*(10100)*	*(9540)*	*(10400)*	*(10600)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	4F195
Hollow Shaft OHL lbs	22480	23155	23380	24055	24275	27425	28325	28100	28100	25175	25175	25175	25175	
(N)	*(100000)*	*(103000)*	*(104000)*	*(107000)*	*(108000)*	*(122000)*	*(126000)*	*(125000)*	*(125000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	
Solid Shaft OHL lbs	18730	20390	21090	22490	23720	25560	26130	27560	28600	28930	28950	28970	28970	
(N)	*(83310)*	*(90690)*	*(93800)*	*(100030)*	*(105500)*	*(113690)*	*(116220)*	*(122580)*	*(127210)*	*(128680)*	*(128760)*	*(128850)*	*(128850)*	

Frame Size Selection Tables 870 RPM



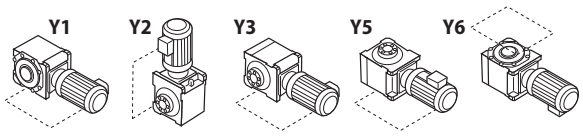
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	14.5	13.0	11.8	10.9	9.89	8.53	7.77	7.07	5.76	4.86	4.20	3.49	2.85	2.09	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	**25.9**	**22.9**	**20.9**	**19.2**	**17.6**	**15.2**	**13.7**	**12.6**	**10.2**	**8.61**	**7.44**	**6.18**	**5.04**	—	4E190
(kW)	***(19.3)***	***(17.1)***	***(15.6)***	***(14.3)***	***(13.1)***	***(11.3)***	***(10.2)***	***(9.36)***	***(7.62)***	***(6.42)***	***(5.55)***	***(4.61)***	***(3.76)***	—	
Output Torque in•lbs	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	
Hollow Shaft OHL lbs	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	—	
(N)	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	20980	21190	21360	21480	21610	21700	21740	21790	21870	21920	21920	21920	21920	—	
(N)	*(93310)*	*(94250)*	*(95000)*	*(95540)*	*(96120)*	*(96520)*	*(96690)*	*(96920)*	*(97270)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	—	
Input Power HP	**25.9**	**22.9**	**20.9**	**19.2**	**17.6**	**15.2**	**13.7**	**12.6**	**10.2**	**8.61**	**7.44**	**6.18**	**5.04**	—	4E195
(kW)	***(19.3)***	***(17.1)***	***(15.6)***	***(14.3)***	***(13.1)***	***(11.3)***	***(10.2)***	***(9.36)***	***(7.62)***	***(6.42)***	***(5.55)***	***(4.61)***	***(3.76)***	—	
Output Torque in•lbs	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	
Hollow Shaft OHL lbs	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	—	
(N)	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	20980	21190	21360	21480	21610	21700	21740	21790	21870	21920	21920	21920	21920	—	
(N)	*(93310)*	*(94250)*	*(95000)*	*(95540)*	*(96120)*	*(96520)*	*(96690)*	*(96920)*	*(97270)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	—	
Input Power HP	**30.7**	**24.8**	**24.8**	**20.8**	**20.8**	**18.0**	**14.9**	**14.9**	**12.1**	**10.2**	**8.82**	**7.34**	**6.01**	—	4F180
(kW)	***(22.9)***	***(18.5)***	***(18.5)***	***(15.5)***	***(15.5)***	***(13.4)***	***(11.1)***	***(11.1)***	***(9.05)***	***(7.62)***	***(6.58)***	***(5.47)***	***(4.48)***	—	
Output Torque in•lbs	122120	111500	122120	110620	121235	122120	111500	122120	122120	122120	122120	122120	122120	—	
(N•m)	*(13800)*	*(12600)*	*(13800)*	*(12500)*	*(13700)*	*(13800)*	*(12600)*	*(13800)*	*(13800)*	*(13800)*	*(13800)*	*(13800)*	*(13800)*	—	
Hollow Shaft OHL lbs	26975	27425	26975	27425	26975	26975	27425	26975	26975	26975	26975	26975	26975	—	
(N)	*(120000)*	*(122000)*	*(120000)*	*(122000)*	*(120000)*	*(120000)*	*(122000)*	*(120000)*	*(120000)*	*(120000)*	*(120000)*	*(120000)*	*(120000)*	—	
Solid Shaft OHL lbs	28970	28970	28970	28970	28970	29130	29220	29290	29440	29530	29530	29530	29530	—	
(N)	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(129570)*	*(129970)*	*(130280)*	*(130940)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	—	
Input Power HP	**34.6**	**30.6**	**30.6**	**25.7**	**25.7**	**22.1**	**18.4**	**18.4**	**15.0**	**12.6**	**10.9**	**8.18**	**7.39**	—	4F185
(kW)	***(25.8)***	***(22.8)***	***(22.8)***	***(19.2)***	***(19.2)***	***(16.5)***	***(13.7)***	***(13.7)***	***(11.2)***	***(9.40)***	***(8.13)***	***(6.10)***	***(5.51)***	—	
Output Torque in•lbs	137165	137165	150440	137165	150440	149555	137165	150440	151325	150440	150440	135395	150440	—	
(N•m)	*(15500)*	*(15500)*	*(17000)*	*(15500)*	*(17000)*	*(16900)*	*(15500)*	*(17000)*	*(17100)*	*(17000)*	*(17000)*	*(15300)*	*(17000)*	—	
Hollow Shaft OHL lbs	26300	26300	25625	26300	25625	25625	26300	25625	25625	25625	25625	26300	25625	—	
(N)	*(117000)*	*(117000)*	*(114000)*	*(117000)*	*(114000)*	*(114000)*	*(117000)*	*(114000)*	*(114000)*	*(114000)*	*(114000)*	*(117000)*	*(114000)*	—	
Solid Shaft OHL lbs	28970	28970	28970	28970	28970	29130	29220	29290	29440	29530	29530	29530	29530	—	
(N)	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(129570)*	*(129970)*	*(130280)*	*(130940)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	—	
Input Power HP	**40.1**	**35.5**	**32.5**	**29.8**	**27.2**	**23.5**	**21.3**	**19.4**	**15.8**	**13.4**	**11.5**	**9.60**	**7.83**	—	4F190
(kW)	***(29.9)***	***(26.5)***	***(24.2)***	***(22.2)***	***(20.3)***	***(17.5)***	***(15.9)***	***(14.5)***	***(11.8)***	***(10.0)***	***(8.60)***	***(7.20)***	***(5.80)***	—	
Output Torque in•lbs	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	—	
(N•m)	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	—	
Hollow Shaft OHL lbs	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	—	
(N)	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	—	
Solid Shaft OHL lbs	28970	28970	28970	28970	28970	29130	29220	29290	29440	29530	29530	29530	29530	—	
(N)	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(129570)*	*(129970)*	*(130280)*	*(130940)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	—	
Input Power HP	**40.1**	**35.5**	**32.5**	**29.8**	**27.2**	**23.5**	**21.3**	**19.4**	**15.8**	**13.4**	**11.5**	**9.60**	**7.83**	—	4F195
(kW)	***(29.9)***	***(26.5)***	***(24.2)***	***(22.2)***	***(20.3)***	***(17.5)***	***(15.9)***	***(14.5***	***(11.8)***	***(10.0)***	***(8.61)***	***(7.16)***	***(5.84)***	—	
Output Torque in•lbs	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	—	
(N•m)	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	—	
Hollow Shaft OHL lbs	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	—	
(N)	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	—	
Solid Shaft OHL lbs	28970	28970	28970	28970	28970	29130	29220	29290	29440	29530	29530	29530	29530	—	
(N)	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(129570)*	*(129970)*	*(130280)*	*(130940)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	—	

Frame Size Selection Tables 720 RPM

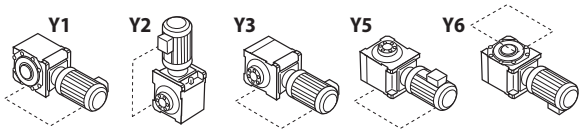
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	65.5	55.4	51.4	45.0	40.0	34.3	32.7	28.8	25.7	20.6	18.5	15.7	13.6	Frame Size
Ratio	**11**	**13**	**14**	**16**	**18**	**21**	**22**	**25**	**28**	**35**	**39**	**46**	**53**	
Input Power HP	**3.03**	**3.03**	**3.03**	**3.03**	**3.03**	**3.03**	**—**	**—**	**2.95**	**2.41**	**2.41**	**2.05**	**1.77**	
(kW)	***(2.26)***	***(2.26)***	***(2.26)***	***(2.26)***	***(2.26)***	***(2.26)***	**—**	**—**	***(2.20)***	***(1.80)***	***(1.80)***	***(1.53)***	***(1.32)***	
Output Torque in•lbs	2565	3120	3415	3910	4270	5130	—	—	6660	6865	7510	7510	7510	**4A100**
(N•m)	*(290)*	*(353)*	*(386)*	*(442)*	*(483)*	*(580)*	—	—	*(753)*	*(776)*	*(849)*	*(849)*	*(849)*	
Hollow Shaft OHL lbs	4695	4920	5035	5190	5305	5505	—	—	5325	5260	5055	5055	5055	
(N)	*(20900)*	*(21900)*	*(22400)*	*(23100)*	*(23600)*	*(24500)*	—	—	*(23700)*	*(23400)*	*(22500)*	*(22500)*	*(22500)*	
Solid Shaft OHL lbs	3900	4180	4300	4510	4540	4580	—	—	4580	4580	4580	4580	4580	
(N)	*(17340)*	*(18590)*	*(19120)*	*(20060)*	*(20190)*	*(20370)*	—	—	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**3.03**	**3.03**	**3.03**	**3.03**	**3.03**	**3.03**	**—**	**—**	**2.95**	**2.98**	**2.98**	**2.45**	**2.13**	
(kW)	***(2.26)***	***(2.26)***	***(2.26)***	***(2.26)***	***(2.26)***	***(2.26)***	**—**	**—**	***(2.20)***	***(2.22)***	***(2.22)***	***(1.83)***	***(1.59)***	
Output Torque in•lbs	2565	3120	3415	3910	4270	5130	—	—	6660	8450	9290	9025	9025	**4A105**
(N•m)	*(290)*	*(353)*	*(386)*	*(442)*	*(483)*	*(580)*	—	—	*(753)*	*(955)*	*(1050)*	*(1020)*	*(1020)*	
Hollow Shaft OHL lbs	4695	4920	5035	5190	5305	5505	—	—	5325	4740	4405	4515	4515	
(N)	*(20900)*	*(21900)*	*(22400)*	*(23100)*	*(23600)*	*(24500)*	—	—	*(23700)*	*(21100)*	*(19600)*	*(20100)*	*(20100)*	
Solid Shaft OHL lbs	3900	4180	4300	4510	4540	4580	—	—	4580	4580	4580	4580	4580	
(N)	*(17340)*	*(18590)*	*(19120)*	*(20060)*	*(20190)*	*(20370)*	—	—	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**—**	**—**	**—**	**—**	**—**	**3.43**	**—**	**—**	**4.76**	**3.49**	**3.49**	**2.95**	**2.55**	
(kW)	**—**	**—**	**—**	**—**	**—**	***(2.56)***	**—**	**—**	***(3.55)***	***(2.60)***	***(2.60)***	***(2.20)***	***(1.90)***	
Output Torque in•lbs	—	—	—	—	—	5810	—	—	10795	9910	10795	10795	10795	**4A110**
(N•m)	—	—	—	—	—	*(657)*	—	—	*(1220)*	*(1120)*	*(1220)*	*(1220)*	*(1220)*	
Hollow Shaft OHL lbs	—	—	—	—	—	5415	—	—	3595	4090	3550	3550	3550	
(N)	—	—	—	—	—	*(24100)*	—	—	*(16000)*	*(18200)*	*(15800)*	*(15800)*	*(15800)*	
Solid Shaft OHL lbs	—	—	—	—	—	4580	—	—	4580	4580	4580	4580	4580	
(N)	—	—	—	—	—	*(20370)*	—	—	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**—**	**—**	**—**	**—**	**—**	**3.43**	**—**	**—**	**4.76**	**4.02**	**3.67**	**3.11**	**2.70**	
(kW)	**—**	**—**	**—**	**—**	**—**	***(2.56)***	**—**	**—**	***(3.55)***	***(3.00)***	***(2.74)***	***(2.32)***	***(2.01)***	
Output Torque in•lbs	—	—	—	—	—	5810	—	—	10755	11415	11415	11415	11415	**4A115**
(N•m)	—	—	—	—	—	*(657)*	—	—	*(1215)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	
Hollow Shaft OHL lbs	—	—	—	—	—	5415	—	—	3120	3120	3120	3120	3120	
(N)	—	—	—	—	—	*(24100)*	—	—	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	—	—	—	—	—	4580	—	—	4580	4580	4580	4580	4580	
(N)	—	—	—	—	—	*(20370)*	—	—	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**9.76**	**9.66**	**9.66**	**8.84**	**8.09**	**6.50**	**6.30**	**5.78**	**5.06**	**4.02**	**3.67**	**3.11**	**2.70**	
(kW)	***(7.28)***	***(7.20)***	***(7.20)***	***(6.59)***	***(6.03)***	***(4.85)***	***(4.70)***	***(4.31)***	***(3.77)***	***(3.00)***	***(2.74)***	***(2.32)***	***(2.01)***	
Output Torque in•lbs	8265	10000	10885	11415	11415	10970	11415	11415	11415	11415	11415	11415	11415	**4A120**
(N•m)	*(934)*	*(1130)*	*(1230)*	*(1290)*	*(1290)*	*(1240)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	
Hollow Shaft OHL lbs	3910	3975	3505	3120	3120	3415	3145	3120	3120	3120	3120	3120	3120	
(N)	*(17400)*	*(17700)*	*(15600)*	*(13900)*	*(13900)*	*(15200)*	*(14000)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	3900	4180	4300	4510	4540	4580	4580	4580	4580	4580	4580	4580	4580	
(N)	*(17340)*	*(18590)*	*(19120)*	*(20060)*	*(20190)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**9.80**	**9.66**	**9.66**	**8.84**	**8.09**	**6.50**	**6.30**	**5.78**	**5.06**	**4.02**	**3.67**	**3.11**	**2.70**	
(kW)	***(7.28)***	***(7.20)***	***(7.20)***	***(6.59)***	***(6.03)***	***(4.85)***	***(4.70)***	***(4.31)***	***(3.77)***	***(3.00)***	***(2.74)***	***(2.32)***	***(2.01)***	
Output Torque in•lbs	8265	10000	10885	11415	11415	10970	11415	11415	11415	11415	11415	11415	11415	**4A125**
(N•m)	*(934)*	*(1130)*	*(1230)*	*(1290)*	*(1290)*	*(1240)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	
Hollow Shaft OHL lbs	3910	3975	3505	3120	3120	3415	3145	3120	3120	3120	3120	3120	3120	
(N)	*(17400)*	*(17700)*	*(15600)*	*(13900)*	*(13900)*	*(15200)*	*(14000)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	3900	4180	4300	4510	4540	4580	4580	4580	4580	4580	4580	4580	4580	
(N)	*(17340)*	*(18590)*	*(19120)*	*(20060)*	*(20190)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	

Frame Size Selection Tables 720 RPM



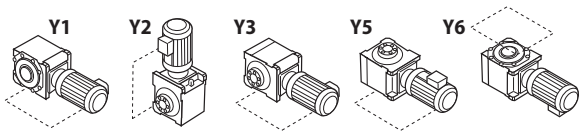
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	12.0	10.7	9.73	9.00	8.18	7.06	6.43	5.85	4.77	4.02	3.48	2.89	2.36	1.73	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	**1.57**	**1.27**	**1.27**	**1.06**	**1.06**	**0.920**	**0.760**	**0.760**	**0.620**	**0.522**	**0.451**	**0.374**	**0.306**	**0.224**	
(kW)	***(1.17)***	***(0.945)***	***(0.945)***	***(0.794)***	***(0.794)***	***(0.684)***	***(0.567)***	***(0.567)***	***(0.461)***	***(0.389)***	***(0.336)***	***(0.279)***	***(0.228)***	***(0.167)***	
Output Torque in•lbs	7510	6865	7510	6865	7510	7510	6865	7510	7510	7510	7510	7510	7510	7510	**4A100**
(N•m)	*(849)*	*(776)*	*(849)*	*(776)*	*(849)*	*(849)*	*(776)*	*(849)*	*(849)*	*(849)*	*(849)*	*(849)*	*(849)*	*(849)*	
Hollow Shaft OHL lbs	5055	5260	5055	5260	5055	5055	5260	5055	5055	5055	5055	5055	5055	5055	
(N)	*(22500)*	*(23400)*	*(22500)*	*(23400)*	*(22500)*	*(22500)*	*(23400)*	*(22500)*	*(22500)*	*(22500)*	*(22500)*	*(22500)*	*(22500)*	*(22500)*	
Solid Shaft OHL lbs	4580	4580	4570	4570	4560	4550	4550	4540	4540	4540	4540	4540	4540	4540	
(N)	*(20370)*	*(20370)*	*(20320)*	*(20320)*	*(20280)*	*(20230)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	
Input Power HP	**1.88**	**1.52**	**1.52**	**1.28**	**1.28**	**1.10**	**0.910**	**0.910**	**0.740**	**0.620**	**0.534**	**0.396**	**0.367**	**0.231**	
(kW)	***(1.4)***	***(1.13)***	***(1.13)***	***(0.952)***	***(0.952)***	***(0.821)***	***(0.68)***	***(0.68)***	***(0.554)***	***(0.462)***	***(0.398)***	***(0.295)***	***(0.274)***	***(0.172)***	
Output Torque in•lbs	9025	8245	9025	8245	9025	9025	8245	9025	9025	8935	8935	7935	9025	7765	**4A105**
(N•m)	*(1020)*	*(932)*	*(1020)*	*(932)*	*(1020)*	*(1020)*	*(932)*	*(1020)*	*(1020)*	*(1010)*	*(1010)*	*(897)*	*(1020)*	*(878)*	
Hollow Shaft OHL lbs	4515	4810	4515	4810	4515	4515	4810	4515	4515	4540	4560	4920	4515	4990	
(N)	*(20100)*	*(21400)*	*(20100)*	*(21400)*	*(20100)*	*(20100)*	*(21400)*	*(20100)*	*(20100)*	*(20200)*	*(20300)*	*(21900)*	*(20100)*	*(22200)*	
Solid Shaft OHL lbs	4580	4580	4570	4570	4560	4550	4550	4540	4540	4540	4540	4540	4540	4540	
(N)	*(20370)*	*(20370)*	*(20320)*	*(20320)*	*(20280)*	*(20230)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	
Input Power HP	**2.25**	**1.82**	**1.82**	**1.53**	**1.53**	**1.32**	**1.09**	**1.09**	**0.890**	**0.750**	**0.650**	**0.539**	**0.440**	**—**	
(kW)	***(1.68)***	***(1.36)***	***(1.36)***	***(1.14)***	***(1.14)***	***(0.985)***	***(0.816)***	***(0.816)***	***(0.664)***	***(0.56)***	***(0.484)***	***(0.402)***	***(0.328)***	**—**	
Output Torque in•lbs	10795	9910	10795	9910	10795	10795	9910	10795	10795	10795	10795	10795	10795	—	**4A110**
(N•m)	*(1220)*	*(1120)*	*(1220)*	*(1120)*	*(1220)*	*(1220)*	*(1120)*	*(1220)*	*(1220)*	*(1220)*	*(1220)*	*(1220)*	*(1220)*	—	
Hollow Shaft OHL lbs	3550	4090	3550	4090	3550	3550	4090	3550	3550	3550	3550	3550	3550	—	
(N)	*(15800)*	*(18200)*	*(15800)*	*(18200)*	*(15800)*	*(15800)*	*(18200)*	*(15800)*	*(15800)*	*(15800)*	*(15800)*	*(15800)*	*(15800)*	—	
Solid Shaft OHL lbs	4580	4580	4570	4570	4560	4550	4550	4540	4540	4540	4540	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20320)*	*(20320)*	*(20280)*	*(20230)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	
Input Power HP	**2.37**	**2.11**	**1.93**	**1.77**	**1.62**	**1.39**	**1.26**	**1.15**	**0.940**	**0.790**	**0.690**	**0.570**	**0.464**	**—**	
(kW)	***(1.77)***	***(1.57)***	***(1.44)***	***(1.32)***	***(1.21)***	***(1.04)***	***(0.942)***	***(0.861)***	***(0.701)***	***(0.591)***	***(0.511)***	***(0.424)***	***(0.346)***	**—**	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	**4A115**
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4580	4580	4570	4570	4560	4550	4550	4540	4540	4540	4540	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20320)*	*(20320)*	*(20280)*	*(20230)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	
Input Power HP	**2.37**	**2.11**	**1.93**	**1.77**	**1.62**	**1.39**	**1.26**	**1.15**	**0.940**	**0.790**	**0.690**	**0.570**	**0.464**	**—**	
(kW)	***(1.77)***	***(1.57)***	***(1.44)***	***(1.32)***	***(1.21)***	***(1.04)***	***(0.942)***	***(0.861)***	***(0.701)***	***(0.591)***	***(0.511)***	***(0.424)***	***(0.346)***	**—**	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	**4A120**
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4580	4580	4570	4570	4560	4550	4550	4540	4540	4540	4540	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20320)*	*(20320)*	*(20280)*	*(20230)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	
Input Power HP	**2.37**	**2.11**	**1.93**	**1.77**	**1.62**	**1.39**	**1.26**	**1.15**	**0.940**	**0.790**	**0.690**	**0.570**	**0.464**	**—**	
(kW)	***(1.77)***	***(1.57)***	***(1.44)***	***(1.32)***	***(1.21)***	***(1.04)***	***(0.942)***	***(0.861)***	***(0.701)***	***(0.591)***	***(0.511)***	***(0.424)***	***(0.346)***	**—**	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	**4A125**
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4580	4580	4570	4570	4560	4550	4550	4540	4540	4540	4540	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20320)*	*(20320)*	*(20280)*	*(20230)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	

Frame Size Selection Tables 720 RPM

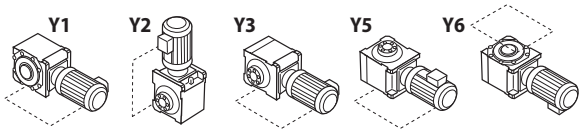
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	65.5	55.4	51.4	45.0	40.0	34.3	32.7	28.8	25.7	20.6	18.5	15.7	13.6	Frame Size
Ratio	**11**	**13**	**14**	**16**	**18**	**21**	**22**	**25**	**28**	**35**	**39**	**46**	**53**	
Input Power HP	**13.4**	**11.1**	**10.1**	**8.80**	**8.09**	**6.73**	**6.32**	**5.78**	**5.06**	**4.02**	**3.67**	**3.11**	**2.70**	
(kW)	***(10.0)***	***(8.24)***	***(7.53)***	***(6.59)***	***(6.03)***	***(5.02)***	***(4.71)***	***(4.31)***	***(3.77)***	***(3.00)***	***(2.74)***	***(2.32)***	***(2.01)***	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	**4A140**
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	3900	4180	4300	4510	4540	4580	4580	4580	4580	4580	4580	4580	4580	
(N)	*(17340)*	*(18590)*	*(19120)*	*(20060)*	*(20190)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**13.4**	**11.1**	**10.1**	**8.80**	**8.09**	**6.73**	**6.32**	**5.78**	**5.06**	**4.02**	**3.67**	**3.11**	**2.70**	
(kW)	***(10.0)***	***(8.24)***	***(7.53)***	***(6.59)***	***(6.03)***	***(5.02)***	***(4.71)***	***(4.31)***	***(3.77)***	***(3.00)***	***(2.74)***	***(2.32)***	***(2.01)***	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	**4A145**
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	3900	4180	4300	4510	4540	4580	4580	4580	4580	4580	4580	4580	4580	
(N)	*(17340)*	*(18590)*	*(19120)*	*(20060)*	*(20190)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**9.76**	**9.66**	**9.66**	**9.13**	**9.13**	**6.50**	**6.30**	**6.30**	**6.33**	**5.08**	**5.08**	**4.29**	**3.73**	
(kW)	***(7.28)***	***(7.20)***	***(7.20)***	***(6.81)***	***(6.81)***	***(4.85)***	***(4.70)***	***(4.70)***	***(4.72)***	***(3.79)***	***(3.79)***	***(3.20)***	***(2.78)***	
Output Torque in•lbs	8265	10000	10885	11765	12920	10970	11415	12475	14335	14420	15750	15750	15750	**4B120**
(N•m)	*(934)*	*(1130)*	*(1230)*	*(1330)*	*(1460)*	*(1240)*	*(1290)*	*(1410)*	*(1620)*	*(1630)*	*(1780)*	*(1780)*	*(1780)*	
Hollow Shaft OHL lbs	5910	6135	6245	6450	6540	7190	7305	7440	7595	8225	8250	8250	8250	
(N)	*(26300)*	*(27300)*	*(27800)*	*(28700)*	*(29100)*	*(32000)*	*(32500)*	*(33100)*	*(33800)*	*(36600)*	*(36700)*	*(36700)*	*(36700)*	
Solid Shaft OHL lbs	4220	4610	4790	5120	5460	5860	6000	6370	6700	7250	7360	7450	7510	
(N)	*(18770)*	*(20500)*	*(21300)*	*(22770)*	*(24280)*	*(26060)*	*(26680)*	*(28330)*	*(29800)*	*(32240)*	*(32730)*	*(33130)*	*(33400)*	
Input Power HP	**9.80**	**9.70**	**9.70**	**9.10**	**9.10**	**6.50**	**6.30**	**6.30**	**6.33**	**5.48**	**5.48**	**4.95**	**4.47**	
(kW)	***(7.28)***	***(7.20)***	***(7.20)***	***(6.81)***	***(6.81)***	***(4.85)***	***(4.70)***	***(4.70)***	***(4.72)***	***(4.09)***	***(4.09)***	***(3.69)***	***(3.33)***	
Output Torque in•lbs	8265	10000	10885	11765	12920	10970	11415	12475	14335	15575	17075	18230	18935	**4B125**
(N•m)	*(934)*	*(1130)*	*(1230)*	*(1330)*	*(1460)*	*(1240)*	*(1290)*	*(1410)*	*(1620)*	*(1760)*	*(1930)*	*(2060)*	*(2140)*	
Hollow Shaft OHL lbs	5910	6135	6245	6450	6540	7190	7305	7440	7595	8090	7910	7575	7325	
(N)	*(26300)*	*(27300)*	*(27800)*	*(28700)*	*(29100)*	*(32000)*	*(32500)*	*(33100)*	*(33800)*	*(36000)*	*(35200)*	*(33700)*	*(32600)*	
Solid Shaft OHL lbs	4220	4610	4790	5120	5460	5860	6000	6370	6700	7250	7360	7450	7510	
(N)	*(18770)*	*(20500)*	*(21300)*	*(22770)*	*(24280)*	*(26060)*	*(26680)*	*(28330)*	*(29800)*	*(32240)*	*(32730)*	*(33130)*	*(33400)*	
Input Power HP	**15.3**	**15.3**	**15.3**	**15.3**	**15.3**	**12.7**	**12.6**	**11.5**	**10.1**	**8.01**	**7.32**	**6.20**	**5.36**	
(kW)	***(11.4)***	***(11.4)***	***(11.4)***	***(11.4)***	***(11.4)***	***(9.48)***	***(9.38)***	***(8.58)***	***(7.51)***	***(5.97)***	***(5.46)***	***(4.62)***	***(4.00)***	
Output Torque in•lbs	12920	15750	17255	19730	21590	21590	22740	22740	22740	22740	22740	22740	22740	**4B140**
(N•m)	*(1460)*	*(1780)*	*(1950)*	*(2230)*	*(2440)*	*(2440)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	
Hollow Shaft OHL lbs	5415	5505	5575	5595	5620	6065	5710	5710	5710	5710	5710	5710	5710	
(N)	*(24100)*	*(24500)*	*(24800)*	*(24900)*	*(25000)*	*(27000)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	
Solid Shaft OHL lbs	4220	4610	4790	5120	5460	5860	6000	6370	6700	7250	7360	7450	7510	
(N)	*(18770)*	*(20500)*	*(21300)*	*(22770)*	*(24280)*	*(26060)*	*(26680)*	*(28330)*	*(29800)*	*(32240)*	*(32730)*	*(33130)*	*(33400)*	
Input Power HP	**15.3**	**15.3**	**15.3**	**15.3**	**15.3**	**12.7**	**12.6**	**11.5**	**10.1**	**8.01**	**7.32**	**6.20**	**5.36**	
(kW)	***(11.4)***	***(11.4)***	***(11.4)***	***(11.4)***	***(11.4)***	***(9.48)***	***(9.38)***	***(8.58)***	***(7.51)***	***(5.97)***	***(5.46)***	***(4.62)***	***(4.00)***	
Output Torque in•lbs	12920	15750	17255	19730	21590	21590	22740	22740	22740	22740	22740	22740	22740	**4B145**
(N•m)	*(1460)*	*(1780)*	*(1950)*	*(2230)*	*(2440)*	*(2440)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	
Hollow Shaft OHL lbs	5415	5505	5575	5595	5620	6065	5710	5710	5710	5710	5710	5710	5710	
(N)	*(24100)*	*(24500)*	*(24800)*	*(24900)*	*(25000)*	*(27000)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	
Solid Shaft OHL lbs	4220	4610	4790	5120	5460	5860	6000	6370	6700	7250	7360	7450	7510	
(N)	*(18770)*	*(20500)*	*(21300)*	*(22770)*	*(24280)*	*(26060)*	*(26680)*	*(28330)*	*(29800)*	*(32240)*	*(32730)*	*(33130)*	*(33400)*	

Frame Size Selection Tables 720 RPM



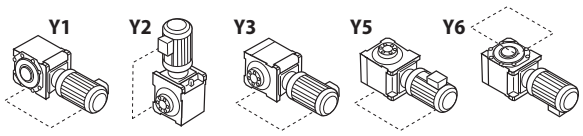
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	12.0	10.7	9.73	9.00	8.18	7.06	6.43	5.85	4.77	4.02	3.48	2.89	2.36	1.73	Frame Size
Ratio	**60**	**67**	**74**	**80**	**88**	**102**	**112**	**123**	**151**	**179**	**207**	**249**	**305**	**417**	
Input Power HP	**2.37**	**2.11**	**1.93**	**1.77**	**1.62**	**1.39**	**1.26**	**1.15**	**0.940**	**0.793**	**0.685**	**0.569**	**0.464**	**—**	
(kW)	***(1.77)***	***(1.57)***	***(1.44)***	***(1.32)***	***(1.21)***	***(1.04)***	***(0.942)***	***(0.861)***	***(0.701)***	***(0.591)***	***(0.511)***	***(0.424)***	***(0.346)***	**—**	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	**4A140**
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4580	4580	4570	4570	4560	4550	4550	4540	4540	4540	4540	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20320)*	*(20320)*	*(20280)*	*(20230)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	
Input Power HP	**2.37**	**2.11**	**1.93**	**1.77**	**1.62**	**1.39**	**1.26**	**1.15**	**0.940**	**0.793**	**0.685**	**0.569**	**0.464**	**—**	
(kW)	***(1.77)***	***(1.57)***	***(1.44)***	***(1.32)***	***(1.21)***	***(1.04)***	***(0.942)***	***(0.861)***	***(0.701)***	***(0.591)***	***(0.511)***	***(0.424)***	***(0.346)***	**—**	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	**4A145**
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4580	4580	4570	4570	4560	4550	4550	4540	4540	4540	4540	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20320)*	*(20320)*	*(20280)*	*(20230)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	
Input Power HP	**3.26**	**2.64**	**2.64**	**2.24**	**2.24**	**1.90**	**1.60**	**1.60**	**1.30**	**1.10**	**0.950**	**0.787**	**0.642**	**—**	
(kW)	***(2.43)***	***(1.97)***	***(1.97)***	***(1.67)***	***(1.67)***	***(1.42)***	***(1.19)***	***(1.19)***	***(0.969)***	***(0.817)***	***(0.706)***	***(0.587)***	***(0.479)***	**—**	
Output Torque in•lbs	15660	14335	15660	14420	15750	15660	14420	15750	15750	15750	15750	15750	15750	—	
(N•m)	*(1770)*	*(1620)*	*(1770)*	*(1630)*	*(1780)*	*(1770)*	*(1630)*	*(1780)*	*(1780)*	*(1780)*	*(1780)*	*(1780)*	*(1780)*	—	**4B120**
Hollow Shaft OHL lbs	8295	8585	8270	8565	8250	8295	8565	8250	8250	8250	8250	8250	8250	—	
(N)	*(36900)*	*(38200)*	*(36800)*	*(38100)*	*(36700)*	*(36900)*	*(38100)*	*(36700)*	*(36700)*	*(36700)*	*(36700)*	*(36700)*	*(36700)*	—	
Solid Shaft OHL lbs	7560	7600	7600	7520	7440	7330	7260	7200	7120	7120	7120	7120	7120	—	
(N)	*(33620)*	*(33800)*	*(33800)*	*(33440)*	*(33090)*	*(32600)*	*(32290)*	*(32020)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	—	
Input Power HP	**3.94**	**3.19**	**3.19**	**2.68**	**2.68**	**2.31**	**1.92**	**1.92**	**1.56**	**1.31**	**1.14**	**0.890**	**0.771**	**—**	
(kW)	***(2.94)***	***(2.38)***	***(2.38)***	***(2.00)***	***(2.00)***	***(1.72)***	***(1.43)***	***(1.43)***	***(1.16)***	***(0.980)***	***(0.847)***	***(0.661)***	***(0.575)***	**—**	
Output Torque in•lbs	18935	17345	18935	17345	18935	18935	17345	18935	18935	18935	18935	17785	18935	—	
(N•m)	*(2140)*	*(1960)*	*(2140)*	*(1960)*	*(2140)*	*(2140)*	*(1960)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2010)*	*(2140)*	—	**4B125**
Hollow Shaft OHL lbs	7325	7845	7325	7845	7325	7325	7845	7325	7325	7325	7325	7685	7325	—	
(N)	*(32600)*	*(34900)*	*(32600)*	*(34900)*	*(32600)*	*(32600)*	*(34900)*	*(32600)*	*(32600)*	*(32600)*	*(32600)*	*(34200)*	*(32600)*	—	
Solid Shaft OHL lbs	7560	7600	7600	7520	7440	7330	7260	7200	7120	7120	7120	7120	7120	—	
(N)	*(33620)*	*(33800)*	*(33800)*	*(33440)*	*(33090)*	*(32600)*	*(32290)*	*(32020)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	—	
Input Power HP	**4.73**	**4.20**	**3.84**	**3.53**	**3.22**	**2.78**	**2.52**	**2.31**	**1.88**	**1.58**	**1.37**	**1.13**	**0.930**	**—**	
(kW)	***(3.53)***	***(3.13)***	***(2.86)***	***(2.63)***	***(2.40)***	***(2.07)***	***(1.88)***	***(1.72)***	***(1.40)***	***(1.18)***	***(1.02)***	***(0.846)***	***(0.690)***	**—**	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	—	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	—	**4B140**
Hollow Shaft OHL lbs	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	—	
(N)	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	—	
Solid Shaft OHL lbs	7560	7600	7600	7520	7440	7330	7260	7200	7120	7120	7120	7120	7120	—	
(N)	*(33620)*	*(33800)*	*(33800)*	*(33440)*	*(33090)*	*(32600)*	*(32290)*	*(32020)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	—	
Input Power HP	**4.73**	**4.20**	**3.84**	**3.53**	**3.22**	**2.78**	**2.52**	**2.31**	**1.88**	**1.58**	**1.37**	**1.13**	**0.930**	**—**	
(kW)	***(3.53)***	***(3.13)***	***(2.86)***	***(2.63)***	***(2.40)***	***(2.07)***	***(1.88)***	***(1.72)***	***(1.40)***	***(1.18)***	***(1.02)***	***(0.846)***	***(0.690)***	**—**	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	—	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	—	**4B145**
Hollow Shaft OHL lbs	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	—	
(N)	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	—	
Solid Shaft OHL lbs	7560	7600	7600	7520	7440	7330	7260	7200	7120	7120	7120	7120	7120	—	
(N)	*(33620)*	*(33800)*	*(33800)*	*(33440)*	*(33090)*	*(32600)*	*(32290)*	*(32020)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	—	

Frame Size Selection Tables 720 RPM

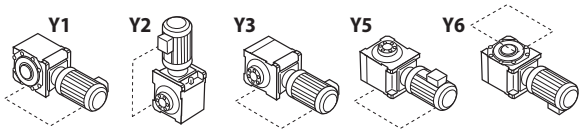
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	65.5	55.4	51.4	45.0	40.0	34.3	32.7	28.8	25.7	20.6	18.5	15.7	13.6	Frame Size
Ratio	**11**	**13**	**14**	**16**	**18**	**21**	**22**	**25**	**28**	**35**	**39**	**46**	**53**	
Input Power HP	**19.3**	**19.3**	**19.3**	**17.6**	**16.1**	**13.4**	**12.6**	**11.5**	**10.1**	**8.01**	**7.32**	**6.20**	**5.36**	
(kW)	***(14.4)***	***(14.4)***	***(14.4)***	***(13.1)***	***(12.0)***	***(10.0)***	***(9.38)***	***(8.58)***	***(7.51)***	***(5.97)***	***(5.46)***	***(4.62)***	***(4.00)***	
Output Torque in•lbs	16370	19910	21855	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(1850)*	*(2250)*	*(2470)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	**4B160**
Hollow Shaft OHL lbs	5055	5055	5080	5260	5485	5710	5710	5710	5710	5710	5710	5710	5710	
(N)	*(22500)*	*(22500)*	*(22600)*	*(23400)*	*(24400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	
Solid Shaft OHL lbs	4220	4610	4790	5120	5460	5860	6000	6370	6700	7250	7360	7450	7510	
(N)	*(18770)*	*(20500)*	*(21300)*	*(22770)*	*(24280)*	*(26060)*	*(26680)*	*(28330)*	*(29800)*	*(32240)*	*(32730)*	*(33130)*	*(33400)*	
Input Power HP	**19.3**	**19.3**	**19.3**	**17.6**	**16.1**	**13.4**	**12.6**	**11.5**	**10.1**	**8.01**	**7.32**	**6.20**	**5.36**	
(kW)	***(14.4)***	***(14.4)***	***(14.4)***	***(13.1)***	***(12.0)***	***(10.0)***	***(9.38)***	***(8.58)***	***(7.51)***	***(5.97)***	***(5.46)***	***(4.62)***	***(4.00)***	
Output Torque in•lbs	16370	19910	21855	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(1850)*	*(2250)*	*(2470)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	**4B165**
Hollow Shaft OHL lbs	5055	5055	5080	5260	5485	5710	5710	5710	5710	5710	5710	5710	5710	
(N)	*(22500)*	*(22500)*	*(22600)*	*(23400)*	*(24400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	
Solid Shaft OHL lbs	4220	4610	4790	5120	5460	5860	6000	6370	6700	7250	7360	7450	7510	
(N)	*(18770)*	*(20500)*	*(21300)*	*(22770)*	*(24280)*	*(26060)*	*(26680)*	*(28330)*	*(29800)*	*(32240)*	*(32730)*	*(33130)*	*(33400)*	
Input Power HP	**15.3**	**15.3**	**15.3**	**15.3**	**15.3**	**12.7**	**14.2**	**14.2**	**12.3**	**11.9**	**11.9**	**10.0**	**8.70**	
(kW)	***(11.4)***	***(11.4)***	***(11.4)***	***(11.4)***	***(11.4)***	***(9.48)***	***(10.6)***	***(10.6)***	***(9.20)***	***(8.84)***	***(8.84)***	***(7.48)***	***(6.48)***	
Output Torque in•lbs	12920	15750	17255	19730	21590	21590	25665	28140	27875	33625	36810	36810	36810	
(N•m)	*(1460)*	*(1780)*	*(1950)*	*(2230)*	*(2440)*	*(2440)*	*(2900)*	*(3180)*	*(3150)*	*(3800)*	*(4160)*	*(4160)*	*(4160)*	**4C140**
Hollow Shaft OHL lbs	8135	8430	8565	8745	8875	9485	9305	9395	9935	10250	10340	11060	11690	
(N)	*(36200)*	*(37500)*	*(38100)*	*(38900)*	*(39500)*	*(42200)*	*(41400)*	*(41800)*	*(44200)*	*(45600)*	*(46000)*	*(49200)*	*(52000)*	
Solid Shaft OHL lbs	5580	6130	6370	6840	7310	7870	8060	8610	9150	10050	10570	11320	11870	
(N)	*(24810)*	*(27260)*	*(28330)*	*(30420)*	*(32510)*	*(35000)*	*(35850)*	*(38290)*	*(40690)*	*(44700)*	*(47010)*	*(50350)*	*(52790)*	
Input Power HP	**15.3**	**15.3**	**15.3**	**15.3**	**15.3**	**12.7**	**14.2**	**14.2**	**12.3**	**12.5**	**12.5**	**11.2**	**9.60**	
(kW)	***(11.4)***	***(11.4)***	***(11.4)***	***(11.4)***	***(11.4)***	***(9.48)***	***(10.6)***	***(10.6)***	***(9.20)***	***(9.32)***	***(9.32)***	***(8.36)***	***(7.18)***	
Output Torque in•lbs	12920	15750	17255	19730	21590	21590	25750	28140	27875	35485	38845	41150	40795	
(N•m)	*(1460)*	*(1780)*	*(1950)*	*(2230)*	*(2440)*	*(2440)*	*(2910)*	*(3180)*	*(3150)*	*(4010)*	*(4390)*	*(4650)*	*(4610)*	**4C145**
Hollow Shaft OHL lbs	8135	8430	8565	8745	8875	9485	9305	9395	9935	10070	10135	10630	11060	
(N)	*(36200)*	*(37500)*	*(38100)*	*(38900)*	*(39500)*	*(42200)*	*(41400)*	*(41800)*	*(44200)*	*(44800)*	*(45100)*	*(47300)*	*(49200)*	
Solid Shaft OHL lbs	5580	6130	6370	6840	7310	7870	8060	8610	9150	10050	10570	11320	11870	
(N)	*(24810)*	*(27260)*	*(28330)*	*(30420)*	*(32510)*	*(35000)*	*(35850)*	*(38290)*	*(40690)*	*(44700)*	*(47010)*	*(50350)*	*(52790)*	
Input Power HP	**33.9**	**33.9**	**33.9**	**33.0**	**32.2**	**23.5**	**24.0**	**23.1**	**20.1**	**16.0**	**14.6**	**12.4**	**10.7**	
(kW)	***(25.3)***	***(25.3)***	***(25.3)***	***(24.6)***	***(24.0)***	***(17.5)***	***(17.9)***	***(17.2)***	***(15.0)***	***(11.9)***	***(10.9)***	***(9.24)***	***(8.01)***	
Output Torque in•lbs	28760	35040	38315	42655	45485	39820	43360	45485	45485	45485	45485	45485	45485	
(N•m)	*(3250)*	*(3960)*	*(4330)*	*(4820)*	*(5140)*	*(4500)*	*(4900)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	**4C160**
Hollow Shaft OHL lbs	6630	6585	6585	6560	6605	7755	7620	7755	8250	9125	9415	9415	9415	
(N)	*(29500)*	*(29300)*	*(29300)*	*(29200)*	*(29400)*	*(34500)*	*(33900)*	*(34500)*	*(36700)*	*(40600)*	*(41900)*	*(41900)*	*(41900)*	
Solid Shaft OHL lbs	5580	6130	6370	6840	7310	7870	8060	8610	9150	10050	10570	11320	11870	
(N)	*(24810)*	*(27260)*	*(28330)*	*(30420)*	*(32510)*	*(35000)*	*(35850)*	*(38290)*	*(40690)*	*(44700)*	*(47010)*	*(50350)*	*(52790)*	
Input Power HP	**34.1**	**34.1**	**34.1**	**33.0**	**32.2**	**23.5**	**24.0**	**23.1**	**20.1**	**16.0**	**14.6**	**12.4**	**10.7**	
(kW)	***(25.4)***	***(25.4)***	***(25.4)***	***(24.6)***	***(24.0)***	***(17.5)***	***(17.9)***	***(17.2)***	***(15.0)***	***(11.9)***	***(10.9)***	***(9.24)***	***(8.01)***	
Output Torque in•lbs	28845	35220	38495	42655	45485	39820	43360	45485	45485	45485	45485	45485	45485	
(N•m)	*(3260)*	*(3980)*	*(4350)*	*(4820)*	*(5140)*	*(4500)*	*(4900)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	**4C165**
Hollow Shaft OHL lbs	6630	6585	6560	6560	6605	7755	7620	7755	8250	9125	9415	9415	9415	
(N)	*(29500)*	*(29300)*	*(29200)*	*(29200)*	*(29400)*	*(34500)*	*(33900)*	*(34500)*	*(36700)*	*(40600)*	*(41900)*	*(41900)*	*(41900)*	
Solid Shaft OHL lbs	5580	6130	6370	6840	7310	7870	8060	8610	9150	10050	10570	11320	11870	
(N)	*(24810)*	*(27260)*	*(28330)*	*(30420)*	*(32510)*	*(35000)*	*(35850)*	*(38290)*	*(40690)*	*(44700)*	*(47010)*	*(50350)*	*(52790)*	

Frame Size Selection Tables 720 RPM



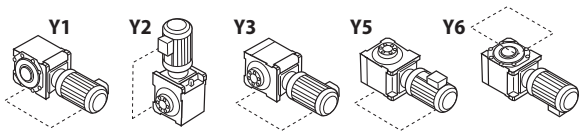
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	12.0	10.7	9.73	9.00	8.18	7.06	6.43	5.85	4.77	4.02	3.48	2.89	2.36	1.73	Frame Size
Ratio	**60**	**67**	**74**	**80**	**88**	**102**	**112**	**123**	**151**	**179**	**207**	**249**	**305**	**417**	
Input Power HP	**4.73**	**4.20**	**3.84**	**3.53**	**3.22**	**2.78**	**2.52**	**2.31**	**1.88**	**1.58**	**1.37**	**1.13**	**0.925**	**—**	**4B160**
(kW)	***(3.53)***	***(3.13)***	***(2.86)***	***(2.63)***	***(2.40)***	***(2.07)***	***(1.88)***	***(1.72)***	***(1.40)***	***(1.18)***	***(1.02)***	***(0.846)***	***(0.690)***	**—**	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	—	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	—	
Hollow Shaft OHL lbs	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	—	
(N)	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	—	
Solid Shaft OHL lbs	7560	7600	7600	7520	7440	7330	7260	7200	7120	7120	7120	7120	7120	—	
(N)	*(33620)*	*(33800)*	*(33800)*	*(33440)*	*(33090)*	*(32600)*	*(32290)*	*(32020)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	—	
Input Power HP	**4.73**	**4.20**	**3.84**	**3.53**	**3.22**	**2.78**	**2.52**	**2.31**	**1.88**	**1.58**	**1.37**	**1.13**	**0.925**	**—**	**4B165**
(kW)	***(3.53)***	***(3.13)***	***(2.86)***	***(2.63)***	***(2.40)***	***(2.07)***	***(1.88)***	***(1.72)***	***(1.40)***	***(1.18)***	***(1.02)***	***(0.846)***	***(0.690)***	**—**	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	—	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	—	
Hollow Shaft OHL lbs	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	—	
(N)	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	—	
Solid Shaft OHL lbs	7560	7600	7600	7520	7440	7330	7260	7200	7120	7120	7120	7120	7120	—	
(N)	*(33620)*	*(33800)*	*(33800)*	*(33440)*	*(33090)*	*(32600)*	*(32290)*	*(32020)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	—	
Input Power HP	**7.67**	**6.21**	**6.21**	**5.22**	**5.22**	**4.49**	**3.73**	**3.73**	**3.03**	**2.56**	**2.21**	**1.84**	**1.50**	**—**	**4C140**
(kW)	***(5.72)***	***(4.63)***	***(4.63)***	***(3.89)***	***(3.89)***	***(3.35)***	***(2.78)***	***(2.78)***	***(2.26)***	***(1.91)***	***(1.65)***	***(1.37)***	***(1.12)***	**—**	
Output Torque in•lbs	36810	33625	36810	33625	36810	36810	33625	36810	36810	36810	36810	36810	36810	—	
(N•m)	*(4160)*	*(3800)*	*(4160)*	*(3800)*	*(4160)*	*(4160)*	*(3800)*	*(4160)*	*(4160)*	*(4160)*	*(4160)*	*(4160)*	*(4160)*	—	
Hollow Shaft OHL lbs	12160	12900	12160	12900	12160	12160	12900	12160	12160	12160	12160	12160	12160	—	
(N)	*(54100)*	*(57400)*	*(54100)*	*(57400)*	*(54100)*	*(54100)*	*(57400)*	*(54100)*	*(54100)*	*(54100)*	*(54100)*	*(54100)*	*(54100)*	—	
Solid Shaft OHL lbs	12300	12640	12820	12780	12730	12660	12630	12590	12550	12550	12550	12550	12550	—	
(N)	*(54710)*	*(56220)*	*(57020)*	*(56840)*	*(56620)*	*(56310)*	*(56170)*	*(56000)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	—	
Input Power HP	**8.60**	**6.79**	**6.79**	**5.83**	**5.83**	**5.03**	**4.17**	**4.17**	**3.39**	**2.86**	**2.47**	**1.98**	**1.53**	**—**	**4C145**
(kW)	***(6.39)***	***(5.06)***	***(5.06)***	***(4.35)***	***(4.35)***	***(3.75)***	***(3.11)***	***(3.11)***	***(2.53)***	***(2.13)***	***(1.84)***	***(1.48)***	***(1.14)***	**—**	
Output Torque in•lbs	41150	36810	40265	37610	41150	41150	37610	41150	41150	41150	41150	39820	37520	—	
(N•m)	*(4650)*	*(4160)*	*(4550)*	*(4250)*	*(4650)*	*(4650)*	*(4250)*	*(4650)*	*(4650)*	*(4650)*	*(4650)*	*(4500)*	*(4240)*	—	
Hollow Shaft OHL lbs	10945	12180	11240	11955	10945	10945	11955	10945	10945	10945	10945	11375	11980	—	
(N)	*(48700)*	*(54200)*	*(50000)*	*(53200)*	*(48700)*	*(48700)*	*(53200)*	*(48700)*	*(48700)*	*(48700)*	*(48700)*	*(50600)*	*(53300)*	—	
Solid Shaft OHL lbs	12300	12640	12820	12780	12730	12660	12630	12590	12550	12550	12550	12550	12550	—	
(N)	*(54710)*	*(56220)*	*(57020)*	*(56840)*	*(56620)*	*(56310)*	*(56170)*	*(56000)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	—	
Input Power HP	**9.50**	**8.40**	**7.67**	**7.04**	**6.44**	**5.55**	**5.03**	**4.60**	**3.74**	**3.15**	**2.74**	**2.27**	**1.85**	**—**	**4C160**
(kW)	***(7.06)***	***(6.25)***	***(5.72)***	***(5.25)***	***(4.80)***	***(4.14)***	***(3.75)***	***(3.43)***	***(2.79)***	***(2.35)***	***(2.04)***	***(1.69)***	***(1.38)***	**—**	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	—	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	—	
Hollow Shaft OHL lbs	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	—	
(N)	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	—	
Solid Shaft OHL lbs	12300	12640	12820	12780	12730	12660	12630	12590	12550	12550	12550	12550	12550	—	
(N)	*(54710)*	*(56220)*	*(57020)*	*(56840)*	*(56620)*	*(56310)*	*(56170)*	*(56000)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	—	
Input Power HP	**9.47**	**8.38**	**7.67**	**7.04**	**6.44**	**5.55**	**5.03**	**4.60**	**3.74**	**3.15**	**2.74**	**2.27**	**1.85**	**—**	**4C165**
(kW)	***(7.06)***	***(6.25)***	***(5.72)***	***(5.25)***	***(4.80)***	***(4.14)***	***(3.75)***	***(3.43)***	***(2.79)***	***(2.35)***	***(2.04)***	***(1.69)***	***(1.38)***	**—**	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	—	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	—	
Hollow Shaft OHL lbs	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	—	
(N)	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	—	
Solid Shaft OHL lbs	12300	12640	12820	12780	12730	12660	12630	12590	12550	12550	12550	12550	12550	—	
(N)	*(54710)*	*(56220)*	*(57020)*	*(56840)*	*(56620)*	*(56310)*	*(56170)*	*(56000)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	—	

Frame Size Selection Tables 720 RPM

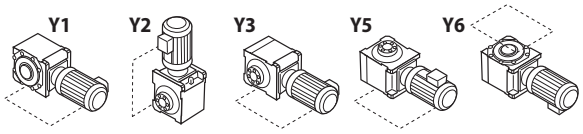
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	65.5	55.4	51.4	45.0	40.0	34.3	32.7	28.8	25.7	20.6	18.5	15.7	13.6	Frame Size
Ratio	**11**	**13**	**14**	**16**	**18**	**21**	**22**	**25**	**28**	**35**	**39**	**46**	**53**	
Input Power HP	**41.4**	**41.4**	**38.4**	**35.3**	**31.1**	**24.0**	**24.0**	**23.1**	**20.1**	**16.0**	**14.6**	**12.4**	**10.7**	
(kW)	***(30.9)***	***(30.9)***	***(28.6)***	***(26.3)***	***(23.2)***	***(17.9)***	***(17.9)***	***(17.2)***	***(15.0)***	***(11.9)***	***(10.9)***	***(9.24)***	***(8.01)***	
Output Torque in•lbs	35135	42835	43370	45490	43900	40615	43360	45485	45485	45485	45485	45485	45485	
(N•m)	*(3970)*	*(4840)*	*(4900)*	*(5140)*	*(4960)*	*(4590)*	*(4900)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	**4C170**
Hollow Shaft OHL lbs	6045	5865	6090	6315	6765	7665	7640	7755	8250	9125	9415	9415	9415	
(N)	*(26900)*	*(26100)*	*(27100)*	*(28100)*	*(30100)*	*(34100)*	*(34000)*	*(34500)*	*(36700)*	*(40600)*	*(41900)*	*(41900)*	*(41900)*	
Solid Shaft OHL lbs	7940	8740	9100	9760	10400	7870	8060	8610	9150	10050	10570	11320	11870	
(N)	*(35310)*	*(38870)*	*(40470)*	*(43410)*	*(46430)*	*(35000)*	*(35850)*	*(38290)*	*(40690)*	*(44700)*	*(47010)*	*(50350)*	*(52790)*	
Input Power HP	**41.4**	**41.4**	**38.4**	**35.3**	**31.1**	**24.0**	**24.0**	**23.1**	**20.1**	**16.0**	**14.6**	**12.4**	**10.7**	
(kW)	***(30.9)***	***(30.9)***	***(28.6)***	***(26.3)***	***(23.2)***	***(17.9)***	***(17.9)***	***(17.2)***	***(15.0)***	***(11.9)***	***(10.9)***	***(9.24)***	***(8.01)***	
Output Torque in•lbs	35135	42835	43370	45490	43900	40615	43360	45485	45485	45485	45485	45485	45485	
(N•m)	*(3970)*	*(4840)*	*(4900)*	*(5140)*	*(4960)*	*(4590)*	*(4900)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	**4C175**
Hollow Shaft OHL lbs	6045	5865	6090	6315	6765	7665	7640	7755	8250	9125	9415	9415	9415	
(N)	*(26900)*	*(26100)*	*(27100)*	*(28100)*	*(30100)*	*(34100)*	*(34000)*	*(34500)*	*(36700)*	*(40600)*	*(41900)*	*(41900)*	*(41900)*	
Solid Shaft OHL lbs	7940	8740	9100	9760	10440	7870	8060	8610	9150	10050	10570	11320	11870	
(N)	*(35310)*	*(38870)*	*(40470)*	*(43410)*	*(46430)*	*(35000)*	*(35850)*	*(38290)*	*(40690)*	*(44700)*	*(47010)*	*(50350)*	*(52790)*	
Input Power HP	**—**	**—**	**—**	**—**	**—**	**23.5**	**26.4**	**26.4**	**23.3**	**17.0**	**17.0**	**14.3**	**12.5**	
(kW)	**—**	**—**	**—**	**—**	**—**	***(17.5)***	***(19.7)***	***(19.7)***	***(17.4)***	***(12.7)***	***(12.7)***	***(10.7)***	***(9.29)***	
Output Torque in•lbs	—	—	—	—	—	39820	47695	52120	52740	48230	52740	52740	52740	
(N•m)	—	—	—	—	—	*(4500)*	*(5390)*	*(5890)*	*(5960)*	*(5450)*	*(5960)*	*(5960)*	*(5960)*	**4D160**
Hollow Shaft OHL lbs	—	—	—	—	—	13440	13105	13240	13890	15530	15710	16745	17670	
(N)	—	—	—	—	—	*(59800)*	*(58300)*	*(58900)*	*(61800)*	*(69100)*	*(69900)*	*(74500)*	*(78600)*	
Solid Shaft OHL lbs	—	—	—	—	—	11250	11530	12320	13110	14420	14890	15490	15930	
(N)	—	—	—	—	—	*(50040)*	*(51280)*	*(54790)*	*(58310)*	*(64140)*	*(66230)*	*(68890)*	*(70850)*	
Input Power HP	**—**	**—**	**—**	**—**	**—**	**23.5**	**26.4**	**26.4**	**23.9**	**20.4**	**20.4**	**17.2**	**14.9**	
(kW)	**—**	**—**	**—**	**—**	**—**	***(17.5)***	***(19.7)***	***(19.7)***	***(17.8)***	***(15.2)***	***(15.2)***	***(12.8)***	***(11.1)***	
Output Torque in•lbs	—	—	—	—	—	39820	47695	52120	53890	57695	63095	63095	63095	
(N•m)	—	—	—	—	—	*(4500)*	*(5390)*	*(5890)*	*(6090)*	*(6520)*	*(7130)*	*(7130)*	*(7130)*	**4D165**
Hollow Shaft OHL lbs	—	—	—	—	—	13440	13105	13240	13800	14745	14880	15755	15755	
(N)	—	—	—	—	—	*(59800)*	*(58300)*	*(58900)*	*(61400)*	*(65600)*	*(66200)*	*(70100)*	*(70100)*	
Solid Shaft OHL lbs	—	—	—	—	—	11250	11530	12320	13110	14420	14890	15490	15930	
(N)	—	—	—	—	—	*(50040)*	*(51280)*	*(54790)*	*(58310)*	*(64140)*	*(66230)*	*(68890)*	*(70850)*	
Input Power HP	**41.4**	**41.4**	**41.4**	**41.4**	**41.4**	**33.0**	**38.5**	**38.5**	**33.7**	**24.5**	**24.5**	**20.7**	**18.0**	
(kW)	***(30.9)***	***(30.9)***	***(30.9)***	***(30.9)***	***(30.9)***	***(24.6)***	***(28.7)***	***(28.7)***	***(25.1)***	***(18.3)***	***(18.3)***	***(15.4)***	***(13.4)***	
Output Torque in•lbs	35130	42830	46810	53540	58495	55840	69555	76015	76015	69555	76015	75925	76015	
(N•m)	*(3970)*	*(4840)*	*(5290)*	*(6050)*	*(6610)*	*(6310)*	*(7860)*	*(8590)*	*(8590)*	*(7860)*	*(8590)*	*(8580)*	*(8590)*	**4D170**
Hollow Shaft OHL lbs	10700	10900	10970	11035	11035	12135	11330	11305	11825	13800	11825	11865	11825	
(N)	*(47600)*	*(48500)*	*(48800)*	*(49100)*	*(49100)*	*(54000)*	*(50400)*	*(50300)*	*(52600)*	*(61400)*	*(52600)*	*(52800)*	*(52600)*	
Solid Shaft OHL lbs	7940	8740	9100	9760	10440	11250	11530	12320	13110	14420	14890	15490	15930	
(N)	*(35310)*	*(38870)*	*(40470)*	*(43410)*	*(46430)*	*(50040)*	*(51280)*	*(54790)*	*(58310)*	*(64140)*	*(66230)*	*(68890)*	*(70850)*	
Input Power HP	**41.4**	**41.4**	**41.4**	**41.4**	**41.4**	**33.0**	**41.4**	**39.0**	**34.2**	**27.2**	**24.8**	**21.1**	**18.2**	
(kW)	***(30.9)***	***(30.9)***	***(30.9)***	***(30.9)***	***(30.9)***	***(24.6)***	***(30.9)***	***(29.1)***	***(25.5)***	***(20.3)***	***(18.5)***	***(15.7)***	***(13.6)***	
Output Torque in•lbs	35130	42830	46810	53540	58495	55840	74955	77165	77165	77165	77165	77165	77165	
(N•m)	*(3970)*	*(4840)*	*(5290)*	*(6050)*	*(6610)*	*(6310)*	*(8470)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	**4D175**
Hollow Shaft OHL lbs	10700	10900	10970	11035	11035	12135	10900	11215	11375	11375	11375	11375	11375	
(N)	*(47600)*	*(48500)*	*(48800)*	*(49100)*	*(49100)*	*(54000)*	*(48500)*	*(49900)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	
Solid Shaft OHL lbs	7940	8740	9100	9760	10440	11250	11530	12320	13110	14420	14890	15490	15930	
(N)	*(35310)*	*(38870)*	*(40470)*	*(43410)*	*(46430)*	*(50040)*	*(51280)*	*(54790)*	*(58310)*	*(64140)*	*(66230)*	*(68890)*	*(70850)*	

Frame Size Selection Tables 720 RPM



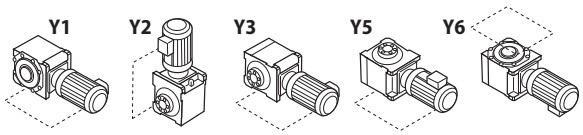
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	12.0	10.7	9.73	9.00	8.18	7.06	6.43	5.85	4.77	4.02	3.48	2.89	2.36	1.73	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	**9.50**	**8.40**	**7.67**	**7.04**	**6.44**	**5.55**	**5.03**	**4.60**	**3.74**	**3.15**	**2.74**	**2.27**	**1.85**	**—**	4C170
(kW)	***(7.06)***	***(6.25)***	***(5.72)***	***(5.25)***	***(4.80)***	***(4.14)***	***(3.75)***	***(3.43)***	***(2.79)***	***(2.35)***	***(2.04)***	***(1.69)***	***(1.38)***	**—**	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	—	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	—	
Hollow Shaft OHL lbs	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	—	
(N)	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	—	
Solid Shaft OHL lbs	12300	12640	12820	12780	12730	12660	12630	12590	12550	12550	12550	12550	12550	—	
(N)	*(54710)*	*(56220)*	*(57020)*	*(56840)*	*(56620)*	*(56310)*	*(56170)*	*(56000)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	—	
Input Power HP	**9.50**	**8.40**	**7.67**	**7.04**	**6.44**	**5.55**	**5.03**	**4.60**	**3.74**	**3.15**	**2.74**	**2.27**	**1.85**	**—**	4C175
(kW)	***(7.06)***	***(6.25)***	***(5.72)***	***(5.25)***	***(4.80)***	***(4.14)***	***(3.75)***	***(3.43)***	***(2.79)***	***(2.35)***	***(2.04)***	***(1.69)***	***(1.38)***	**—**	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	—	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	—	
Hollow Shaft OHL lbs	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	—	
(N)	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	—	
Solid Shaft OHL lbs	12300	12640	12820	12780	12730	12660	12630	12590	12550	12550	12550	12550	12550	—	
(N)	*(54710)*	*(56220)*	*(57020)*	*(56840)*	*(56620)*	*(56310)*	*(56170)*	*(56000)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	—	
Input Power HP	**11.0**	**8.90**	**8.90**	**7.47**	**7.47**	**6.44**	**5.34**	**5.34**	**4.29**	**3.66**	**3.16**	**2.63**	**2.15**	**—**	4D160
(kW)	***(8.19)***	***(6.63)***	***(6.63)***	***(5.57)***	***(5.57)***	***(4.80)***	***(3.98)***	***(3.98)***	***(3.20)***	***(2.73)***	***(2.36)***	***(1.96)***	***(1.60)***	**—**	
Output Torque in•lbs	52740	48230	52740	48230	52740	52740	48230	52740	52120	52740	52740	52740	52740	—	
(N•m)	*(5960)*	*(5450)*	*(5960)*	*(5450)*	*(5960)*	*(5960)*	*(5450)*	*(5960)*	*(5890)*	*(5960)*	*(5960)*	*(5960)*	*(5960)*	—	
Hollow Shaft OHL lbs	17915	18680	17915	18680	17915	17915	18680	17915	18025	17915	17915	17915	17915	—	
(N)	*(79700)*	*(83100)*	*(79700)*	*(83100)*	*(79700)*	*(79700)*	*(83100)*	*(79700)*	*(80200)*	*(79700)*	*(79700)*	*(79700)*	*(79700)*	—	
Solid Shaft OHL lbs	16270	16540	16690	16670	16650	16620	16610	16600	16580	16580	16580	16580	16580	—	
(N)	*(72360)*	*(73560)*	*(74230)*	*(74140)*	*(74050)*	*(73920)*	*(73880)*	*(73830)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	—	
Input Power HP	**13.1**	**10.6**	**10.6**	**8.90**	**8.90**	**7.71**	**6.38**	**6.38**	**5.20**	**4.39**	**3.78**	**3.15**	**2.51**	**—**	4D165
(kW)	***(9.80)***	***(7.94)***	***(7.94)***	***(6.67)***	***(6.67)***	***(5.75)***	***(4.76)***	***(4.76)***	***(3.88)***	***(3.27)***	***(2.82)***	***(2.35)***	***(1.87)***	**—**	
Output Torque in•lbs	63095	57695	63095	57695	63095	63095	57695	63095	63095	63095	63095	63095	61680	—	
(N•m)	*(7130)*	*(6520)*	*(7130)*	*(6520)*	*(7130)*	*(7130)*	*(6520)*	*(7130)*	*(7130)*	*(7130)*	*(7130)*	*(7130)*	*(6970)*	—	
Hollow Shaft OHL lbs	15755	16970	15755	16970	15755	15755	16970	15755	15755	15755	15755	15755	16115	—	
(N)	*(70100)*	*(75500)*	*(70100)*	*(75500)*	*(70100)*	*(70100)*	*(75500)*	*(70100)*	*(70100)*	*(70100)*	*(70100)*	*(70100)*	*(71700)*	—	
Solid Shaft OHL lbs	16270	16540	16690	16670	16650	16620	16610	16600	16580	16580	16580	16580	16580	—	
(N)	*(72360)*	*(73560)*	*(74230)*	*(74140)*	*(74050)*	*(73920)*	*(73880)*	*(73830)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	—	
Input Power HP	**15.8**	**12.8**	**12.8**	**10.8**	**10.8**	**9.30**	**7.70**	**7.70**	**6.26**	**5.28**	**4.56**	**3.80**	**3.10**	**—**	4D170
(kW)	***(11.8)***	***(9.56)***	***(9.56)***	***(8.03)***	***(8.03)***	***(6.92)***	***(5.74)***	***(5.74)***	***(4.67)***	***(3.94)***	***(3.40)***	***(2.83)***	***(2.31)***	**—**	
Output Torque in•lbs	76015	69555	76015	69555	76015	76015	69555	76015	76015	76015	76015	76015	76015	—	
(N•m)	*(8590)*	*(7860)*	*(8590)*	*(7860)*	*(8590)*	*(8590)*	*(7860)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	—	
Hollow Shaft OHL lbs	11825	14050	11825	14050	11825	11825	14050	11825	11825	11825	11825	11825	11825	—	
(N)	*(52600)*	*(62500)*	*(52600)*	*(62500)*	*(52600)*	*(52600)*	*(62500)*	*(52600)*	*(52600)*	*(52600)*	*(52600)*	*(52600)*	*(52600)*	—	
Solid Shaft OHL lbs	16270	16540	16690	16670	16650	16620	16610	16600	16580	16580	16580	16580	16580	—	
(N)	*(72360)*	*(73560)*	*(74230)*	*(74140)*	*(74050)*	*(73920)*	*(73880)*	*(73830)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	—	
Input Power HP	**16.1**	**14.2**	**13.0**	**11.9**	**10.9**	**9.40**	**8.50**	**7.80**	**6.36**	**5.35**	**4.63**	**3.85**	**3.14**	**—**	4D175
(kW)	***(12.0)***	***(10.6)***	***(9.70)***	***(8.91)***	***(8.15)***	***(7.03)***	***(6.37)***	***(5.82)***	***(4.74)***	***(3.99)***	***(3.45)***	***(2.87)***	***(2.34)***	**—**	
Output Torque in•lbs	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	—	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	—	
Hollow Shaft OHL lbs	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	—	
(N)	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	—	
Solid Shaft OHL lbs	16270	16540	16690	16670	16650	16620	16610	16600	16580	16580	16580	16580	16580	—	
(N)	*(72360)*	*(73560)*	*(74230)*	*(74140)*	*(74050)*	*(73920)*	*(73880)*	*(73830)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	—	

Frame Size Selection Tables 720 RPM

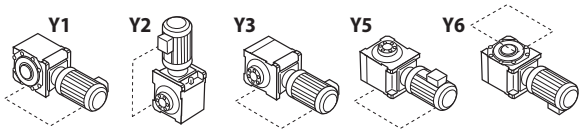
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	65.5	55.4	51.4	45.0	40.0	34.3	32.7	28.8	25.7	20.6	18.5	15.7	13.6	Frame Size
Ratio	**11**	**13**	**14**	**16**	**18**	**21**	**22**	**25**	**28**	**35**	**39**	**46**	**53**	
Input Power HP	**55.1**	**55.1**	**55.1**	**55.1**	**54.2**	**41.4**	**36.9**	**36.9**	**32.7**	**27.2**	**24.8**	**21.1**	**18.2**	
(kW)	***(41.1)***	***(41.1)***	***(41.1)***	***(41.1)***	***(40.4)***	***(30.9)***	***(27.5)***	***(27.5)***	***(24.4)***	***(20.3)***	***(18.5)***	***(15.7)***	***(13.6)***	
Output Torque in•lbs	46725	56900	62305	71160	76470	70275	66635	72930	73980	77165	77165	77165	77165	
(N•m)	*(5280)*	*(6430)*	*(7040)*	*(8040)*	*(8640)*	*(7940)*	*(7530)*	*(8240)*	*(8360)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	**4D180**
Hollow Shaft OHL lbs	9755	9755	9730	9600	9600	10990	11600	11555	12185	11375	11375	11375	11375	
(N)	*(43400)*	*(43400)*	*(43300)*	*(42700)*	*(42700)*	*(48900)*	*(51600)*	*(51400)*	*(54200)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	
Solid Shaft OHL lbs	7940	8740	9100	9760	10440	11250	11530	12320	13110	14420	14890	15490	15930	
(N)	*(35310)*	*(38870)*	*(40470)*	*(43410)*	*(46430)*	*(50040)*	*(51280)*	*(54790)*	*(58310)*	*(64140)*	*(66230)*	*(68890)*	*(70850)*	
Input Power HP	**55.1**	**55.1**	**55.1**	**55.1**	**54.2**	**42.1**	**37.4**	**37.4**	**33.3**	**27.2**	**24.8**	**21.1**	**18.2**	
(kW)	***(41.1)***	***(41.1)***	***(41.1)***	***(41.1)***	***(40.4)***	***(31.4)***	***(27.9)***	***(27.9)***	***(24.8)***	***(20.3)***	***(18.5)***	***(15.7)***	***(13.6)***	
Output Torque in•lbs	46725	56900	62305	71160	76470	71335	67620	73990	75140	77165	77165	77165	77165	
(N•m)	*(5280)*	*(6430)*	*(7040)*	*(8040)*	*(8640)*	*(8060)*	*(7640)*	*(8360)*	*(8490)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	**4D185**
Hollow Shaft OHL lbs	9755	9755	9730	9595	9595	10900	11510	11465	12095	11375	11375	11375	11375	
(N)	*(43400)*	*(43400)*	*(43300)*	*(42700)*	*(42700)*	*(48500)*	*(51200)*	*(51000)*	*(53800)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	
Solid Shaft OHL lbs	7940	8740	9100	9760	10440	11250	11530	12320	13110	14420	14890	15490	15930	
(N)	*(35310)*	*(38870)*	*(40470)*	*(43410)*	*(46430)*	*(50040)*	*(51280)*	*(54790)*	*(58310)*	*(64140)*	*(66230)*	*(68890)*	*(70850)*	
Input Power HP	**41.4**	**41.4**	**41.4**	**41.4**	**41.4**	**33.0**	**38.5**	**38.5**	**33.7**	**24.5**	**24.5**	**20.7**	**18.0**	
(kW)	***(30.9)***	***(30.9)***	***(30.9)***	***(30.9)***	***(30.9)***	***(24.6)***	***(28.7)***	***(28.7)***	***(25.1)***	***(18.3)***	***(18.3)***	***(15.4)***	***(13.4)***	
Output Torque in•lbs	35130	42830	46810	53540	58495	55840	69555	76015	76015	69555	76015	75925	76015	
(N•m)	*(3970)*	*(4840)*	*(5290)*	*(6050)*	*(6610)*	*(6310)*	*(7860)*	*(8590)*	*(8590)*	*(7860)*	*(8590)*	*(8580)*	*(8590)*	**4E170**
Hollow Shaft OHL lbs	14770	15265	15485	15755	15935	17265	16635	16790	17715	19805	19940	19960	19940	
(N)	*(65700)*	*(67900)*	*(68900)*	*(70100)*	*(70900)*	*(76800)*	*(74000)*	*(74700)*	*(78800)*	*(88100)*	*(88700)*	*(88800)*	*(88700)*	
Solid Shaft OHL lbs	11630	12660	13130	14010	14880	15910	16270	17300	18320	20030	20430	20820	21110	
(N)	*(51730)*	*(56310)*	*(58400)*	*(62310)*	*(66180)*	*(70760)*	*(72360)*	*(76950)*	*(81480)*	*(89090)*	*(90870)*	*(92600)*	*(93890)*	
Input Power HP	**41.4**	**41.4**	**41.4**	**41.4**	**41.4**	**33.0**	**41.4**	**41.4**	**34.6**	**30.4**	**28.0**	**23.7**	**20.5**	
(kW)	***(30.9)***	***(30.9)***	***(30.9)***	***(30.9)***	***(30.9)***	***(24.6)***	***(30.9)***	***(30.9)***	***(25.8)***	***(22.7)***	***(20.9)***	***(17.7)***	***(15.3)***	
Output Torque in•lbs	35130	42830	46810	53540	58495	55840	74955	81945	78230	86545	86990	86990	86990	
(N•m)	*(3970)*	*(4840)*	*(5290)*	*(6050)*	*(6610)*	*(6310)*	*(8470)*	*(9260)*	*(8840)*	*(9780)*	*(9830)*	*(9830)*	*(9830)*	**4E175**
Hollow Shaft OHL lbs	14770	15265	15485	15755	15935	17265	16250	16365	17555	18545	19240	19400	19400	
(N)	*(65700)*	*(67900)*	*(68900)*	*(70100)*	*(70900)*	*(76800)*	*(72300)*	*(72800)*	*(78100)*	*(82500)*	*(85600)*	*(86300)*	*(86300)*	
Solid Shaft OHL lbs	11630	12660	13130	14010	14880	15910	16270	17300	18320	20030	20430	20820	21110	
(N)	*(51730)*	*(56310)*	*(58400)*	*(62310)*	*(66180)*	*(70760)*	*(72360)*	*(76950)*	*(81480)*	*(89090)*	*(90870)*	*(92600)*	*(93890)*	
Input Power HP	**55.1**	**55.1**	**55.1**	**55.1**	**55.1**	**41.4**	**36.9**	**36.9**	**32.7**	**36.1**	**33.0**	**27.9**	**24.3**	
(kW)	***(41.1)***	***(41.1)***	***(41.1)***	***(41.1)***	***(41.1)***	***(30.9)***	***(27.5)***	***(27.5)***	***(24.4)***	***(26.9)***	***(24.6)***	***(20.8)***	***(18.1)***	
Output Torque in•lbs	46725	56900	62300	71150	77875	70265	66635	72920	73980	102665	102665	102665	102665	
(N•m)	*(5280)*	*(6430)*	*(7040)*	*(8040)*	*(8800)*	*(7940)*	*(7530)*	*(8240)*	*(8360)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	**4E180**
Hollow Shaft OHL lbs	13915	14230	14340	14455	14520	16205	16880	17015	17850	17400	18095	18430	18430	
(N)	*(61900)*	*(63300)*	*(63800)*	*(64300)*	*(64600)*	*(72100)*	*(75100)*	*(75700)*	*(79400)*	*(77400)*	*(80500)*	*(82000)*	*(82000)*	
Solid Shaft OHL lbs	11630	12660	13130	14010	14880	15910	16270	17300	18320	20030	20430	20820	21110	
(N)	*(51730)*	*(56310)*	*(58400)*	*(62310)*	*(66180)*	*(70760)*	*(72360)*	*(76950)*	*(81480)*	*(89090)*	*(90870)*	*(92600)*	*(93890)*	
Input Power HP	**55.1**	**55.1**	**55.1**	**55.1**	**55.1**	**42.1**	**37.4**	**37.4**	**33.3**	**36.1**	**33.0**	**27.9**	**24.3**	
(kW)	***(41.1)***	***(41.1)***	***(41.1)***	***(41.1)***	***(41.1)***	***(31.4)***	***(27.9)***	***(27.9)***	***(24.8)***	***(26.9)***	***(24.6)***	***(20.8)***	***(18.1)***	
Output Torque in•lbs	46725	56900	62300	71150	77875	71325	67610	73980	75130	102665	102665	102665	102665	
(N•m)	*(5280)*	*(6430)*	*(7040)*	*(8040)*	*(8800)*	*(8060)*	*(7640)*	*(8360)*	*(8490)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	**4E185**
Hollow Shaft OHL lbs	13915	14230	14340	14455	14520	16115	16815	16950	17760	17400	18095	18430	18430	
(N)	*(61900)*	*(63300)*	*(63800)*	*(64300)*	*(64600)*	*(71700)*	*(74800)*	*(75400)*	*(79000)*	*(77400)*	*(80500)*	*(82000)*	*(82000)*	
Solid Shaft OHL lbs	11630	12660	13130	14010	14880	15910	16270	17300	18320	20030	20430	20820	21110	
(N)	*(51730)*	*(56310)*	*(58400)*	*(62310)*	*(66180)*	*(70760)*	*(72360)*	*(76950)*	*(81480)*	*(89090)*	*(90870)*	*(92600)*	*(93890)*	

Frame Size Selection Tables 720 RPM



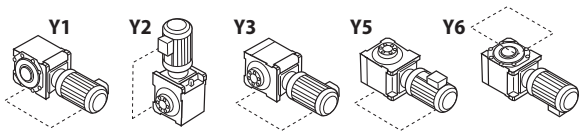
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	12.0	10.7	9.73	9.00	8.18	7.06	6.43	5.85	4.77	4.02	3.48	2.89	2.36	1.73	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	**16.1**	**14.2**	**13.0**	**11.9**	**10.9**	**9.40**	**8.50**	**7.80**	**6.36**	**5.35**	**4.63**	**3.85**	**3.14**	—	4D180
(kW)	***(12.0)***	***(10.6)***	***(9.70)***	***(8.91)***	***(8.15)***	***(7.03)***	***(6.37)***	***(5.82)***	***(4.74)***	***(3.99)***	***(3.45)***	***(2.87)***	***(2.34)***	—	
Output Torque in•lbs	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	—	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	—	
Hollow Shaft OHL lbs	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	—	
(N)	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	—	
Solid Shaft OHL lbs	16270	16540	16690	16670	16650	16620	16610	16600	16580	16580	16580	16580	16580	—	
(N)	*(72360)*	*(73560)*	*(74230)*	*(74140)*	*(74050)*	*(73920)*	*(73880)*	*(73830)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	—	
Input Power HP	**16.1**	**14.2**	**13.0**	**11.9**	**10.9**	**9.40**	**8.50**	**7.80**	**6.36**	**5.35**	**4.63**	**3.85**	**3.14**	—	4D185
(kW)	***(12.0)***	***(10.6)***	***(9.70)***	***(8.91)***	***(8.15)***	***(7.03)***	***(6.37)***	***(5.82)***	***(4.74)***	***(3.99)***	***(3.45)***	***(2.87)***	***(2.34)***	—	
Output Torque in•lbs	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	—	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	—	
Hollow Shaft OHL lbs	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	—	
(N)	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	—	
Solid Shaft OHL lbs	16270	16540	16690	16670	16650	16620	16610	16600	16580	16580	16580	16580	16580	—	
(N)	*(72360)*	*(73560)*	*(74230)*	*(74140)*	*(74050)*	*(73920)*	*(73880)*	*(73830)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	—	
Input Power HP	**15.8**	**12.8**	**12.8**	**10.8**	**10.8**	**9.30**	**7.70**	**7.70**	**6.26**	**5.28**	**4.56**	**3.80**	**3.10**	—	4E170
(kW)	***(11.8)***	***(9.56)***	***(9.56)***	***(8.03)***	***(8.03)***	***(6.92)***	***(5.74)***	***(5.74)***	***(4.67)***	***(3.94)***	***(3.40)***	***(2.83)***	***(2.31)***	—	
Output Torque in•lbs	76015	69555	76015	69555	76015	76015	69555	76015	76015	76015	76015	76015	76015	—	
(N•m)	*(8590)*	*(7860)*	*(8590)*	*(7860)*	*(8590)*	*(8590)*	*(7860)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	—	
Hollow Shaft OHL lbs	19940	20275	19940	20275	19940	19940	20275	19940	19940	19940	19940	19940	19940	—	
(N)	*(88700)*	*(90200)*	*(88700)*	*(90200)*	*(88700)*	*(88700)*	*(90200)*	*(88700)*	*(88700)*	*(88700)*	*(88700)*	*(88700)*	*(88700)*	—	
Solid Shaft OHL lbs	21330	21500	21620	21670	21720	21790	21830	21860	21920	21920	21920	21920	21920	—	
(N)	*(94870)*	*(95630)*	*(96160)*	*(96380)*	*(96610)*	*(96920)*	*(97090)*	*(97230)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	—	
Input Power HP	**18.1**	**16.0**	**14.6**	**13.4**	**12.3**	**10.6**	**9.60**	**9.60**	**7.79**	**6.57**	**5.69**	**4.72**	**3.85**	—	4E175
(kW)	***(13.5)***	***(11.9)***	***(10.9)***	***(10.0)***	***(9.19)***	***(7.92)***	***(7.14)***	***(7.14)***	***(5.81)***	***(4.90)***	***(4.24)***	***(3.52)***	***(2.87)***	—	
Output Torque in•lbs	86990	86545	86990	86545	86990	86990	86545	94690	94690	94690	94690	94690	94690	—	
(N•m)	*(9830)*	*(9780)*	*(9830)*	*(9780)*	*(9830)*	*(9830)*	*(9780)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	—	
Hollow Shaft OHL lbs	19400	19420	19400	19420	19400	19400	19420	18995	18995	18995	18995	18995	18995	—	
(N)	*(86300)*	*(86400)*	*(86300)*	*(86400)*	*(86300)*	*(86300)*	*(86400)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	—	
Solid Shaft OHL lbs	21330	21500	21620	21670	21720	21790	21830	21860	21920	21920	21920	21920	21920	—	
(N)	*(94870)*	*(95630)*	*(96160)*	*(96380)*	*(96610)*	*(96920)*	*(97090)*	*(97230)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	—	
Input Power HP	**21.3**	**18.9**	**17.3**	**16.0**	**14.5**	**12.5**	**11.4**	**10.4**	**8.40**	**7.12**	**6.16**	**5.12**	**4.18**	—	4E180
(kW)	***(15.9)***	***(14.1)***	***(12.9)***	***(11.9)***	***(10.8)***	***(9.4)***	***(8.47)***	***(7.74)***	***(6.30)***	***(5.31)***	***(4.59)***	***(3.82)***	***(3.12)***	—	
Output Torque in•lbs	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	
Hollow Shaft OHL lbs	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	—	
(N)	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	21330	21500	21620	21670	21720	21790	21830	21860	21920	21920	21920	21920	21920	—	
(N)	*(94870)*	*(95630)*	*(96160)*	*(96380)*	*(96610)*	*(96920)*	*(97090)*	*(97230)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	—	
Input Power HP	**21.3**	**18.9**	**17.3**	**16.0**	**14.5**	**12.5**	**11.4**	**10.4**	**8.40**	**7.12**	**6.16**	**5.12**	**4.18**	—	4E185
(kW)	***(15.9)***	***(14.1)***	***(12.9)***	***(11.9)***	***(10.8)***	***(9.35)***	***(8.47)***	***(7.74)***	***(6.30)***	***(5.31)***	***(4.59)***	***(3.82)***	***(3.12)***	—	
Output Torque in•lbs	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	
Hollow Shaft OHL lbs	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	—	
(N)	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	21330	21500	21620	21670	21720	21790	21830	21860	21920	21920	21920	21920	21920	—	
(N)	*(94870)*	*(95630)*	*(96160)*	*(96380)*	*(96610)*	*(96920)*	*(97090)*	*(97230)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	—	

Frame Size Selection Tables 720 RPM

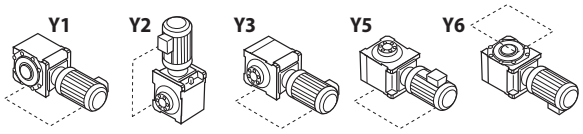
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	65.5	55.4	51.4	45.0	40.0	34.3	32.7	28.8	25.7	20.6	18.5	15.7	13.6	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	**88.6**	**88.0**	**81.0**	**77.9**	**71.7**	**51.9**	**45.7**	**45.7**	**40.6**	**36.1**	**33.0**	**27.9**	**24.3**	4E190
(kW)	***(66.1)***	***(65.6)***	***(60.4)***	***(58.1)***	***(53.5)***	***(38.7)***	***(34.1)***	***(34.1)***	***(30.3)***	***(26.9)***	***(24.6)***	***(20.8)***	***(18.1)***	
Output Torque in•lbs	75140	91160	91160	100895	101780	87975	82655	90275	92045	102665	102665	102665	102665	
(N•m)	*(8490)*	*(10300)*	*(10300)*	*(11400)*	*(11500)*	*(9940)*	*(9340)*	*(10200)*	*(10400)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	
Hollow Shaft OHL lbs	11845	11755	12205	12295	12790	14905	15690	15735	16545	17400	18095	18430	18430	
(N)	*(52700)*	*(52300)*	*(54300)*	*(54700)*	*(56900)*	*(66300)*	*(69800)*	*(70000)*	*(73600)*	*(77400)*	*(80500)*	*(82000)*	*(82000)*	
Solid Shaft OHL lbs	11630	12660	13130	14010	14880	15910	16270	17300	18320	20030	20430	20820	21110	
(N)	*(51730)*	*(56310)*	*(58400)*	*(62310)*	*(66180)*	*(70760)*	*(72360)*	*(76950)*	*(81480)*	*(89090)*	*(90870)*	*(92600)*	*(93890)*	
Input Power HP	**88.6**	**88.0**	**81.0**	**77.9**	**71.7**	**52.8**	**46.7**	**46.7**	**41.4**	**36.1**	**33.0**	**27.9**	**24.3**	4E195
(kW)	***(66.1)***	***(65.6)***	***(60.4)***	***(58.1)***	***(53.5)***	***(39.4)***	***(34.8)***	***(34.8)***	***(30.9)***	***(26.9)***	***(24.6)***	***(20.8)***	***(18.1)***	
Output Torque in•lbs	75140	91160	91160	100895	101780	89390	84335	92045	93815	102665	102665	102665	102665	
(N•m)	*(8490)*	*(10300)*	*(10300)*	*(11400)*	*(11500)*	*(10100)*	*(9530)*	*(10400)*	*(10600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	
Hollow Shaft OHL lbs	11845	11755	12205	12295	12790	14790	15575	15600	16410	17400	18095	18430	18430	
(N)	*(52700)*	*(52300)*	*(54300)*	*(54700)*	*(56900)*	*(65800)*	*(69300)*	*(69400)*	*(73000)*	*(77400)*	*(80500)*	*(82000)*	*(82000)*	
Solid Shaft OHL lbs	11630	12660	13130	14010	14880	15910	16270	17300	18320	20030	20430	20820	21110	
(N)	*(51730)*	*(56310)*	*(58400)*	*(62310)*	*(66180)*	*(70760)*	*(72360)*	*(76950)*	*(81480)*	*(89090)*	*(90870)*	*(92600)*	*(93890)*	
Input Power HP	**55.1**	**55.1**	**55.1**	**55.1**	**55.1**	**41.4**	**36.9**	**36.9**	**32.7**	**39.3**	**39.3**	**33.3**	**28.8**	4F180
(kW)	***(41.1)***	***(41.1)***	***(41.1)***	***(41.1)***	***(41.1)***	***(30.9)***	***(27.5)***	***(27.5)***	***(24.4)***	***(29.3)***	***(29.3)***	***(24.8)***	***(21.5)***	
Output Torque in•lbs	46725	56900	62300	71150	77875	70265	66635	72920	73980	111500	122120	122120	122120	
(N•m)	*(5280)*	*(6430)*	*(7040)*	*(8040)*	*(8800)*	*(7940)*	*(7530)*	*(8240)*	*(8360)*	*(12600)*	*(13800)*	*(13800)*	*(13800)*	
Hollow Shaft OHL lbs	25625	26750	27200	27875	28325	29225	29225	29000	29000	27425	26975	26975	26975	
(N)	*(114000)*	*(119000)*	*(121000)*	*(124000)*	*(126000)*	*(130000)*	*(130000)*	*(129000)*	*(129000)*	*(122000)*	*(120000)*	*(120000)*	*(120000)*	
Solid Shaft OHL lbs	20600	22300	23060	24490	26000	27700	28140	28900	28930	28960	28970	28970	28970	
(N)	*(91620)*	*(99190)*	*(102570)*	*(108930)*	*(115640)*	*(123200)*	*(125160)*	*(128540)*	*(128680)*	*(128810)*	*(128850)*	*(128850)*	*(128850)*	
Input Power HP	**55.1**	**55.1**	**55.1**	**55.1**	**55.1**	**42.1**	**37.4**	**37.4**	**33.3**	**46.5**	**46.5**	**40.1**	**31.5**	4F185
(kW)	***(41.1)***	***(41.1)***	***(41.1)***	***(41.1)***	***(41.1)***	***(31.4)***	***(27.9)***	***(27.9)***	***(24.8)***	***(34.7)***	***(34.7)***	***(29.9)***	***(23.5)***	
Output Torque in•lbs	46725	56900	62300	71150	77875	71325	67610	73980	75130	131855	144245	146900	133625	
(N•m)	*(5280)*	*(6430)*	*(7040)*	*(8040)*	*(8800)*	*(8060)*	*(7640)*	*(8360)*	*(8490)*	*(14900)*	*(16300)*	*(16600)*	*(15100)*	
Hollow Shaft OHL lbs	25625	26750	27200	27875	28325	29000	29225	29000	29000	26525	25850	25850	26300	
(N)	*(114000)*	*(119000)*	*(121000)*	*(124000)*	*(126000)*	*(129000)*	*(130000)*	*(129000)*	*(129000)*	*(118000)*	*(115000)*	*(115000)*	*(117000)*	
Solid Shaft OHL lbs	20600	22300	23060	24490	26000	27700	28140	28900	28930	28960	28970	28970	28970	
(N)	*(91620)*	*(99190)*	*(102570)*	*(108930)*	*(115640)*	*(123200)*	*(125160)*	*(128540)*	*(128680)*	*(128810)*	*(128850)*	*(128850)*	*(128850)*	
Input Power HP	**88.6**	**90.5**	**90.5**	**83.3**	**83.3**	**51.9**	**45.7**	**45.7**	**40.6**	**56.1**	**51.2**	**43.3**	**37.5**	4F190
(kW)	***(66.1)***	***(67.5)***	***(67.5)***	***(62.1)***	***(62.1)***	***(38.7)***	***(34.1)***	***(34.1)***	***(30.3)***	***(41.8)***	***(38.2)***	***(32.3)***	***(28.0)***	
Output Torque in•lbs	75130	93815	102665	107975	117715	87965	82655	90265	92035	159290	159290	159290	159290	
(N•m)	*(8490)*	*(10600)*	*(11600)*	*(12200)*	*(13300)*	*(9940)*	*(9340)*	*(10200)*	*(10400)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	
Hollow Shaft OHL lbs	23825	24275	24500	25400	25625	28325	28550	28325	28100	25175	25175	25175	25175	
(N)	*(106000)*	*(108000)*	*(109000)*	*(113000)*	*(114000)*	*(126000)*	*(127000)*	*(126000)*	*(125000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	
Solid Shaft OHL lbs	20600	22300	23060	24490	26000	27700	28140	28900	28930	28960	28970	28970	28970	
(N)	*(91620)*	*(99190)*	*(102570)*	*(108930)*	*(115640)*	*(123200)*	*(125160)*	*(128540)*	*(128680)*	*(128810)*	*(128850)*	*(128850)*	*(128850)*	
Input Power HP	**88.6**	**90.5**	**90.5**	**83.3**	**83.3**	**52.8**	**46.7**	**46.7**	**41.4**	**56.1**	**51.2**	**43.3**	**37.5**	4F195
(kW)	***(66.1)***	***(67.5)***	***(67.5)***	***(62.1)***	***(62.1)***	***(39.4)***	***(34.8)***	***(34.8)***	***(30.9)***	***(41.8)***	***(38.2)***	***(32.3)***	***(28.0)***	
Output Torque in•lbs	75130	93815	102665	107975	117715	89380	84335	92035	93805	159290	159290	159290	159290	
(N•m)	*(8490)*	*(10600)*	*(11600)*	*(122000*	*(13300)*	*(10100)*	*(9530)*	*(10400)*	*(10600)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	
Hollow Shaft OHL lbs	23825	24275	24500	25400	25625	28325	28550	28100	28100	25175	25175	25175	25175	
(N)	*(106000)*	*(108000)*	*(109000)*	*(113000)*	*(114000)*	*(126000)*	*(127000)*	*(125000)*	*(125000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	
Solid Shaft OHL lbs	20600	22300	23060	24490	26000	27700	28140	28900	28930	28960	28970	28970	28970	
(N)	*(91620)*	*(99190)*	*(102570)*	*(108930)*	*(115640)*	*(123200)*	*(125160)*	*(128540)*	*(128680)*	*(128810)*	*(128850)*	*(128850)*	*(128850)*	

Frame Size Selection Tables 720 RPM



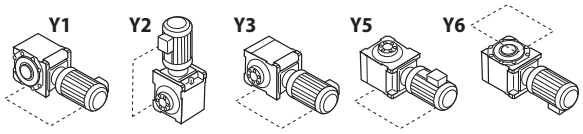
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	12.0	10.7	9.73	9.00	8.18	7.06	6.43	5.85	4.77	4.02	3.48	2.89	2.36	1.73	Frame Size
Ratio	**60**	**67**	**74**	**80**	**88**	**102**	**112**	**123**	**151**	**179**	**207**	**249**	**305**	**417**	
Input Power HP	**21.3**	**189**	**17.3**	**16.0**	**14.5**	**12.5**	**11.4**	**10.4**	**8.40**	**7.12**	**6.16**	**5.12**	**4.18**	**—**	
(kW)	***(15.9)***	***(14.1)***	***(12.9)***	***(11.9)***	***(10.8)***	***(9.40)***	***(8.47)***	***(7.74)***	***(6.30)***	***(5.31)***	***(4.59)***	***(3.82)***	***(3.12)***	**—**	
Output Torque in•lbs	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	**4E190**
Hollow Shaft OHL lbs	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	—	
(N)	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	21330	21500	21620	21670	21720	21790	21830	21860	21920	21920	21920	21920	21920	—	
(N)	*(94870)*	*(95630)*	*(96160)*	*(96380)*	*(96610)*	*(96920)*	*(97090)*	*(97230)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	—	
Input Power HP	**21.3**	**18.9**	**17.3**	**16.0**	**14.5**	**12.5**	**11.4**	**10.4**	**8.40**	**7.12**	**6.16**	**5.12**	**4.18**	**—**	
(kW)	***(15.9)***	***(14.1)***	***(12.9)***	***(11.9)***	***(10.8)***	***(9.35)***	***(8.47)***	***(7.74)***	***(6.30)***	***(5.31)***	***(4.59)***	***(3.82)***	***(3.12)***	**—**	
Output Torque in•lbs	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	**4E195**
Hollow Shaft OHL lbs	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	—	
(N)	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	21330	21500	21620	21670	21720	21790	21830	21860	21920	21920	21920	21920	21920	—	
(N)	*(94870)*	*(95630)*	*(96160)*	*(96380)*	*(96610)*	*(96920)*	*(97090)*	*(97230)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	—	
Input Power HP	**25.5**	**20.5**	**20.5**	**17.3**	**17.3**	**14.9**	**12.3**	**12.3**	**10.0**	**8.40**	**7.31**	**6.07**	**4.96**	**—**	
(kW)	***(19.0)***	***(15.3)***	***(15.3)***	***(12.9)***	***(12.9)***	***(11.1)***	***(9.19)***	***(9.19)***	***(7.49)***	***(6.30)***	***(5.45)***	***(4.53)***	***(3.70)***	**—**	
Output Torque in•lbs	122120	111500	122120	111500	122120	122120	111500	122120	122120	122120	122120	122120	122120	—	
(N•m)	*(13800)*	*(12600)*	*(13800)*	*(12600)*	*(13800)*	*(13800)*	*(12600)*	*(13800)*	*(13800)*	*(13800)*	*(13800)*	*(13800)*	*(13800)*	—	**4F180**
Hollow Shaft OHL lbs	26975	27425	26975	27425	26975	26975	27425	26975	26975	26975	26975	26975	26975	—	
(N)	*(120000)*	*(122000)*	*(120000)*	*(122000)*	*(120000)*	*(120000)*	*(122000)*	*(120000)*	*(120000)*	*(120000)*	*(120000)*	*(120000)*	*(120000)*	—	
Solid Shaft OHL lbs	28970	28970	29000	29080	29170	29290	29370	29430	29530	29530	29530	29530	29530	—	
(N)	*(128850)*	*(128850)*	*(128990)*	*(129340)*	*(129740)*	*(130280)*	*(130630)*	*(130900)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	—	
Input Power HP	**30.0**	**25.3**	**25.3**	**21.3**	**21.3**	**18.4**	**15.2**	**15.2**	**12.4**	**10.4**	**9.00**	**6.77**	**6.12**	**—**	
(kW)	***(22.4)***	***(18.9)***	***(18.9)***	***(15.9)***	***(15.9)***	***(13.7)***	***(11.3)***	***(11.3)***	***(9.23)***	***(7.78)***	***(6.73)***	***(5.05)***	***(4.56)***	**—**	
Output Torque in•lbs	144245	137165	150440	138050	150440	150440	137165	149555	150440	150440	150440	135395	150440	—	
(N•m)	*(16300)*	*(15500)*	*(17000)*	*(15600)*	*(17000)*	*(17000)*	*(15500)*	*(16900)*	*(17000)*	*(17000)*	*(17000)*	*(15300)*	*(17000)*	—	**4F185**
Hollow Shaft OHL lbs	25850	26300	25625	26300	25625	25625	26300	25625	25625	25625	25625	26300	25625	—	
(N)	*(115000)*	*(117000)*	*(114000)*	*(117000)*	*(114000)*	*(114000)*	*(117000)*	*(114000)*	*(114000)*	*(114000)*	*(114000)*	*(117000)*	*(114000)*	—	
Solid Shaft OHL lbs	28970	28970	29000	29080	29170	29290	29370	29430	29530	29530	29530	29530	29530	—	
(N)	*(128850)*	*(128850)*	*(128990)*	*(129340)*	*(129740)*	*(130280)*	*(130630)*	*(130900)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	—	
Input Power HP	**33.1**	**29.4**	**26.8**	**24.7**	**22.5**	**19.4**	**17.6**	**16.1**	**13.1**	**11.1**	**9.60**	**7.94**	**6.48**	**—**	
(kW)	***(24.7)***	***(21.9)***	***(20.0)***	***(18.4)***	***(16.8)***	***(14.5)***	***(13.1)***	***(12.0)***	***(9.78)***	***(8.25)***	***(7.13)***	***(5.92)***	***(4.83)***	**—**	
Output Torque in•lbs	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	—	
(N•m)	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	—	**4F190**
Hollow Shaft OHL lbs	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	—	
(N)	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	—	
Solid Shaft OHL lbs	28970	28970	29000	29080	29170	29290	29370	29430	29530	29530	29530	29530	29530	—	
(N)	*(128850)*	*(128850)*	*(128990)*	*(129340)*	*(129740)*	*(130280)*	*(130630)*	*(130900)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	—	
Input Power HP	**33.1**	**29.4**	**26.8**	**24.7**	**22.5**	**19.4**	**17.6**	**16.1**	**13.1**	**11.1**	**9.60**	**7.94**	**6.48**	**—**	
(kW)	***(24.7)***	***(21.9)***	***(20.0)***	***(18.4)***	***(16.8)***	***(14.5)***	***(13.1)***	***(12.0)***	***(9.78)***	***(8.25)***	***(7.13)***	***(5.92)***	***(4.83)***	**—**	
Output Torque in•lbs	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	—	
(N•m)	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	—	**4F195**
Hollow Shaft OHL lbs	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	—	
(N)	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	—	
Solid Shaft OHL lbs	28970	28970	29000	29080	29170	29290	29370	29430	29530	29530	29530	29530	29530	—	
(N)	*(128850)*	*(128850)*	*(128990)*	*(129340)*	*(129740)*	*(130280)*	*(130630)*	*(130900)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	—	

Frame Size Selection Tables 580 RPM

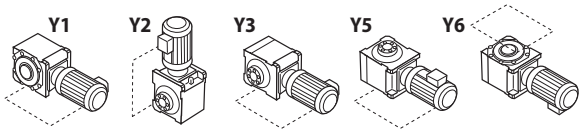
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	52.7	44.6	41.4	36.3	32.2	27.6	26.4	23.2	20.7	16.6	14.9	12.6	10.9	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	**2.44**	**2.44**	**2.44**	**2.44**	**2.44**	**2.44**	—	—	**2.49**	**1.94**	**1.94**	**1.65**	**1.43**	
(kW)	***(1.82)***	***(1.82)***	***(1.82)***	***(1.82)***	***(1.82)***	***(1.82)***	—	—	***(1.86)***	***(1.45)***	***(1.45)***	***(1.23)***	***(1.07)***	
Output Torque in•lbs	2565	3120	3415	3910	4270	5130	—	—	7015	6865	7510	7510	7510	
(N•m)	*(290)*	*(353)*	*(386)*	*(442)*	*(483)*	*(580)*	—	—	*(793)*	*(776)*	*(849)*	*(849)*	*(849)*	**4A100**
Hollow Shaft OHL lbs	5035	5280	5415	5575	5685	5665	—	—	5215	5260	5055	5055	5055	
(N)	*(22400)*	*(23500)*	*(24100)*	*(24800)*	*(25300)*	*(25200)*	—	—	*(23200)*	*(23400)*	*(22500)*	*(22500)*	*(22500)*	
Solid Shaft OHL lbs	4260	4510	4530	4570	4580	4580	—	—	4580	4580	4580	4580	4580	
(N)	*(18940)*	*(20060)*	*(20140)*	*(20320)*	*(20370)*	*(20370)*	—	—	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**2.44**	**2.44**	**2.44**	**2.44**	**2.44**	**2.44**	**—**	**—**	**2.49**	**2.40**	**2.40**	**1.98**	**1.72**	
(kW)	***(1.82)***	***(1.82)***	***(1.82)***	***(1.82)***	***(1.82)***	***(1.82)***	**—**	**—**	***(1.86)***	***(1.79)***	***(1.79)***	***(1.48)***	***(1.28)***	
Output Torque in•lbs	2565	3120	3415	3910	4270	5130	—	—	7015	8450	9290	9025	9025	
(N•m)	*(290)*	*(353)*	*(386)*	*(442)*	*(483)*	*(580)*	—	—	*(793)*	*(955)*	*(1050)*	*(1020)*	*(1020)*	**4A105**
Hollow Shaft OHL lbs	5035	5280	5415	5575	5685	5665	—	—	5215	4740	4405	4515	4515	
(N)	*(22400)*	*(23500)*	*(24100)*	*(24800)*	*(25300)*	*(25200)*	—	—	*(23200)*	*(21100)*	*(19600)*	*(20100)*	*(20100)*	
Solid Shaft OHL lbs	4260	4510	4530	4570	4580	4580	—	—	4580	4580	4580	4580	4580	
(N)	*(18940)*	*(20060)*	*(20140)*	*(20320)*	*(20370)*	*(20370)*	—	—	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**—**	**—**	**—**	**—**	**—**	**2.76**	**—**	**—**	**3.50**	**2.80**	**2.80**	**2.37**	**2.05**	
(kW)	**—**	**—**	**—**	**—**	**—**	***(2.06)***	**—**	**—**	***(2.61)***	***(2.09)***	***(2.09)***	***(1.77)***	***(1.53)***	
Output Torque in•lbs	—	—	—	—	—	5810	—	—	9820	9910	10795	10795	10795	
(N•m)	—	—	—	—	—	*(657)*	—	—	*(1110)*	*(1120)*	*(1220)*	*(1220)*	*(1220)*	**4A110**
Hollow Shaft OHL lbs	—	—	—	—	—	5530	—	—	3550	4090	3550	3550	3550	
(N)	—	—	—	—	—	*(24600)*	—	—	*(15800)*	*(18200)*	*(15800)*	*(15800)*	*(15800)*	
Solid Shaft OHL lbs	—	—	—	—	—	4580	—	—	4580	4580	4580	4580	4580	
(N)	—	—	—	—	—	*(20370)*	—	—	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**—**	**—**	**—**	**—**	**—**	**2.76**	**—**	**—**	**3.50**	**3.23**	**2.96**	**2.51**	**2.17**	
(kW)	**—**	**—**	**—**	**—**	**—**	***(2.06)***	**—**	**—**	***(2.61)***	***(2.41)***	***(2.21)***	***(1.87)***	***(1.62)***	
Output Torque in•lbs	—	—	—	—	—	5810	—	—	9820	11415	11415	11415	11415	
(N•m)	—	—	—	—	—	*(657)*	—	—	*(1110)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	**4A115**
Hollow Shaft OHL lbs	—	—	—	—	—	5530	—	—	3120	3120	3120	3120	3120	
(N)	—	—	—	—	—	*(24600)*	—	—	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	—	—	—	—	—	4580	—	—	4580	4580	4580	4580	4580	
(N)	—	—	—	—	—	*(20370)*	—	—	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**7.86**	**7.86**	**7.86**	**7.12**	**6.52**	**5.23**	**5.08**	**4.65**	**4.06**	**3.23**	**2.96**	**2.51**	**2.17**	
(kW)	***(5.86)***	***(5.86)***	***(5.86)***	***(5.31)***	***(4.86)***	***(3.90)***	***(3.79)***	***(3.47)***	***(3.03)***	***(2.41)***	***(2.21)***	***(1.87)***	***(1.62)***	
Output Torque in•lbs	8265	10085	11060	11415	11415	10970	11415	11415	11415	11415	11415	11415	11415	
(N•m)	*(934)*	*(1140)*	*(1250)*	*(1290)*	*(1290)*	*(1240)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	**4A120**
Hollow Shaft OHL lbs	4245	4000	3415	3120	3120	3415	3120	3120	3120	3120	3120	3120	3120	
(N)	*(18900)*	*(17800)*	*(15200)*	*(13900)*	*(13900)*	*(15200)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	4260	4510	4530	4570	4580	4580	4580	4580	4580	4580	4580	4580	4580	
(N)	*(18940)*	*(20060)*	*(20140)*	*(20320)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**7.86**	**7.86**	**7.86**	**7.12**	**6.52**	**5.23**	**5.08**	**4.65**	**4.06**	**3.23**	**2.96**	**2.51**	**2.17**	
(kW)	***(5.86)***	***(5.86)***	***(5.86)***	***(5.31)***	***(4.86)***	***(3.90)***	***(3.79)***	***(3.47)***	***(3.03)***	***(2.41)***	***(2.21)***	***(1.87)***	***(1.62)***	
Output Torque in•lbs	8265	10085	11060	11415	11415	10970	11415	11415	11415	11415	11415	11415	11415	
(N•m)	*(934)*	*(1140)*	*(1250)*	*(1290)*	*(1290)*	*(1240)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	**4A125**
Hollow Shaft OHL lbs	4245	4000	3415	3120	3120	3415	3120	3120	3120	3120	3120	3120	3120	
(N)	*(18900)*	*(17800)*	*(15200)*	*(13900)*	*(13900)*	*(15200)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	4260	4510	4530	4570	4580	4580	4580	4580	4580	4580	4580	4580	4580	
(N)	*(18940)*	*(20060)*	*(20140)*	*(20320)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	

Frame Size Selection Tables 580 RPM



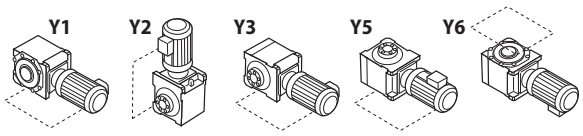
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	9.67	8.66	7.84	7.25	6.59	5.69	5.18	4.72	3.84	3.24	2.80	2.33	1.90	1.39	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	**1.26**	**1.02**	**1.02**	**0.860**	**0.860**	**0.740**	**0.610**	**0.610**	**0.500**	**0.420**	**0.363**	**0.302**	**0.247**	**0.180**	
(kW)	***(0.94)***	***(0.761)***	***(0.761)***	***(0.639)***	***(0.639)***	***(0.551)***	***(0.457)***	***(0.457)***	***(0.372)***	***(0.313)***	***(0.271)***	***(0.225)***	***(0.184)***	***(0.134)***	
Output Torque in•lbs	7510	6865	7510	6865	7510	7510	6865	7510	7510	7510	7510	7510	7510	7510	**4A100**
(N•m)	*(849)*	*(776)*	*(849)*	*(776)*	*(849)*	*(849)*	*(776)*	*(849)*	*(849)*	*(849)*	*(849)*	*(849)*	*(849)*	*(849)*	
Hollow Shaft OHL lbs	5055	5260	5055	5260	5055	5055	5260	5055	5055	5055	5055	5055	5055	5055	
(N)	*(22500)*	*(23400)*	*(22500)*	*(23400)*	*(22500)*	*(22500)*	*(23400)*	*(22500)*	*(22500)*	*(22500)*	*(22500)*	*(22500)*	*(22500)*	*(22500)*	
Solid Shaft OHL lbs	4570	4560	4560	4550	4550	4540	4540	4540	4540	4540	4540	4540	4540	4540	
(N)	*(20320)*	*(20280)*	*(20280)*	*(20230)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	
Input Power HP	**1.52**	**1.22**	**1.22**	**1.03**	**1.03**	**0.89**	**0.730**	**0.730**	**0.600**	**0.499**	**0.430**	**0.319**	**0.295**	**0.186**	
(kW)	***(1.13)***	***(0.913)***	***(0.913)***	***(0.767)***	***(0.767)***	***(0.661)***	***(0.548)***	***(0.548)***	***(0.446)***	***(0.372)***	***(0.321)***	***(0.238)***	***(0.220)***	***(0.139)***	
Output Torque in•lbs	9025	8245	9025	8245	9025	9025	8245	9025	9025	8935	8935	7935	9025	7765	**4A105**
(N•m)	*(1020)*	*(932)*	*(1020)*	*(932)*	*(1020)*	*(1020)*	*(932)*	*(1020)*	*(1020)*	*(1010)*	*(1010)*	*(897)*	*(1020)*	*(878)*	
Hollow Shaft OHL lbs	4515	4810	4515	4810	4515	4515	4810	4515	4515	4540	4560	4920	4515	4990	
(N)	*(20100)*	*(21400)*	*(20100)*	*(21400)*	*(20100)*	*(20100)*	*(21400)*	*(20100)*	*(20100)*	*(20200)*	*(20300)*	*(21900)*	*(20100)*	*(22200)*	
Solid Shaft OHL lbs	4570	4560	4560	4550	4550	4540	4540	4540	4540	4540	4540	4540	4540	4540	
(N)	*(20320)*	*(20280)*	*(20280)*	*(20230)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	
Input Power HP	**1.81**	**1.48**	**1.48**	**1.24**	**1.24**	**1.06**	**0.880**	**0.880**	**0.720**	**0.600**	**0.520**	**0.434**	**0.355**	**—**	
(kW)	***(1.35)***	***(1.10)***	***(1.10)***	***(0.921)***	***(0.921)***	***(0.794)***	***(0.658)***	***(0.658)***	***(0.535)***	***(0.451)***	***(0.390)***	***(0.324)***	***(0.265)***	**—**	
Output Torque in•lbs	10795	9910	10795	9910	10795	10795	9910	10795	10795	10795	10795	10795	10795	—	**4A110**
(N•m)	*(1220)*	*(1120)*	*(1220)*	*(1120)*	*(1220)*	*(1220)*	*(1120)*	*(1220)*	*(1220)*	*(1220)*	*(1220)*	*(1220)*	*(1220)*	—	
Hollow Shaft OHL lbs	3550	4090	3550	4090	3550	3550	4090	3550	3550	3550	3550	3550	3550	—	
(N)	*(15800)*	*(18200)*	*(15800)*	*(18200)*	*(15800)*	*(15800)*	*(18200)*	*(15800)*	*(15800)*	*(15800)*	*(15800)*	*(15800)*	*(15800)*	—	
Solid Shaft OHL lbs	4570	4560	4560	4550	4550	4540	4540	4540	4540	4540	4540	4540	4540	—	
(N)	*(20320)*	*(20280)*	*(20280)*	*(20230)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	
Input Power HP	**1.92**	**1.69**	**1.56**	**1.42**	**1.30**	**1.12**	**1.02**	**0.930**	**0.760**	**0.640**	**0.550**	**0.460**	**0.374**	**—**	
(kW)	***(1.43)***	***(1.26)***	***(1.16)***	***(1.06)***	***(0.971)***	***(0.837)***	***(0.759)***	***(0.694)***	***(0.565)***	***(0.476)***	***(0.411)***	***(0.342)***	***(0.279)***	**—**	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	**4A115**
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4570	4560	4560	4550	4550	4540	4540	4540	4540	4540	4540	4540	4540	—	
(N)	*(20320)*	*(20280)*	*(20280)*	*(20230)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	
Input Power HP	**1.92**	**1.69**	**1.56**	**1.42**	**1.30**	**1.12**	**1.02**	**0.930**	**0.760**	**0.640**	**0.550**	**0.460**	**0.374**	**—**	
(kW)	***(1.43)***	***(1.26)***	***(1.16)***	***(1.06)***	***(0.971)***	***(0.837)***	***(0.759)***	***(0.694)***	***(0.565)***	***(0.476)***	***(0.411)***	***(0.342)***	***(0.279)***	**—**	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	**4A120**
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4570	4560	4560	4550	4550	4540	4540	4540	4540	4540	4540	4540	4540	—	
(N)	*(20320)*	*(20280)*	*(20280)*	*(20230)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	
Input Power HP	**1.92**	**1.69**	**1.56**	**1.42**	**1.30**	**1.12**	**1.02**	**0.930**	**0.760**	**0.640**	**0.550**	**0.460**	**0.374**	**—**	
(kW)	***(1.43)***	***(1.26)***	***(1.16)***	***(1.06)***	***(0.971)***	***(0.837)***	***(0.759)***	***(0.694)***	***(0.565)***	***(0.476)***	***(0.411)***	***(0.342)***	***(0.279)***	**—**	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	**4A125**
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4570	4560	4560	4550	4550	4540	4540	4540	4540	4540	4540	4540	4540	—	
(N)	*(20320)*	*(20280)*	*(20280)*	*(20230)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	

Frame Size Selection Tables 580 RPM

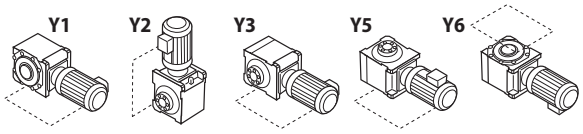
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	52.7	44.6	41.4	36.3	32.2	27.6	26.4	23.2	20.7	16.6	14.9	12.6	10.9	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	**10.8**	**8.90**	**8.10**	**7.10**	**6.52**	**5.43**	**5.08**	**4.65**	**4.06**	**3.23**	**2.96**	**2.51**	**2.17**	4A140
(kW)	***(8.09)***	***(6.64)***	***(6.07)***	***(5.31)***	***(4.86)***	***(4.05)***	***(3.79)***	***(3.47)***	***(3.03)***	***(2.41)***	***(2.21)***	***(1.87)***	***(1.62)***	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	4260	4510	4530	4570	4580	4580	4580	4580	4580	4580	4580	4580	4580	
(N)	*(18940)*	*(20060)*	*(20140)*	*(20320)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**10.8**	**8.90**	**8.10**	**7.10**	**6.52**	**5.43**	**5.08**	**4.65**	**4.06**	**3.23**	**2.96**	**2.51**	**2.17**	4A145
(kW)	***(8.09)***	***(6.64)***	***(6.07)***	***(5.31)***	***(4.86)***	***(4.05)***	***(3.79)***	***(3.47)***	***(3.03)***	***(2.41)***	***(2.21)***	***(1.87)***	***(1.62)***	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	4260	4510	4530	4570	4580	4580	4580	4580	4580	4580	4580	4580	4580	
(N)	*(18940)*	*(20060)*	*(20140)*	*(20320)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	
Input Power HP	**7.86**	**7.86**	**7.86**	**7.86**	**7.86**	**5.23**	**5.34**	**5.34**	**5.36**	**4.09**	**4.09**	**3.46**	**3.00**	4B120
(kW)	***(5.86)***	***(5.86)***	***(5.86)***	***(5.86)***	***(5.86)***	***(3.90)***	***(3.98)***	***(3.98)***	***(4.00)***	***(3.05)***	***(3.05)***	***(2.58)***	***(2.24)***	
Output Torque in•lbs	8265	10085	11060	12565	13805	10970	12035	13095	15040	14420	15750	15750	15750	
(N•m)	*(934)*	*(1140)*	*(1250)*	*(1420)*	*(1560)*	*(1240)*	*(1360)*	*(1480)*	*(1700)*	*(1630)*	*(1780)*	*(1780)*	*(1780)*	
Hollow Shaft OHL lbs	6380	6605	6740	6875	6990	7755	7820	7955	8135	8565	8250	8250	8250	
(N)	*(28400)*	*(29400)*	*(30000)*	*(30600)*	*(31100)*	*(34500)*	*(34800)*	*(35400)*	*(36200)*	*(38100)*	*(36700)*	*(36700)*	*(36700)*	
Solid Shaft OHL lbs	4730	5140	5360	5710	6010	6490	6630	6970	7240	7420	7470	7540	7600	
(N)	*(21030)*	*(22860)*	*(23840)*	*(25390)*	*(26730)*	*(28860)*	*(29490)*	*(31000)*	*(32200)*	*(33000)*	*(33220)*	*(33530)*	*(33800)*	
Input Power HP	**7.86**	**7.86**	**7.86**	**7.86**	**7.86**	**5.23**	**5.34**	**5.34**	**5.36**	**4.65**	**4.65**	**4.16**	**3.61**	4B125
(kW)	***(5.86)***	***(5.86)***	***(5.86)***	***(5.86)***	***(5.86)***	***(3.90)***	***(3.98)***	***(3.98)***	***(4.00)***	***(3.47)***	***(3.47)***	***(3.10)***	***(2.69)***	
Output Torque in•lbs	8265	10085	11060	12565	13805	10970	12035	13095	15040	16370	17960	18935	18935	
(N•m)	*(934)*	*(1140)*	*(1250)*	*(1420)*	*(1560)*	*(1240)*	*(1360)*	*(1480)*	*(1700)*	*(1850)*	*(2030)*	*(2140)*	*(2140)*	
Hollow Shaft OHL lbs	6380	6605	6740	6875	6990	7755	7820	7955	8135	8090	7640	7325	7325	
(N)	*(28400)*	*(29400)*	*(30000)*	*(30600)*	*(31100)*	*(34500)*	*(34800)*	*(35400)*	*(36200)*	*(36000)*	*(34000)*	*(32600)*	*(32600)*	
Solid Shaft OHL lbs	4730	5140	5360	5710	6010	6490	6630	6970	7240	7420	7470	7540	7600	
(N)	*(21030)*	*(22860)*	*(23840)*	*(25390)*	*(26730)*	*(28860)*	*(29490)*	*(31000)*	*(32200)*	*(33000)*	*(33220)*	*(33530)*	*(33800)*	
Input Power HP	**12.3**	**12.3**	**12.3**	**12.3**	**12.3**	**10.2**	**10.1**	**9.3**	**8.1**	**6.45**	**5.90**	**4.99**	**4.32**	4B140
(kW)	***(9.17)***	***(9.17)***	***(9.17)***	***(9.17)***	***(9.17)***	***(7.64)***	***(7.56)***	***(6.91)***	***(6.05)***	***(4.81)***	***(4.40)***	***(3.72)***	***(3.22)***	
Output Torque in•lbs	12920	15750	17255	19730	21590	21590	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(1460)*	*(1780)*	*(1950)*	*(2230)*	*(2440)*	*(2440)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	
Hollow Shaft OHL lbs	5865	6000	6065	6110	6155	6290	5710	5710	5710	5710	5710	5710	5710	
(N)	*(26100)*	*(26700)*	*(27000)*	*(27200)*	*(27400)*	*(28000)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	
Solid Shaft OHL lbs	4730	5140	5360	5710	6010	6490	6630	6970	7240	7420	7470	7540	7600	
(N)	*(21030)*	*(22860)*	*(23840)*	*(25390)*	*(26730)*	*(28860)*	*(29490)*	*(31000)*	*(32200)*	*(33000)*	*(33220)*	*(33530)*	*(33800)*	
Input Power HP	**12.3**	**12.3**	**12.3**	**12.3**	**12.3**	**10.2**	**10.1**	**9.30**	**8.10**	**6.45**	**5.90**	**4.99**	**4.32**	4B145
(kW)	***(9.17)***	***(9.17)***	***(9.17)***	***(9.17)***	***(9.17)***	***(7.64)***	***(7.56)***	***(6.91)***	***(6.05)***	***(4.81)***	***(4.40)***	***(3.72)***	***(3.22)***	
Output Torque in•lbs	12920	15750	17255	19730	21590	21590	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(1460)*	*(1780)*	*(1950)*	*(2230)*	*(2440)*	*(2440)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	
Hollow Shaft OHL lbs	5865	6000	6065	6110	6155	6290	5710	5710	5710	5710	5710	5710	5710	
(N)	*(26100)*	*(26700)*	*(27000)*	*(27200)*	*(27400)*	*(28000)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	
Solid Shaft OHL lbs	4730	5140	5360	5710	6010	6490	6630	6970	7240	7420	7470	7540	7600	
(N)	*(21030)*	*(22860)*	*(23840)*	*(25390)*	*(26730)*	*(28860)*	*(29490)*	*(31000)*	*(32200)*	*(33000)*	*(33220)*	*(33530)*	*(33800)*	

Frame Size Selection Tables 580 RPM



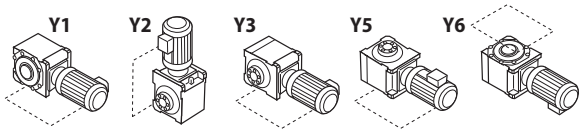
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	9.67	8.66	7.84	7.25	6.59	5.69	5.18	4.72	3.84	3.24	2.80	2.33	1.90	1.39	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	**1.92**	**1.69**	**1.56**	**1.42**	**1.30**	**1.12**	**1.02**	**0.931**	**0.758**	**0.638**	**0.551**	**0.459**	**0.374**	**—**	
(kW)	***(1.43)***	***(1.26)***	***(1.16)***	***(1.06)***	***(0.971)***	***(0.837)***	***(0.759)***	***(0.694)***	***(0.565)***	***(0.476)***	***(0.411)***	***(0.342)***	***(0.279)***	**—**	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	**4A140**
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4570	4560	4560	4550	4550	4540	4540	4540	4540	4540	4540	4540	4540	—	
(N)	*(20320)*	*(20280)*	*(20280)*	*(20230)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	
Input Power HP	**1.92**	**1.69**	**1.56**	**1.42**	**1.30**	**1.12**	**1.02**	**0.930**	**0.760**	**0.638**	**0.551**	**0.459**	**0.374**	**—**	
(kW)	***(1.43)***	***(1.26)***	***(1.16)***	***(1.06)***	***(0.971)***	***(0.837)***	***(0.759)***	***(0.694)***	***(0.565)***	***(0.476)***	***(0.411)***	***(0.342)***	***(0.279)***	**—**	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	**4A145**
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4570	4560	4560	4550	4550	4540	4540	4540	4540	4540	4540	4540	4540	—	
(N)	*(20320)*	*(20280)*	*(20280)*	*(20230)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	
Input Power HP	**2.63**	**2.13**	**2.13**	**1.80**	**1.80**	**1.54**	**1.29**	**1.29**	**1.05**	**0.880**	**0.760**	**0.634**	**0.518**	**—**	
(kW)	***(1.96)***	***(1.59)***	***(1.59)***	***(1.34)***	***(1.34)***	***(1.15)***	***(0.959)***	***(0.959)***	***(0.781)***	***(0.658)***	***(0.569)***	***(0.473)***	***(0.386)***	**—**	
Output Torque in•lbs	15660	14335	15660	14420	15750	15660	14420	15750	15750	15750	15750	15750	15750	—	
(N•m)	*(1770)*	*(1620)*	*(1770)*	*(1630)*	*(1780)*	*(1770)*	*(1630)*	*(1780)*	*(1780)*	*(1780)*	*(1780)*	*(1780)*	*(1780)*	—	**4B120**
Hollow Shaft OHL lbs	8295	8585	8270	8565	8250	8295	8565	8250	8250	8250	8250	8250	8250	—	
(N)	*(36900)*	*(38200)*	*(36800)*	*(38100)*	*(36700)*	*(36900)*	*(38100)*	*(36700)*	*(36700)*	*(36700)*	*(36700)*	*(36700)*	*(36700)*	—	
Solid Shaft OHL lbs	7590	7490	7400	7350	7280	7190	7120	7120	7120	7120	7120	7120	7120	—	
(N)	*(33760)*	*(33310)*	*(32910)*	*(32690)*	*(32380)*	*(31980)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	—	
Input Power HP	**3.18**	**2.57**	**2.57**	**2.16**	**2.16**	**1.86**	**1.54**	**1.54**	**1.26**	**1.06**	**0.920**	**0.710**	**0.621**	**—**	
(kW)	***(2.37)***	***(1.92)***	***(1.92)***	***(1.61)***	***(1.61)***	***(1.39)***	***(1.15)***	***(1.15)***	***(0.937)***	***(0.790)***	***(0.683)***	***(0.533)***	***(0.463)***	**—**	
Output Torque in•lbs	18935	17345	18935	17345	18935	18935	17345	18935	18935	18935	18935	17785	18935	—	
(N•m)	*(2140)*	*(1960)*	*(2140)*	*(1960)*	*(2140)*	*(2140)*	*(1960)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2010)*	*(2140)*	—	**4B125**
Hollow Shaft OHL lbs	7325	7845	7325	7845	7325	7325	7845	7325	7325	7325	7325	7685	7325	—	
(N)	*(32600)*	*(34900)*	*(32600)*	*(34900)*	*(32600)*	*(32600)*	*(34900)*	*(32600)*	*(32600)*	*(32600)*	*(32600)*	*(34200)*	*(32600)*	—	
Solid Shaft OHL lbs	7590	7490	7400	7350	7280	7190	7120	7120	7120	7120	7120	7120	7120	—	
(N)	*(33760)*	*(33310)*	*(32910)*	*(32690)*	*(32380)*	*(31980)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	—	
Input Power HP	**3.82**	**3.38**	**3.08**	**2.84**	**2.59**	**2.24**	**2.02**	**1.85**	**1.50**	**1.27**	**1.10**	**0.910**	**0.750**	**—**	
(kW)	***(2.85)***	***(2.52)***	***(2.30)***	***(2.12)***	***(1.93)***	***(1.67)***	***(1.51)***	***(1.38)***	***(1.12)***	***(0.948)***	***(0.820)***	***(0.681)***	***(0.556)***	**—**	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	—	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	—	**4B140**
Hollow Shaft OHL lbs	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	—	
(N)	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	—	
Solid Shaft OHL lbs	7590	7490	7400	7350	7280	7190	7120	7120	7120	7120	7120	7120	7120	—	
(N)	*(33760)*	*(33310)*	*(32910)*	*(32690)*	*(32380)*	*(31980)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	—	
Input Power HP	**3.82**	**3.38**	**3.08**	**2.84**	**2.59**	**2.24**	**2.02**	**1.85**	**1.50**	**1.27**	**1.10**	**0.910**	**0.750**	**—**	
(kW)	***(2.85)***	***(2.52)***	***(2.30)***	***(2.12)***	***(1.93)***	***(1.67)***	***(1.51)***	***(1.38)***	***(1.12)***	***(0.948)***	***(0.820)***	***(0.681)***	***(0.556)***	**—**	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	—	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	—	**4B145**
Hollow Shaft OHL lbs	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	—	
(N)	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	—	
Solid Shaft OHL lbs	7590	7490	7400	7350	7280	7190	7120	7120	7120	7120	7120	7120	7120	—	
(N)	*(33760)*	*(33310)*	*(32910)*	*(32690)*	*(32380)*	*(31980)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	—	

Frame Size Selection Tables 580 RPM

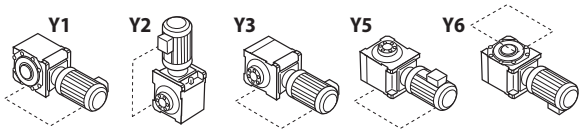
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	52.7	44.6	41.4	36.3	32.2	27.6	26.4	23.2	20.7	16.6	14.9	12.6	10.9	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	**15.6**	**15.6**	**15.6**	**14.2**	**13.0**	**10.8**	**10.1**	**9.27**	**8.11**	**6.45**	**5.90**	**4.99**	**4.32**	4B160
(kW)	***(11.6)***	***(11.6)***	***(11.6)***	***(10.6)***	***(9.67)***	***(8.06)***	***(7.56)***	***(6.91)***	***(6.05)***	***(4.81)***	***(4.40)***	***(3.72)***	***(3.22)***	
Output Torque in•lbs	16370	19910	21855	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(1850)*	*(2250)*	*(2470)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	
Hollow Shaft OHL lbs	5505	5550	5575	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	
(N)	*(24500)*	*(24700)*	*(24800)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	
Solid Shaft OHL lbs	4730	5140	5360	5710	6010	6490	6630	6970	7240	7420	7470	7540	7600	
(N)	*(21030)*	*(22860)*	*(23840)*	*(25390)*	*(26730)*	*(28860)*	*(29490)*	*(31000)*	*(32200)*	*(33000)*	*(33220)*	*(33530)*	*(33800)*	
Input Power HP	**15.6**	**15.6**	**15.6**	**14.2**	**13.0**	**10.8**	**10.1**	**9.27**	**8.11**	**6.45**	**5.90**	**4.99**	**4.32**	4B165
(kW)	***(11.6)***	***(11.6)***	***(11.6)***	***(10.6)***	***(9.67)***	***(8.06)***	***(7.56)***	***(6.91)***	***(6.05)***	***(4.81)***	***(4.40)***	***(3.72)***	***(3.22)***	
Output Torque in•lbs	16370	19910	21855	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(1850)*	*(2250)*	*(2470)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	
Hollow Shaft OHL lbs	5505	5550	5575	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	
(N)	*(24500)*	*(24700)*	*(24800)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	
Solid Shaft OHL lbs	4730	5140	5360	5710	6010	6490	6630	6970	7240	7420	7470	7540	7600	
(N)	*(21030)*	*(22860)*	*(23840)*	*(25390)*	*(26730)*	*(28860)*	*(29490)*	*(31000)*	*(32200)*	*(33000)*	*(33220)*	*(33530)*	*(33800)*	
Input Power HP	**12.3**	**12.3**	**12.3**	**12.3**	**12.3**	**10.2**	**12.1**	**12.1**	**10.5**	**9.55**	**9.55**	**8.07**	**7.00**	4C140
(kW)	***(9.17)***	***(9.17)***	***(9.17)***	***(9.17)***	***(9.17)***	***(7.64)***	***(9.00)***	***(9.00)***	***(7.80)***	***(7.12)***	***(7.12)***	***(6.02)***	***(5.22)***	
Output Torque in•lbs	12920	15750	17255	19730	21590	21590	27075	29645	29380	33625	36810	36810	36810	
(N•m)	*(1460)*	*(1780)*	*(1950)*	*(2230)*	*(2440)*	*(2440)*	*(3060)*	*(3350)*	*(3320)*	*(3800)*	*(4160)*	*(4160)*	*(4160)*	
Hollow Shaft OHL lbs	8765	9100	9260	9460	9595	10250	9955	10070	10630	11150	11260	12025	12160	
(N)	*(39000)*	*(40500)*	*(41200)*	*(42100)*	*(42700)*	*(45600)*	*(44300)*	*(44800)*	*(47300)*	*(49600)*	*(50100)*	*(53500)*	*(54100)*	
Solid Shaft OHL lbs	6290	6870	7170	7670	8090	8810	9040	9590	10030	11070	11530	12140	12580	
(N)	*(27970)*	*(30550)*	*(31890)*	*(34110)*	*(35980)*	*(39180)*	*(40200)*	*(42650)*	*(44610)*	*(49230)*	*(51280)*	*(53990)*	*(55950)*	
Input Power HP	**12.3**	**12.3**	**12.3**	**12.3**	**12.3**	**10.2**	**12.1**	**12.1**	**10.5**	**10.1**	**10.1**	**9.03**	**7.76**	4C145
(kW)	***(9.17)***	***(9.17)***	***(9.17)***	***(9.17)***	***(9.17)***	***(7.64)***	***(9.00)***	***(9.00)***	***(7.80)***	***(7.51)***	***(7.51)***	***(6.73)***	***(5.79)***	
Output Torque in•lbs	12920	15750	17255	19730	21590	21590	27075	29645	29380	35485	38845	41150	40795	
(N•m)	*(1460)*	*(1780)*	*(1950)*	*(2230)*	*(2440)*	*(2440)*	*(3060)*	*(3350)*	*(3320)*	*(4010)*	*(4390)*	*(4650)*	*(4610)*	
Hollow Shaft OHL lbs	8765	9100	9260	9460	9595	10250	9955	10070	10630	10970	11080	10945	11060	
(N)	*(39000)*	*(40500)*	*(41200)*	*(42100)*	*(42700)*	*(45600)*	*(44300)*	*(44800)*	*(47300)*	*(48800)*	*(49300)*	*(48700)*	*(49200)*	
Solid Shaft OHL lbs	6290	6870	7170	7670	8090	8810	9040	9590	10030	11070	11530	12140	12580	
(N)	*(27970)*	*(30550)*	*(31890)*	*(34110)*	*(35980)*	*(39180)*	*(40200)*	*(42650)*	*(44610)*	*(49230)*	*(51280)*	*(53990)*	*(55950)*	
Input Power HP	**27.5**	**27.5**	**27.5**	**27.5**	**25.9**	**18.9**	**19.3**	**18.5**	**16.2**	**12.9**	**11.8**	**10.0**	**8.6**	4C160
(kW)	***(20.5)***	***(20.5)***	***(20.5)***	***(20.5)***	***(19.3)***	***(14.1)***	***(14.4)***	***(13.8)***	***(12.1)***	***(9.62)***	***(8.79)***	***(7.44)***	***(6.45)***	
Output Torque in•lbs	28845	35220	38495	43980	45485	39820	43360	45485	45485	45485	45485	45485	45485	
(N•m)	*(3260)*	*(3980)*	*(4350)*	*(4970)*	*(5140)*	*(4500)*	*(4900)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	
Hollow Shaft OHL lbs	7260	7235	7235	7145	7325	8520	8405	8565	9100	9415	9415	9415	9415	
(N)	*(32300)*	*(32200)*	*(32200)*	*(31800)*	*(32600)*	*(37900)*	*(37400)*	*(38100)*	*(40500)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	
Solid Shaft OHL lbs	6290	6870	7170	7670	8090	8810	9040	9590	10030	11070	11530	12140	12580	
(N)	*(27970)*	*(30550)*	*(31890)*	*(34110)*	*(35980)*	*(39180)*	*(40200)*	*(42650)*	*(44610)*	*(49230)*	*(51280)*	*(53990)*	*(55950)*	
Input Power HP	**27.5**	**27.5**	**27.5**	**27.5**	**25.9**	**18.9**	**19.3**	**18.5**	**16.2**	**12.9**	**11.8**	**10.0**	**8.65**	4C165
(kW)	***(20.5)***	***(20.5)***	***(20.5)***	***(20.5)***	***(19.3)***	***(14.1)***	***(14.4)***	***(13.8)***	***(12.1)***	***(9.62)***	***(8.79)***	***(7.44)***	***(6.45)***	
Output Torque in•lbs	28845	35220	38495	43980	45485	39820	43360	45485	45485	45485	45485	45485	45485	
(N•m)	*(3260)*	*(3980)*	*(4350)*	*(4970)*	*(5140)*	*(4500)*	*(4900)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	
Hollow Shaft OHL lbs	7260	7235	7235	7145	7325	8520	8405	8565	9100	9415	9415	9415	9415	
(N)	*(32300)*	*(32200)*	*(32200)*	*(31800)*	*(32600)*	*(37900)*	*(37400)*	*(38100)*	*(40500)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	
Solid Shaft OHL lbs	6290	6870	7170	7670	8090	8810	9040	9590	10030	11070	11530	12140	12580	
(N)	*(27970)*	*(30550)*	*(31890)*	*(34110)*	*(35980)*	*(39180)*	*(40200)*	*(42650)*	*(44610)*	*(49230)*	*(51280)*	*(53990)*	*(55950)*	

Frame Size Selection Tables 580 RPM



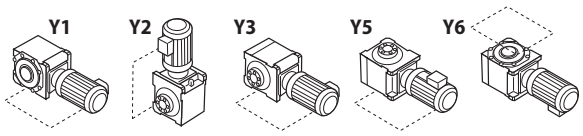
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	9.67	8.66	7.84	7.25	6.59	5.69	5.18	4.72	3.84	3.24	2.80	2.33	1.90	1.39	Frame Size
Ratio	**60**	**67**	**74**	**80**	**88**	**102**	**112**	**123**	**151**	**179**	**207**	**249**	**305**	**417**	
Input Power HP	**3.82**	**3.38**	**3.08**	**2.84**	**2.59**	**2.24**	**2.02**	**1.85**	**1.50**	**1.27**	**1.10**	**0.913**	**0.746**	**—**	
(kW)	***(2.85)***	***(2.52)***	***(2.30)***	***(2.12)***	***(1.93)***	***(1.67)***	***(1.51)***	***(1.38)***	***(1.12)***	***(0.948)***	***(0.820)***	***(0.681)***	***(0.556)***	**—**	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	—	**4B160**
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	—	
Hollow Shaft OHL lbs	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	—	
(N)	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	—	
Solid Shaft OHL lbs	7590	7490	7400	7350	7280	7190	7120	7120	7120	7120	7120	7120	7120	—	
(N)	*(33760)*	*(33310)*	*(32910)*	*(32690)*	*(32380)*	*(31980)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	—	
Input Power HP	**3.82**	**3.38**	**3.08**	**2.84**	**2.59**	**2.24**	**2.02**	**1.85**	**1.50**	**1.27**	**1.10**	**0.913**	**0.746**	**—**	
(kW)	***(2.85)***	***(2.52)***	***(2.30)***	***(2.12)***	***(1.93)***	***(1.67)***	***(1.51)***	***(1.38)***	***(1.12)***	***(0.948)***	***(0.820)***	***(0.681)***	***(0.556)***	**—**	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	—	**4B165**
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	—	
Hollow Shaft OHL lbs	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	—	
(N)	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	—	
Solid Shaft OHL lbs	7590	7490	7400	7350	7280	7190	7120	7120	7120	7120	7120	7120	7120	—	
(N)	*(33760)*	*(33310)*	*(32910)*	*(32690)*	*(32380)*	*(31980)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	—	
Input Power HP	**6.18**	**5.00**	**5.00**	**4.20**	**4.20**	**3.62**	**3.00**	**3.00**	**2.44**	**2.07**	**1.78**	**1.48**	**1.21**	**—**	
(kW)	***(4.61)***	***(3.73)***	***(3.73)***	***(3.13)***	***(3.13)***	***(2.70)***	***(2.24)***	***(2.24)***	***(1.82)***	***(1.54)***	***(1.33)***	***(1.10)***	***(0.900)***	**—**	
Output Torque in•lbs	36810	33625	36810	33625	36810	36810	33625	36810	36810	36810	36810	36810	36810	—	**4C140**
(N•m)	*(4160)*	*(3800)*	*(4160)*	*(3800)*	*(4160)*	*(4160)*	*(3800)*	*(4160)*	*(4160)*	*(4160)*	*(4160)*	*(4160)*	*(4160)*	—	
Hollow Shaft OHL lbs	12160	12900	12160	12900	12160	12160	12900	12160	12160	12160	12160	12160	12160	—	
(N)	*(54100)*	*(57400)*	*(54100)*	*(57400)*	*(54100)*	*(54100)*	*(57400)*	*(54100)*	*(54100)*	*(54100)*	*(54100)*	*(54100)*	*(54100)*	—	
Solid Shaft OHL lbs	12820	12760	12710	12680	12640	12580	12560	12550	12550	12550	12550	12550	12550	—	
(N)	*(57020)*	*(56750)*	*(56530)*	*(56400)*	*(56220)*	*(55950)*	*(55860)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	—	
Input Power HP	**6.91**	**5.46**	**5.46**	**4.69**	**4.69**	**4.05**	**3.35**	**3.35**	**2.74**	**2.31**	**1.98**	**1.60**	**1.23**	**—**	
(kW)	***(5.15)***	***(4.07)***	***(4.07)***	***(3.50)***	***(3.50)***	***(3.02)***	***(2.50)***	***(2.50)***	***(2.04)***	***(1.72)***	***(1.48)***	***(1.19)***	***(0.917)***	**—**	
Output Torque in•lbs	41150	36810	40265	37610	41150	41150	37610	41150	41150	41150	41150	39820	37520	—	**4C145**
(N•m)	*(4650)*	*(4160)*	*(4550)*	*(4250)*	*(4650)*	*(4650)*	*(4250)*	*(4650)*	*(4650)*	*(4650)*	*(4650)*	*(4500)*	*(4240)*	—	
Hollow Shaft OHL lbs	10945	12180	11240	11955	10945	10945	11955	10945	10945	10945	10945	11375	11980	—	
(N)	*(48700)*	*(54200)*	*(50000)*	*(53200)*	*(48700)*	*(48700)*	*(53200)*	*(48700)*	*(48700)*	*(48700)*	*(48700)*	*(50600)*	*(53300)*	—	
Solid Shaft OHL lbs	12820	12760	12710	12680	12640	12580	12560	12550	12550	12550	12550	12550	12550	—	
(N)	*(57020)*	*(56750)*	*(56530)*	*(56400)*	*(56220)*	*(55950)*	*(55860)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	—	
Input Power HP	**7.63**	**6.76**	**6.18**	**5.67**	**5.19**	**4.48**	**4.05**	**3.70**	**3.02**	**2.55**	**2.20**	**1.82**	**1.49**	**—**	
(kW)	***(5.69)***	***(5.04)***	***(4.61)***	***(4.23)***	***(3.87)***	***(3.34)***	***(3.02)***	***(2.76)***	***(2.25)***	***(1.90)***	***(1.64)***	***(1.36)***	***(1.11)***	**—**	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	—	**4C160**
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	—	
Hollow Shaft OHL lbs	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	—	
(N)	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	—	
Solid Shaft OHL lbs	12820	12760	12710	12680	12640	12580	12560	12550	12550	12550	12550	12550	12550	—	
(N)	*(57020)*	*(56750)*	*(56530)*	*(56400)*	*(56220)*	*(55950)*	*(55860)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	—	
Input Power HP	**7.63**	**6.76**	**6.18**	**5.67**	**5.19**	**4.48**	**4.05**	**3.70**	**3.02**	**2.55**	**2.20**	**1.82**	**1.49**	**—**	
(kW)	***(5.69)***	***(5.04)***	***(4.61)***	***(4.23)***	***(3.87)***	***(3.34)***	***(3.02)***	***(2.76)***	***(2.25)***	***(1.90)***	***(1.64)***	***(1.36)***	***(1.11)***	**—**	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	—	**4C165**
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	—	
Hollow Shaft OHL lbs	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	—	
(N)	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	—	
Solid Shaft OHL lbs	12820	12760	12710	12680	12640	12580	12560	12550	12550	12550	12550	12550	12550	—	
(N)	*(57020)*	*(56750)*	*(56530)*	*(56400)*	*(56220)*	*(55950)*	*(55860)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	—	

Frame Size Selection Tables 580 RPM

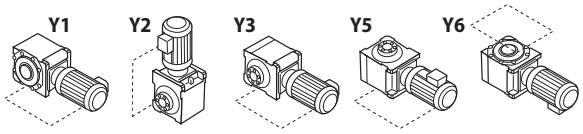
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	52.7	44.6	41.4	36.3	32.2	27.6	26.4	23.2	20.7	16.6	14.9	12.6	10.9	Frame Size
Ratio	**11**	**13**	**14**	**16**	**18**	**21**	**22**	**25**	**28**	**35**	**39**	**46**	**53**	
Input Power HP	**33.4**	**33.4**	**31.0**	**28.4**	**25.1**	**19.3**	**19.3**	**18.5**	**16.2**	**12.9**	**11.8**	**10.0**	**8.60**	
(kW)	***(24.9)***	***(24.9)***	***(23.1)***	***(21.2)***	***(18.7)***	***(14.4)***	***(14.4)***	***(13.8)***	***(12.1)***	***(9.62)***	***(8.79)***	***(7.44)***	***(6.45)***	
Output Torque in•lbs	35135	42835	43365	45490	43900	40615	43360	45485	45485	45485	45485	45485	45485	
(N•m)	*(3970)*	*(4840)*	*(4900)*	*(5140)*	*(4960)*	*(4590)*	*(4900)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	**4C170**
Hollow Shaft OHL lbs	6650	6540	6785	7010	7485	8450	8430	8565	9100	9415	9415	9415	9415	
(N)	*(29600)*	*(29100)*	*(30200)*	*(31200)*	*(33300)*	*(37600)*	*(37500)*	*(38100)*	*(40500)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	
Solid Shaft OHL lbs	6930	6810	7070	7305	7800	8810	9040	9590	10030	11070	11530	12140	12580	
(N)	*(30830)*	*(30310)*	*(31460)*	*(32510)*	*(34700)*	*(39180)*	*(40200)*	*(42650)*	*(44610)*	*(49230)*	*(51280)*	*(53990)*	*(55950)*	
Input Power HP	**33.4**	**33.4**	**31.0**	**28.4**	**25.1**	**19.3**	**19.3**	**18.5**	**16.2**	**12.9**	**11.8**	**10.0**	**8.60**	
(kW)	***(24.9)***	***(24.9)***	***(23.1)***	***(21.2)***	***(18.7)***	***(14.4)***	***(14.4)***	***(13.8)***	***(12.1)***	***(9.62)***	***(8.79)***	***(7.44)***	***(6.45)***	
Output Torque in•lbs	35135	42835	43365	45490	43900	40615	43360	45485	45485	45485	45485	45485	45485	
(N•m)	*(3970)*	*(4840)*	*(4900)*	*(5140)*	*(4960)*	*(4590)*	*(4900)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	**4C175**
Hollow Shaft OHL lbs	6650	6540	6785	7010	7485	8450	8430	8565	9100	9415	9415	9415	9415	
(N)	*(29600)*	*(29100)*	*(30200)*	*(31200)*	*(33300)*	*(37600)*	*(37500)*	*(38100)*	*(40500)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	
Solid Shaft OHL lbs	6930	6810	7070	7305	7800	8810	9040	9590	10030	11070	11530	12140	12580	
(N)	*(30830)*	*(30310)*	*(31460)*	*(32510)*	*(34700)*	*(39180)*	*(40200)*	*(42650)*	*(44610)*	*(49230)*	*(51280)*	*(53990)*	*(55950)*	
Input Power HP	**—**	**—**	**—**	**—**	**—**	**18.9**	**21.5**	**21.5**	**18.8**	**13.7**	**13.7**	**11.6**	**10.0**	
(kW)	**—**	**—**	**—**	**—**	**—**	***(14.1)***	***(16.0)***	***(16.0)***	***(14.0)***	***(10.2)***	***(10.2)***	***(8.63)***	***(7.48)***	
Output Torque in•lbs	—	—	—	—	—	39820	48230	52740	52740	48230	52740	52740	52740	
(N•m)	—	—	—	—	—	*(4500)*	*(5450)*	*(5960)*	*(5960)*	*(5450)*	*(5960)*	*(5960)*	*(5960)*	**4D160**
Hollow Shaft OHL lbs	—	—	—	—	—	14545	14205	14340	15105	16815	17060	17915	17915	
(N)	—	—	—	—	—	*(64700)*	*(63200)*	*(63800)*	*(67200)*	*(74800)*	*(75900)*	*(79700)*	*(79700)*	
Solid Shaft OHL lbs	—	—	—	—	—	12620	12940	13750	14380	15300	15660	16140	16490	
(N)	—	—	—	—	—	*(56130)*	*(57550)*	*(61160)*	*(63960)*	*(68050)*	*(69650)*	*(71790)*	*(73340)*	
Input Power HP	**—**	**—**	**—**	**—**	**—**	**18.9**	**22.1**	**22.1**	**20.0**	**16.4**	**16.4**	**13.8**	**12.0**	
(kW)	**—**	**—**	**—**	**—**	**—**	***(14.1)***	***(16.5)***	***(16.5)***	***(14.9)***	***(12.2)***	***(12.2)***	***(10.3)***	***(8.95)***	
Output Torque in•lbs	—	—	—	—	—	39820	49645	54335	56105	57695	63095	63095	63095	
(N•m)	—	—	—	—	—	*(4500)*	*(5610)*	*(6140)*	*(6340)*	*(6520)*	*(7130)*	*(7130)*	*(7130)*	**4D165**
Hollow Shaft OHL lbs	—	—	—	—	—	14545	14070	14230	14835	16050	15755	15755	15755	
(N)	—	—	—	—	—	*(64700)*	*(62600)*	*(63300)*	*(66000)*	*(71400)*	*(70100)*	*(70100)*	*(70100)*	
Solid Shaft OHL lbs	—	—	—	—	—	12620	12940	13750	14380	15300	15660	16140	16490	
(N)	—	—	—	—	—	*(56130)*	*(57550)*	*(61160)*	*(63960)*	*(68050)*	*(69650)*	*(71790)*	*(73340)*	
Input Power HP	**33.4**	**33.4**	**33.4**	**33.4**	**33.4**	**26.6**	**31.0**	**31.0**	**27.1**	**19.7**	**19.7**	**16.6**	**14.5**	
(kW)	***(24.9)***	***(24.9)***	***(24.9)***	***(24.9)***	***(24.9)***	***(19.8)***	***(23.1)***	***(23.1)***	***(20.2)***	***(14.7)***	***(14.7)***	***(12.4)***	***(10.8)***	
Output Torque in•lbs	35130	42830	46810	53540	58580	55840	69555	76015	76015	69555	76015	75925	76015	
(N•m)	*(3970)*	*(4840)*	*(5290)*	*(6050)*	*(6620)*	*(6310)*	*(7860)*	*(8590)*	*(8590)*	*(7860)*	*(8590)*	*(8580)*	*(8590)*	**4D170**
Hollow Shaft OHL lbs	11600	11870	11960	12050	12095	13260	12475	11825	11825	14050	11825	11865	11825	
(N)	*(51600)*	*(52800)*	*(53200)*	*(53600)*	*(53800)*	*(59000)*	*(55500)*	*(52600)*	*(52600)*	*(62500)*	*(52600)*	*(52800)*	*(52600)*	
Solid Shaft OHL lbs	8980	9810	10240	10950	11570	12620	12940	13750	14380	15300	15660	16140	16490	
(N)	*(39940)*	*(43630)*	*(45540)*	*(48700)*	*(51460)*	*(56130)*	*(57550)*	*(61160)*	*(63960)*	*(68050)*	*(69650)*	*(71790)*	*(73340)*	
Input Power HP	**33.4**	**33.4**	**33.4**	**33.4**	**33.4**	**26.6**	**33.4**	**31.4**	**27.5**	**21.9**	**20.0**	**16.9**	**14.6**	
(kW)	***(24.9)***	***(24.9)***	***(24.9)***	***(24.9)***	***(24.9)***	***(19.8)***	***(24.9)***	***(23.4)***	***(20.5)***	***(16.3)***	***(14.9)***	***(12.6)***	***(10.9)***	
Output Torque in•lbs	35130	42830	46810	53540	58580	55840	74955	77165	77165	77165	77165	77165	77165	
(N•m)	*(3970)*	*(4840)*	*(5290)*	*(6050)*	*(6620)*	*(6310)*	*(8470)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	**4D175**
Hollow Shaft OHL lbs	11600	11870	11960	12050	12095	13260	12025	11375	11375	11375	11375	11375	11375	
(N)	*(51600)*	*(52800)*	*(53200)*	*(53600)*	*(53800)*	*(59000)*	*(53500)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	
Solid Shaft OHL lbs	8980	9810	10240	10950	11570	12620	12940	13750	14380	15300	15660	16140	16490	
(N)	*(39940)*	*(43630)*	*(45540)*	*(48700)*	*(51460)*	*(56130)*	*(57550)*	*(61160)*	*(63960)*	*(68050)*	*(69650)*	*(71790)*	*(73340)*	

Frame Size Selection Tables 580 RPM



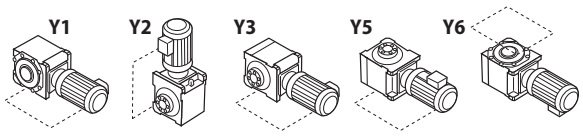
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	9.67	8.66	7.84	7.25	6.59	5.69	5.18	4.72	3.84	3.24	2.80	2.33	1.90	1.39	Frame Size
Ratio	**60**	**67**	**74**	**80**	**88**	**102**	**112**	**123**	**151**	**179**	**207**	**249**	**305**	**417**	
Input Power HP	**7.63**	**6.76**	**6.18**	**5.67**	**5.19**	**4.48**	**4.05**	**3.70**	**3.02**	**2.55**	**2.20**	**1.82**	**1.49**	**—**	
(kW)	***(5.69)***	***(5.04)***	***(4.61)***	***(4.23)***	***(3.87)***	***(3.34)***	***(3.02)***	***(2.76)***	***(2.25)***	***(1.90)***	***(1.64)***	***(1.36)***	***(1.11)***	**—**	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	—	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	—	**4C170**
Hollow Shaft OHL lbs	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	—	
(N)	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	—	
Solid Shaft OHL lbs	12820	12760	12710	12680	12640	12580	12560	12550	12550	12550	12550	12550	12550	—	
(N)	*(57020)*	*(56750)*	*(56530)*	*(56400)*	*(56220)*	*(55950)*	*(55860)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	—	
Input Power HP	**7.63**	**6.80**	**6.18**	**5.67**	**5.19**	**4.48**	**4.05**	**3.70**	**3.02**	**2.55**	**2.20**	**1.82**	**1.49**	**—**	
(kW)	***(5.69)***	***(5.04)***	***(4.61)***	***(4.23)***	***(3.87)***	***(3.34)***	***(3.02)***	***(2.76)***	***(2.25)***	***(1.90)***	***(1.64)***	***(1.36)***	***(1.11)***	**—**	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	—	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	—	**4C175**
Hollow Shaft OHL lbs	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	—	
(N)	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	—	
Solid Shaft OHL lbs	12820	12760	12710	12680	12640	12580	12560	12550	12550	12550	12550	12550	12550	—	
(N)	*(57020)*	*(56750)*	*(56530)*	*(56400)*	*(56220)*	*(55950)*	*(55860)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	—	
Input Power HP	**8.85**	**7.16**	**7.16**	**6.02**	**6.02**	**5.19**	**4.30**	**4.30**	**3.46**	**2.95**	**2.55**	**2.12**	**1.73**	**—**	
(kW)	***(6.60)***	***(5.34)***	***(5.34)***	***(4.49)***	***(4.49)***	***(3.87)***	***(3.21)***	***(3.21)***	***(2.58)***	***(2.20)***	***(1.90)***	***(1.58)***	***(1.29)***	**—**	
Output Torque in•lbs	52740	48230	52740	48230	52740	52740	48230	52740	52120	52740	52740	52740	52740	—	
(N•m)	*(5960)*	*(5450)*	*(5960)*	*(5450)*	*(5960)*	*(5960)*	*(5450)*	*(5960)*	*(5890)*	*(5960)*	*(5960)*	*(5960)*	*(5960)*	—	**4D160**
Hollow Shaft OHL lbs	17915	18680	17915	18680	17915	17915	18680	17915	18025	17915	17915	17915	17915	—	
(N)	*(79700)*	*(83100)*	*(79700)*	*(83100)*	*(79700)*	*(79700)*	*(83100)*	*(79700)*	*(80200)*	*(79700)*	*(79700)*	*(79700)*	*(79700)*	—	
Solid Shaft OHL lbs	16690	16660	16640	16630	16610	16590	16580	16580	16580	16580	16580	16580	16580	—	
(N)	*(74230)*	*(74100)*	*(74010)*	*(73970)*	*(73880)*	*(73790)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	—	
Input Power HP	**10.6**	**8.60**	**8.60**	**7.20**	**7.20**	**6.21**	**5.15**	**5.15**	**4.18**	**3.53**	**3.06**	**2.53**	**2.02**	**—**	
(kW)	***(7.90)***	***(6.39)***	***(6.39)***	***(5.37)***	***(5.37)***	***(4.63)***	***(3.84)***	***(3.84)***	***(3.12)***	***(2.63)***	***(2.28)***	***(1.89)***	***(1.51)***	**—**	
Output Torque in•lbs	63095	57695	63095	57695	63095	63095	57695	63095	63095	63095	63095	63095	61680	—	
(N•m)	*(7130)*	*(6520)*	*(7130)*	*(6520)*	*(7130)*	*(7130)*	*(6520)*	*(7130)*	*(7130)*	*(7130)*	*(7130)*	*(7130)*	*(6970)*	—	**4D165**
Hollow Shaft OHL lbs	15755	16970	15755	16970	15755	15755	16970	15755	15755	15755	15755	15755	16115	—	
(N)	*(70100)*	*(75500)*	*(70100)*	*(75500)*	*(70100)*	*(70100)*	*(75500)*	*(70100)*	*(70100)*	*(70100)*	*(70100)*	*(70100)*	*(71700)*	—	
Solid Shaft OHL lbs	16690	16660	16640	16630	16610	16590	16580	16580	16580	16580	16580	16580	16580	—	
(N)	*(74230)*	*(74100)*	*(74010)*	*(73970)*	*(73880)*	*(73790)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	—	
Input Power HP	**12.8**	**10.3**	**10.3**	**8.70**	**8.70**	**7.50**	**6.20**	**6.20**	**5.04**	**4.25**	**3.67**	**3.06**	**2.49**	**—**	
(kW)	***(9.51)***	***(7.70)***	***(7.70)***	***(6.47)***	***(6.47)***	***(5.58)***	***(4.62)***	***(4.62)***	***(3.76)***	***(3.17)***	***(2.74)***	***(2.28)***	***(1.86)***	**—**	
Output Torque in•lbs	76015	69555	76015	69555	76015	76015	69555	76015	76015	76015	76015	76015	76015	—	
(N•m)	*(8590)*	*(7860)*	*(8590)*	*(7860)*	*(8590)*	*(8590)*	*(7860)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	—	**4D170**
Hollow Shaft OHL lbs	11825	14050	11825	14050	11825	11825	14050	11825	11825	11825	11825	11825	11825	—	
(N)	*(52600)*	*(62500)*	*(52600)*	*(62500)*	*(52600)*	*(52600)*	*(62500)*	*(52600)*	*(52600)*	*(52600)*	*(52600)*	*(52600)*	*(52600)*	—	
Solid Shaft OHL lbs	16690	16660	16640	16630	16610	16590	16580	16580	16580	16580	16580	16580	16580	—	
(N)	*(74230)*	*(74100)*	*(74010)*	*(73970)*	*(73880)*	*(73790)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	—	
Input Power HP	**12.9**	**11.5**	**10.5**	**9.60**	**8.80**	**7.60**	**6.90**	**6.29**	**5.12**	**4.32**	**3.73**	**3.10**	**2.53**	**—**	
(kW)	***(9.65)***	***(8.55)***	***(7.81)***	***(7.18)***	***(6.56)***	***(5.66)***	***(5.13)***	***(4.69)***	***(3.82)***	***(3.22)***	***(2.78)***	***(2.31)***	***(1.89)***	**—**	
Output Torque in•lbs	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	—	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	—	**4D175**
Hollow Shaft OHL lbs	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	—	
(N)	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	—	
Solid Shaft OHL lbs	16690	16660	16640	16630	16610	16590	16580	16580	16580	16580	16580	16580	16580	—	
(N)	*(74230)*	*(74100)*	*(74010)*	*(73970)*	*(73880)*	*(73790)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	—	

Frame Size Selection Tables 580 RPM

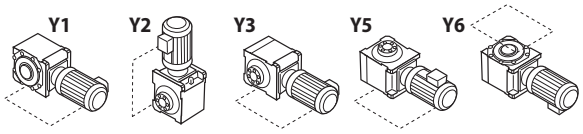
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	52.7	44.6	41.4	36.3	32.2	27.6	26.4	23.2	20.7	16.6	14.9	12.6	10.9	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	**44.4**	**44.4**	**44.4**	**44.4**	**44.0**	**33.4**	**29.6**	**29.6**	**26.4**	**21.9**	**20.0**	**16.9**	**14.6**	4D180
(kW)	***(33.1)***	***(33.1)***	***(33.1)***	***(33.1)***	***(32.8)***	***(24.9)***	***(22.1)***	***(22.1)***	***(19.7)***	***(16.3)***	***(14.9)***	***(12.6)***	***(10.9)***	
Output Torque in•lbs	46725	56900	62210	71150	77165	70265	66545	72740	74070	77165	77165	77165	77165	
(N•m)	*(5280)*	*(6430)*	*(7030)*	*(8040)*	*(8720)*	*(7940)*	*(7520)*	*(8220)*	*(8370)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	
Hollow Shaft OHL lbs	10655	10720	10720	10630	10610	12095	12745	12720	12565	11375	11375	11375	11375	
(N)	*(47400)*	*(47700)*	*(47700)*	*(47300)*	*(47200)*	*(53800)*	*(56700)*	*(56600)*	*(55900)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	
Solid Shaft OHL lbs	8980	9810	10240	10950	11570	12620	12940	13750	14380	15300	15660	16140	16490	
(N)	*(39940)*	*(43630)*	*(45540)*	*(48700)*	*(51460)*	*(56130)*	*(57550)*	*(61160)*	*(63960)*	*(68050)*	*(69650)*	*(71790)*	*(73340)*	
Input Power HP	**44.4**	**44.4**	**44.4**	**44.4**	**44.0**	**33.9**	**30.2**	**30.2**	**26.8**	**21.9**	**20.0**	**16.9**	**14.6**	4D185
(kW)	***(33.1)***	***(33.1)***	***(33.1)***	***(33.1)***	***(32.8)***	***(25.3)***	***(22.5)***	***(22.5)***	***(20.0)***	***(16.3)***	***(14.9)***	***(12.6)***	***(10.9)***	
Output Torque in•lbs	46725	56900	62210	71150	77165	71415	67695	74070	75220	77165	77165	77165	77165	
(N•m)	*(5280)*	*(6430)*	*(7030)*	*(8040)*	*(8720)*	*(8070)*	*(7650)*	*(8370)*	*(8500)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	
Hollow Shaft OHL lbs	10655	10720	10720	10630	10610	12005	12655	12585	12160	11375	11375	11375	11375	
(N)	*(47400)*	*(47700)*	*(4700)*	*(47300)*	*(47200)*	*(53400)*	*(56300)*	*(56000)*	*(54100)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	
Solid Shaft OHL lbs	8980	9810	10240	10950	11570	12620	12940	13750	14380	15300	15660	16140	16490	
(N)	*(39940)*	*(43630)*	*(45540)*	*(48700)*	*(51460)*	*(56130)*	*(57550)*	*(61160)*	*(63960)*	*(68050)*	*(69650)*	*(71790)*	*(73340)*	
Input Power HP	**33.4**	**33.4**	**33.4**	**33.4**	**33.4**	**26.6**	**31.0**	**31.0**	**27.1**	**19.7**	**19.7**	**16.6**	**14.5**	4E170
(kW)	***(24.9)***	***(24.9)***	***(24.9)***	***(24.9)***	***(24.9)***	***(19.8)***	***(23.1)***	***(23.1)***	***(20.2)***	***(14.7)***	***(14.7)***	***(12.4)***	***(10.8)***	
Output Torque in•lbs	35130	42830	46810	53540	58580	55840	69555	76015	76015	69555	76015	75925	76015	
(N•m)	*(3970)*	*(4840)*	*(5290)*	*(6050)*	*(6620)*	*(6310)*	*(7860)*	*(8590)*	*(8590)*	*(7860)*	*(8590)*	*(8580)*	*(8590)*	
Hollow Shaft OHL lbs	15935	16500	16745	17085	17285	18700	18095	18295	19265	20275	19940	19960	19940	
(N)	*(70900)*	*(73400)*	*(74500)*	*(76000)*	*(76900)*	*(83200)*	*(80500)*	*(81400)*	*(85700)*	*(90200)*	*(88700)*	*(88800)*	*(88700)*	
Solid Shaft OHL lbs	12970	14070	14630	15530	16320	17690	18110	19160	19980	20690	20930	21240	21470	
(N)	*(57690)*	*(62580)*	*(65070)*	*(69070)*	*(72590)*	*(78680)*	*(80550)*	*(85220)*	*(88870)*	*(92020)*	*(93090)*	*(94470)*	*(95490)*	
Input Power HP	**33.4**	**33.4**	**33.4**	**33.4**	**33.4**	**26.6**	**33.4**	**33.4**	**27.9**	**24.5**	**22.5**	**19.0**	**16.5**	4E175
(kW)	***(24.9)***	***(24.9)***	***(24.9)***	***(24.9)***	***(24.9)***	***(19.8)***	***(24.9)***	***(24.9)***	***(20.8)***	***(18.3)***	***(16.8)***	***(14.2)***	***(12.3)***	
Output Torque in•lbs	35130	42830	46810	53540	58580	55840	74955	81945	78230	86545	86990	86990	86990	
(N•m)	*(3970)*	*(4840)*	*(5290)*	*(6050)*	*(6620)*	*(6310)*	*(8470)*	*(9260)*	*(8840)*	*(9780)*	*(9830)*	*(9830)*	*(9830)*	
Hollow Shaft OHL lbs	15935	16500	16745	17085	17285	18700	17715	17845	19105	19420	19400	19400	19400	
(N)	*(70900)*	*(73400)*	*(74500)*	*(76000)*	*(76900)*	*(83200)*	*(78800)*	*(79400)*	*(85000)*	*(86400)*	*(86300)*	*(86300)*	*(86300)*	
Solid Shaft OHL lbs	12970	14070	14630	15530	16320	17690	18110	19160	19980	20690	20930	21240	21470	
(N)	*(57690)*	*(62580)*	*(65070)*	*(69070)*	*(72590)*	*(78680)*	*(80550)*	*(85220)*	*(88870)*	*(92020)*	*(93090)*	*(94470)*	*(95490)*	
Input Power HP	**44.4**	**44.4**	**44.4**	**44.4**	**44.4**	**33.4**	**29.6**	**29.6**	**26.4**	**29.1**	**26.6**	**22.5**	**19.6**	4E180
(kW)	***(33.1)***	***(33.1)***	***(33.1)***	***(33.1)***	***(33.1)***	***(24.9)***	***(22.1)***	***(22.1)***	***(19.7)***	***(21.7)***	***(19.8)***	***(16.8)***	***(14.6)***	
Output Torque in•lbs	46725	56900	62210	71150	77785	70265	66545	72740	74070	102655	102665	102665	102665	
(N•m)	*(5280)*	*(6430)*	*(7030)*	*(8040)*	*(8790)*	*(7940)*	*(7520)*	*(8220)*	*(8370)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	
Hollow Shaft OHL lbs	15085	15465	15620	15780	15870	17625	18340	18520	19420	18430	18430	18430	18430	
(N)	*(67100)*	*(68800)*	*(69500)*	*(70200)*	*(70600)*	*(78400)*	*(81600)*	*(82400)*	*(86400)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	
Solid Shaft OHL lbs	12970	14070	14630	15530	16320	17690	18110	19160	19980	20690	20930	21240	21470	
(N)	*(57690)*	*(62580)*	*(65070)*	*(69070)*	*(72590)*	*(78680)*	*(80550)*	*(85220)*	*(88870)*	*(92020)*	*(93090)*	*(94470)*	*(95490)*	
Input Power HP	**44.4**	**44.4**	**44.4**	**44.4**	**44.4**	**33.9**	**30.2**	**30.2**	**26.8**	**29.1**	**26.6**	**22.5**	**19.6**	4E185
(kW)	***(33.1)***	***(33.1)***	***(33.1)***	***(33.1)***	***(33.1)***	***(25.3)***	***(22.5)***	***(22.5)***	***(20.0)***	***(21.7)***	***(19.8)***	***(16.8)***	***(14.6)***	
Output Torque in•lbs	46725	56900	62210	71150	77785	71425	67705	74080	75230	102665	102665	102665	102665	
(N•m)	*(5280)*	*(6430)*	*(7030)*	*(8040)*	*(8790)*	*(8070)*	*(7650)*	*(8370)*	*(8500)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	
Hollow Shaft OHL lbs	15085	15465	15620	15780	15870	17555	18275	18430	19330	18430	18430	18430	18430	
(N)	*(67100)*	*(68800)*	*(69500)*	*(70200)*	*(70600)*	*(78100)*	*(81300)*	*(82000)*	*(86000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	
Solid Shaft OHL lbs	12970	14070	14630	15530	16320	17690	18110	19160	19980	20690	20930	21240	21470	
(N)	*(57690)*	*(62580)*	*(65070)*	*(69070)*	*(72590)*	*(78680)*	*(80550)*	*(85220)*	*(88870)*	*(92020)*	*(93090)*	*(94470)*	*(95490)*	

Frame Size Selection Tables 580 RPM



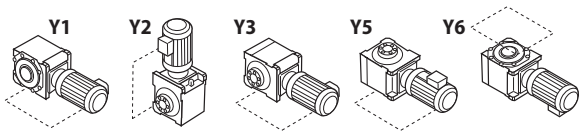
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	9.67	8.66	7.84	7.25	6.59	5.69	5.18	4.72	3.84	3.24	2.80	2.33	1.90	1.39	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	**12.9**	**11.5**	**10.5**	**9.60**	**8.80**	**7.60**	**6.90**	**6.29**	**5.12**	**4.32**	**3.73**	**3.10**	**2.53**	—	
(kW)	***(9.65)***	***(8.55)***	***(7.81)***	***(7.18)***	***(6.56)***	***(5.66)***	***(5.13)***	***(4.69)***	***(3.82)***	***(3.22)***	***(2.78)***	***(2.31)***	***(1.89)***	—	
Output Torque in•lbs	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	—	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	—	4D180
Hollow Shaft OHL lbs	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	—	
(N)	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	—	
Solid Shaft OHL lbs	16690	16660	16640	16630	16610	16590	16580	16580	16580	16580	16580	16580	16580	—	
(N)	*(74230)*	*(74100)*	*(74010)*	*(73970)*	*(73880)*	*(73790)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	—	
Input Power HP	**12.9**	**11.5**	**10.5**	**9.60**	**8.80**	**7.60**	**6.90**	**6.29**	**5.12**	**4.32**	**3.73**	**3.10**	**2.53**	—	
(kW)	***(9.65)***	***(8.55)***	***(7.81)***	***(7.18)***	***(6.56)***	***(5.66)***	***(5.13)***	***(4.69)***	***(3.82)***	***(3.22)***	***(2.78)***	***(2.31)***	***(1.89)***	—	
Output Torque in•lbs	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	—	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	—	4D185
Hollow Shaft OHL lbs	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	—	
(N)	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	—	
Solid Shaft OHL lbs	16690	16660	16640	16630	16610	16590	16580	16580	16580	16580	16580	16580	16580	—	
(N)	*(74230)*	*(74100)*	*(74010)*	*(73970)*	*(73880)*	*(73790)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	—	
Input Power HP	**12.8**	**10.3**	**10.3**	**8.70**	**8.70**	**7.50**	**6.20**	**6.20**	**5.04**	**4.25**	**3.67**	**3.06**	**2.49**	—	
(kW)	***(9.51)***	***(7.70)***	***(7.70)***	***(6.47)***	***(6.47)***	***(5.58)***	***(4.62)***	***(4.62)***	***(3.76)***	***(3.17)***	***(2.74)***	***(2.28)***	***(1.86)***	—	
Output Torque in•lbs	76015	69555	76015	69555	76015	76015	69555	76015	76015	76015	76015	76015	76015	—	
(N•m)	*(8590)*	*(7860)*	*(8590)*	*(7860)*	*(8590)*	*(8590)*	*(7860)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	—	4E170
Hollow Shaft OHL lbs	19940	20275	19940	20275	19940	19940	20275	19940	19940	19940	19940	19940	19940	—	
(N)	*(88700)*	*(90200)*	*(88700)*	*(90200)*	*(88700)*	*(88700)*	*(90200)*	*(88700)*	*(88700)*	*(88700)*	*(88700)*	*(88700)*	*(88700)*	—	
Solid Shaft OHL lbs	21630	21690	21740	21780	21820	21870	21900	21920	21920	21920	21920	21920	21920	—	
(N)	*(96210)*	*(96470)*	*(96690)*	*(96870)*	*(97050)*	*(97270)*	*(97410)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	—	
Input Power HP	**14.6**	**12.9**	**11.8**	**10.8**	**9.90**	**8.60**	**7.70**	**7.70**	**6.28**	**5.30**	**4.57**	**3.81**	**3.10**	—	
(kW)	***(10.9)***	***(9.59)***	***(8.81)***	***(8.06)***	***(7.40)***	***(6.38)***	***(5.75)***	***(5.75)***	***(4.68)***	***(3.95)***	***(3.41)***	***(2.84)***	***(2.31)***	—	
Output Torque in•lbs	86990	86545	86990	86545	86990	86990	86545	94690	94690	94690	94690	94690	94690	—	
(N•m)	*(9830)*	*(9780)*	*(9830)*	*(9780)*	*(9830)*	*(9830)*	*(9780)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	—	4E175
Hollow Shaft OHL lbs	19400	19420	19400	19420	19400	19400	19420	18995	18995	18995	18995	18995	18995	—	
(N)	*(86300)*	*(86400)*	*(86300)*	*(86400)*	*(86300)*	*(86300)*	*(86400)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	—	
Solid Shaft OHL lbs	21630	21690	21740	21780	21820	21870	21900	21920	21920	21920	21920	21920	21920	—	
(N)	*(96210)*	*(96470)*	*(96690)*	*(96870)*	*(97050)*	*(97270)*	*(97410)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	—	
Input Power HP	**17.2**	**15.3**	**13.9**	**12.8**	**11.7**	**10.1**	**9.10**	**8.40**	**6.80**	**5.74**	**4.96**	**4.12**	**3.37**	—	
(kW)	***(12.8)***	***(11.4)***	***(10.4)***	***(9.60)***	***(8.70)***	***(7.50)***	***(6.82)***	***(6.24)***	***(5.08)***	***(4.28)***	***(3.70)***	***(3.07)***	***(2.51)***	—	
Output Torque in•lbs	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	4E180
Hollow Shaft OHL lbs	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	—	
(N)	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	21630	21690	21740	21780	21820	21870	21900	21920	21920	21920	21920	21920	21920	—	
(N)	*(96210)*	*(96470)*	*(96690)*	*(96870)*	*(97050)*	*(97270)*	*(97410)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	—	
Input Power HP	**17.2**	**15.3**	**13.9**	**12.8**	**11.7**	**10.1**	**9.10**	**8.40**	**6.80**	**5.74**	**4.96**	**4.12**	**3.37**	—	
(kW)	***(12.8)***	***(11.4)***	***(10.4)***	***(9.60)***	***(8.70)***	***(7.50)***	***(6.82)***	***(6.24)***	***(5.08)***	***(4.28)***	***(3.70)***	***(3.07)***	***(2.51)***	—	
Output Torque in•lbs	102655	102655	102655	102655	102655	102655	102655	102655	102655	102655	102655	102655	102655	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	4E185
Hollow Shaft OHL lbs	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	—	
(N)	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	21630	21690	21740	21780	21820	21870	21900	21920	21920	21920	21920	21920	21920	—	
(N)	*(96210)*	*(96470)*	*(96690)*	*(96870)*	*(97050)*	*(97270)*	*(97410)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	—	

Frame Size Selection Tables 580 RPM

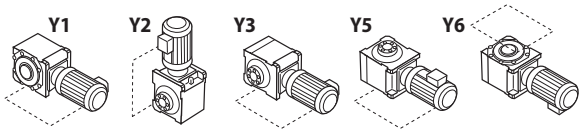
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	52.7	44.6	41.4	36.3	32.2	27.6	26.4	23.2	20.7	16.6	14.9	12.6	10.9	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	**73.0**	**73.0**	**69.6**	**64.1**	**58.6**	**42.6**	**37.5**	**37.5**	**33.4**	**29.1**	**26.6**	**22.5**	**19.6**	4E190
(kW)	***(54.4)***	***(54.4)***	***(51.9)***	***(47.8)***	***(43.7)***	***(31.8)***	***(28.0)***	***(28.0)***	***(24.9)***	***(21.7)***	***(19.8)***	***(16.8)***	***(14.6)***	
Output Torque in•lbs	76735	93815	97355	102665	102665	87710	82750	90275	92045	102665	102665	102665	102665	
(N•m)	*(8670)*	*(10600)*	*(11000)*	*(11600)*	*(11600)*	*(9910)*	*(9350)*	*(10200)*	*(10400)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	
Hollow Shaft OHL lbs	12880	12790	13015	13465	14050	16340	17150	17240	18095	18430	18430	18430	18430	
(N)	*(57300)*	*(56900)*	*(57900)*	*(59900)*	*(62500)*	*(72700)*	*(76300)*	*(76700)*	*(80500)*	*(82000)*	*(82000)*	*(820000*	*(82000)*	
Solid Shaft OHL lbs	12970	14070	14630	15530	16320	17690	18110	19160	19980	20690	20930	21240	21470	
(N)	*(57690)*	*(62580)*	*(65070)*	*(69070)*	*(72590)*	*(78680)*	*(80550)*	*(85220)*	*(88870)*	*(92020)*	*(93090)*	*(94470)*	*(95490)*	
Input Power HP	**73.0**	**73.0**	**69.6**	**64.1**	**58.6**	**42.6**	**37.5**	**37.5**	**33.4**	**29.1**	**26.6**	**22.5**	**19.6**	4E195
(kW)	***(54.4)***	***(54.4)***	***(51.9)***	***(47.8)***	***(43.7)***	***(31.8)***	***(28.0)***	***(28.0)***	***(24.9)***	***(21.7)***	***(19.8)***	***(16.8)***	***(14.6)***	
Output Torque in•lbs	76735	93815	97355	102665	102665	89390	84255	92045	93815	102665	102665	102665	102665	
(N•m)	*(8670)*	*(10600)*	*(11000)*	*(11600)*	*(11600)*	*(10100)*	*(9520)*	*(10400)*	*(10600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	
Hollow Shaft OHL lbs	12880	12790	13015	13465	14050	16230	17040	17105	17960	18430	18430	18430	18430	
(N)	*(57300)*	*(56900)*	*(57900)*	*(59900)*	*(62500)*	*(72200)*	*(75800)*	*(76100)*	*(79900)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	
Solid Shaft OHL lbs	12970	14070	14630	15530	16320	17690	18110	19160	19980	20690	20930	21240	21470	
(N)	*(57690)*	*(62580)*	*(65070)*	*(69070)*	*(72590)*	*(78680)*	*(80550)*	*(85220)*	*(88870)*	*(92020)*	*(93090)*	*(94470)*	*(95490)*	
Input Power HP	**44.4**	**44.4**	**44.4**	**44.4**	**44.4**	**33.4**	**29.6**	**29.6**	**26.4**	**31.6**	**31.6**	**26.8**	**23.2**	4F180
(kW)	***(33.1)***	***(33.1)***	***(33.1)***	***(33.1)***	***(33.1)***	***(24.9)***	***(22.1)***	***(22.1)***	***(19.7)***	***(23.6)***	***(23.6)***	***(20.0)***	***(17.3)***	
Output Torque in•lbs	46725	56900	62210	71150	77785	70265	66545	72740	74070	111500	122120	122120	122120	
(N•m)	*(5280)*	*(6430)*	*(7030)*	*(8040)*	*(8790)*	*(7940)*	*(7520)*	*(8220)*	*(8370)*	*(12600)*	*(13800)*	*(13800)*	*(13800)*	
Hollow Shaft OHL lbs	27650	28775	29225	29000	28775	29225	29225	29000	29000	27425	26975	26975	26975	
(N)	*(123000)*	*(128000)*	*(130000)*	*(129000)*	*(128000)*	*(130000)*	*(130000)*	*(129000)*	*(129000)*	*(122000)*	*(120000)*	*(120000)*	*(120000)*	
Solid Shaft OHL lbs	22810	24600	25560	27130	28200	28910	28920	28940	28960	28970	28970	28970	28970	
(N)	*(101450)*	*(109420)*	*(113690)*	*(120670)*	*(125430)*	*(128590)*	*(128630)*	*(128720)*	*(128810)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	
Input Power HP	**44.4**	**44.4**	**44.4**	**44.4**	**44.4**	**33.9**	**30.2**	**30.2**	**26.8**	**37.4**	**37.4**	**32.3**	**26.7**	4F185
(kW)	***(33.1)***	***(33.1)***	***(33.1)***	***(33.1)***	***(33.1)***	***(25.3)***	***(22.5)***	***(22.5)***	***(20.0)***	***(27.9)***	***(27.9)***	***(24.1)***	***(19.9)***	
Output Torque in•lbs	46725	56900	62210	71150	77785	71415	67695	74070	75220	131855	144245	146900	140705	
(N•m)	*(5280)*	*(6430)*	*(7030)*	*(8040)*	*(8790)*	*(8070)*	*(7650)*	*(8370)*	*(8500)*	*(14900)*	*(16300)*	*(16600)*	*(15900)*	
Hollow Shaft OHL lbs	27650	28775	29225	29000	28775	29000	29225	29000	29000	26525	25850	25850	26075	
(N)	*(123000)*	*(128000)*	*(130000)*	*(129000)*	*(128000)*	*(129000)*	*(130000)*	*(129000)*	*(129000)*	*(118000)*	*(115000)*	*(115000)*	*(116000)*	
Solid Shaft OHL lbs	22810	24600	25560	27130	28200	28910	28920	28940	28960	28970	28970	28970	28970	
(N)	*(101450)*	*(109420)*	*(113690)*	*(120670)*	*(125430)*	*(128590)*	*(128630)*	*(128720)*	*(128810)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	
Input Power HP	**73.0**	**73.0**	**73.0**	**71.6**	**71.6**	**41.7**	**36.9**	**36.9**	**32.7**	**45.2**	**41.3**	**35.0**	**30.3**	4F190
(kW)	***(54.4)***	***(54.4)***	***(54.4)***	***(53.4)***	***(53.4)***	***(31.1)***	***(27.5)***	***(27.5)***	***(24.4)***	***(33.7)***	***(30.8)***	***(26.1)***	***(22.6)***	
Output Torque in•lbs	76735	93815	102665	115060	125680	87695	82740	90265	92035	159290	159290	159290	159290	
(N•m)	*(8670)*	*(10600)*	*(11600)*	*(13000)*	*(14200)*	*(9910)*	*(9350)*	*(10200)*	*(10400)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	
Hollow Shaft OHL lbs	25625	26300	26750	27200	26750	28325	28550	28325	28100	25175	25175	25175	25175	
(N)	*(114000)*	*(117000)*	*(119000)*	*(121000)*	*(119000)*	*(126000)*	*(127000)*	*(126000)*	*(125000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	
Solid Shaft OHL lbs	22810	24600	25560	27130	28200	28910	28920	28940	28960	28970	28970	28970	28970	
(N)	*(101450)*	*(109420)*	*(113690)*	*(120670)*	*(125430)*	*(128590)*	*(128630)*	*(128720)*	*(128810)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	
Input Power HP	**73.0**	**73.0**	**73.0**	**71.6**	**71.6**	**42.6**	**37.5**	**37.5**	**33.4**	**45.2**	**41.3**	**35.0**	**30.3**	4F195
(kW)	***(54.4)***	***(54.4)***	***(54.4)***	***(53.4)***	***(53.4)***	***(31.8)***	***(28.0)***	***(28.0)***	***(24.9)***	***(33.7)***	***(30.8)***	***(26.1)***	***(22.6)***	
Output Torque in•lbs	76735	93815	102665	115060	125680	89380	84245	92035	93805	159290	159290	159290	159290	
(N•m)	*(8670)*	*(10600)*	*(11600)*	*(13000)*	*(14200)*	*(10100)*	*(9520)*	*(10400)*	*(10600)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	
Hollow Shaft OHL lbs	25625	26300	26750	27200	26750	28325	28550	28100	28100	25175	25175	25175	25175	
(N)	*(114000)*	*(117000)*	*(119000)*	*(121000)*	*(119000)*	*(126000)*	*(127000)*	*(125000)*	*(125000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	
Solid Shaft OHL lbs	22810	24600	25560	27130	28200	28910	28920	28940	28960	28970	28970	28970	28970	
(N)	*(101450)*	*(109420)*	*(113690)*	*(120670)*	*(125430)*	*(128590)*	*(128630)*	*(128720)*	*(128810)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	

Frame Size Selection Tables 580 RPM



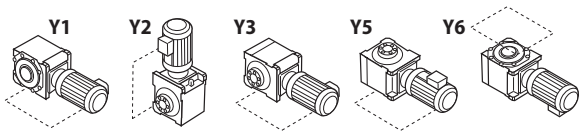
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	9.67	8.66	7.84	7.25	6.59	5.69	5.18	4.72	3.84	3.24	2.80	2.33	1.90	1.39	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	**17.2**	**15.3**	**13.9**	**12.8**	**11.7**	**10.4**	**9.10**	**8.40**	**6.80**	**5.74**	**4.96**	**4.12**	**3.37**	**—**	4E190
(kW)	***(12.8)***	***(11.4)***	***(10.4)***	***(9.55)***	***(8.73)***	***(7.53)***	***(6.82)***	***(6.24)***	***(5.08)***	***(4.28)***	***(3.70)***	***(3.07)***	***(2.51)***	**—**	
Output Torque in•lbs	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	
Hollow Shaft OHL lbs	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	—	
(N)	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	21630	21690	21740	21780	21820	21870	21900	21920	21920	21920	21920	21920	21920	—	
(N)	*(96210)*	*(96470)*	*(96690)*	*(96870)*	*(97050)*	*(97270)*	*(97410)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	—	
Input Power HP	**17.2**	**15.3**	**13.9**	**12.8**	**11.7**	**10.1**	**9.10**	**8.40**	**6.80**	**5.74**	**4.96**	**4.12**	**3.37**	**—**	4E195
(kW)	***(12.8)***	***(11.4)***	***(10.4)***	***(9.55)***	***(8.73)***	***(7.53)***	***(6.82)***	***(6.24)***	***(5.08)***	***(4.28)***	***(3.70)***	***(3.07)***	***(2.51)***	**—**	
Output Torque in•lbs	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	
Hollow Shaft OHL lbs	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	—	
(N)	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	21630	21690	21740	21780	21820	21870	21900	21920	21920	21920	21920	21920	21920	—	
(N)	*(96210)*	*(96470)*	*(96690)*	*(96870)*	*(97050)*	*(97270)*	*(97410)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	—	
Input Power HP	**20.5**	**16.5**	**16.5**	**13.9**	**13.9**	**12.0**	**9.90**	**9.90**	**8.10**	**6.80**	**5.89**	**4.89**	**4.00**	**—**	4F180
(kW)	***(15.3)***	***(12.3)***	***(12.3)***	***(10.4)***	***(10.4)***	***(8.93)***	***(7.40)***	***(7.40)***	***(6.03)***	***(5.08)***	***(4.39)***	***(3.65)***	***(2.98)***	**—**	
Output Torque in•lbs	122120	110620	121235	111500	122120	122120	111500	122120	122120	122120	122120	122120	122120	—	
(N•m)	*(13800)*	*(12500)*	*(13700)*	*(12600)*	*(13800)*	*(13800)*	*(12600)*	*(13800)*	*(13800)*	*(13800)*	*(13800)*	*(13800)*	*(13800)*	—	
Hollow Shaft OHL lbs	26975	27425	26975	27425	26975	26975	27425	26975	26975	26975	26975	26975	26975	—	
(N)	*(120000)*	*(122000)*	*(120000)*	*(122000)*	*(120000)*	*(120000)*	*(122000)*	*(120000)*	*(120000)*	*(120000)*	*(120000)*	*(120000)*	*(120000)*	—	
Solid Shaft OHL lbs	29000	29120	29210	29270	29350	29450	29510	29530	29530	29530	29530	29530	29530	—	
(N)	*(128990)*	*(129520)*	*(129920)*	*(130190)*	*(130540)*	*(130990)*	*(131260)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	—	
Input Power HP	**25.2**	**20.4**	**20.4**	**17.2**	**17.2**	**14.8**	**12.2**	**12.2**	**10.0**	**8.40**	**7.30**	**5.44**	**4.92**	**—**	4F185
(kW)	***(18.8)***	***(15.2)***	***(15.2)***	***(12.8)***	***(12.8)***	***(11.0)***	***(9.13)***	***(9.13)***	***(7.43)***	***(6.27)***	***(5.42)***	***(4.06)***	***(3.67)***	**—**	
Output Torque in•lbs	150440	137165	150440	137165	150440	149555	137165	150440	150440	150440	150440	135395	150440	—	
(N•m)	*(17000)*	*(15500)*	*(17000)*	*(15500)*	*(17000)*	*(16900)*	*(15500)*	*(17000)*	*(17000)*	*(17000)*	*(17000)*	*(15300)*	*(17000)*	—	
Hollow Shaft OHL lbs	25625	26300	25625	26300	25625	25625	26300	25625	25625	25625	25625	26300	25625	—	
(N)	*(114000)*	*(117000)*	*(114000)*	*(117000)*	*(114000)*	*(114000)*	*(117000)*	*(114000)*	*(114000)*	*(114000)*	*(114000)*	*(117000)*	*(114000)*	—	
Solid Shaft OHL lbs	29000	29120	29210	29270	29350	29450	29530	29530	29530	29530	29530	29530	29530	—	
(N)	*(128990)*	*(129520)*	*(129920)*	*(130190)*	*(130540)*	*(130990)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	—	
Input Power HP	**26.7**	**23.6**	**21.6**	**19.8**	**18.2**	**15.7**	**14.2**	**13.0**	**10.6**	**8.90**	**7.70**	**6.40**	**5.22**	**—**	4F190
(kW)	***(19.9)***	***(17.6)***	***(16.1)***	***(14.8)***	***(13.6)***	***(11.7)***	***(10.6)***	***(9.68)***	***(7.88)***	***(6.64)***	***(5.740***	***(4.77)***	***(3.89)***	**—**	
Output Torque in•lbs	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	—	
(N•m)	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	—	
Hollow Shaft OHL lbs	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	—	
(N)	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	—	
Solid Shaft OHL lbs	29000	29120	29210	29270	29350	29450	29530	29530	29530	29530	29530	29530	29530	—	
(N)	*(128990)*	*(129520)*	*(129920)*	*(130190)*	*(130540)*	*(130990)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	—	
Input Power HP	**26.7**	**23.6**	**21.6**	**19.8**	**18.2**	**15.7**	**14.2**	**13.0**	**10.6**	**8.90**	**7.70**	**6.40**	**5.22**	**—**	4F195
(kW)	***(19.9)***	***(17.6)***	***(16.1)***	***(14.8)***	***(13.6)***	***(11.7)***	***(10.6)***	***(9.68)***	***(7.88)***	***(6.64)***	***(5.74)***	***(4.77)***	***(3.89)***	**—**	
Output Torque in•lbs	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	—	
(N•m)	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	—	
Hollow Shaft OHL lbs	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	—	
(N)	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	—	
Solid Shaft OHL lbs	29000	29120	29210	29270	29350	29450	29530	29530	29530	29530	29530	29530	29530	—	
(N)	*(128990)*	*(129520)*	*(129920)*	*(130190)*	*(130540)*	*(130990)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	—	

Frame Size Selection Tables 50 RPM

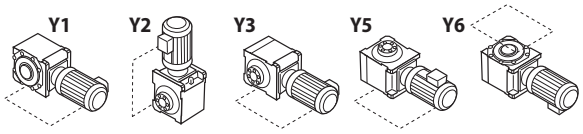
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	4.55	3.85	3.57	3.13	2.78	2.38	2.27	2.00	1.79	1.43	1.28	1.09	0.943	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4A100
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	2565	3120	3415	3910	4270	5130	—	—	7510	6865	7510	7510	7510	
(N•m)	*(290)*	*(353)*	*(386)*	*(442)*	*(483)*	*(580)*	—	—	*(849)*	*(776)*	*(849)*	*(849)*	*(849)*	
Hollow Shaft OHL lbs	6020	5975	5930	5865	5820	5665	—	—	5055	5260	5055	5055	5055	
(N)	*(26800)*	*(26600)*	*(26400)*	*(26100)*	*(25900)*	*(25200)*	—	—	*(22500)*	*(23400)*	*(22500)*	*(22500)*	*(22500)*	
Solid Shaft OHL lbs	4540	4540	4540	4540	4540	4540	—	—	4540	4540	4540	4540	4540	
(N)	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	—	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4A105
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	2565	3120	3415	3910	4270	5130	—	—	8300	8450	9290	9025	9025	
(N•m)	*(290)*	*(353)*	*(386)*	*(442)*	*(483)*	*(580)*	—	—	*(938)*	*(955)*	*(1050)*	*(1020)*	*(1020)*	
Hollow Shaft OHL lbs	6020	5975	5930	5865	5820	5665	—	—	4785	4740	4405	4515	4515	
(N)	*(26800)*	*(26600)*	*(26400)*	*(26100)*	*(25900)*	*(25200)*	—	—	*(21300)*	*(21100)*	*(19600)*	*(20100)*	*(20100)*	
Solid Shaft OHL lbs	4540	4540	4540	4540	4540	4540	—	—	4540	4540	4540	4540	4540	
(N)	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	—	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4A110
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	5810	—	—	10795	9910	10795	10795	10795	
(N•m)	—	—	—	—	—	*(657)*	—	—	*(1220)*	*(1120)*	*(1220)*	*(1220)*	*(1220)*	
Hollow Shaft OHL lbs	—	—	—	—	—	5530	—	—	3550	4090	3550	3550	3550	
(N)	—	—	—	—	—	*(24600)*	—	—	*(15800)*	*(18200)*	*(15800)*	*(15800)*	*(15800)*	
Solid Shaft OHL lbs	—	—	—	—	—	4540	—	—	4540	4540	4540	4540	4540	
(N)	—	—	—	—	—	*(20190)*	—	—	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4A115
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	5810	—	—	11415	11415	11415	11415	11415	
(N•m)	—	—	—	—	—	*(657)*	—	—	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	
Hollow Shaft OHL lbs	—	—	—	—	—	5530	—	—	3120	3120	3120	3120	3120	
(N)	—	—	—	—	—	*(24600)*	—	—	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	—	—	—	—	—	4540	—	—	4540	4540	4540	4540	4540	
(N)	—	—	—	—	—	*(20190)*	—	—	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4A120
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	8265	10085	11060	11415	11415	10970	11415	11415	11415	11415	11415	11415	11415	
(N•m)	*(934)*	*(1140)*	*(1250)*	*(1290)*	*(1290)*	*(1240)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	
Hollow Shaft OHL lbs	4810	4000	3415	3120	3120	3415	3120	3120	3120	3120	3120	3120	3120	
(N)	*(21400)*	*(17800)*	*(15200)*	*(13900)*	*(13900)*	*(15200)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	
(N)	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4A125
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	8265	10085	11060	11415	11415	10970	11415	11415	11415	11415	11415	11415	11415	
(N•m)	*(934)*	*(1140)*	*(1250)*	*(1290)*	*(1290)*	*(1240)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	
Hollow Shaft OHL lbs	4810	4000	3415	3120	3120	3415	3120	3120	3120	3120	3120	3120	3120	
(N)	*(21400)*	*(17800)*	*(15200)*	*(13900)*	*(13900)*	*(15200)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	
(N)	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	

Frame Size Selection Tables 50 RPM



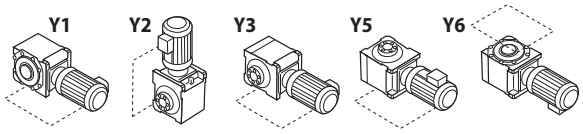
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	0.833	0.746	0.676	0.625	0.568	0.490	0.446	0.407	0.331	0.279	0.242	0.201	0.164	0.120	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4A100
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	7510	6865	7510	6865	7510	7510	6865	7510	7510	7510	7510	7510	7510	7510	
(N•m)	*(849)*	*(776)*	*(849)*	*(776)*	*(849)*	*(849)*	*(776)*	*(849)*	*(849)*	*(849)*	*(849)*	*(849)*	*(849)*	*(849)*	
Hollow Shaft OHL lbs	5055	5260	5055	5260	5055	5055	5260	5055	5055	5055	5055	5055	5055	5055	
(N)	*(22500)*	*(23400)*	*(22500)*	*(23400)*	*(22500)*	*(22500)*	*(23400)*	*(22500)*	*(22500)*	*(22500)*	*(22500)*	*(22500)*	*(22500)*	*(22500)*	
Solid Shaft OHL lbs	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	
(N)	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4A105
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	9025	8245	9025	8245	9025	9025	8245	9025	9025	8935	8935	7935	9025	7765	
(N•m)	*(1020)*	*(932)*	*(1020)*	*(932)*	*(1020)*	*(1020)*	*(932)*	*(1020)*	*(1020)*	*(1010)*	*(1010)*	*(897)*	*(1020)*	*(878)*	
Hollow Shaft OHL lbs	4515	4810	4515	4810	4515	4515	4810	4515	4515	4540	4560	4920	4515	4990	
(N)	*(20100)*	*(21400)*	*(20100)*	*(21400)*	*(20100)*	*(20100)*	*(21400)*	*(20100)*	*(20100)*	*(20200)*	*(20300)*	*(21900)*	*(20100)*	*(22200)*	
Solid Shaft OHL lbs	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	
(N)	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4A110
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	10795	9910	10795	9910	10795	10795	9910	10795	10795	10795	10795	10795	10795	—	
(N•m)	*(1220)*	*(1120)*	*(1220)*	*(1120)*	*(1220)*	*(1220)*	*(1120)*	*(1220)*	*(1220)*	*(1220)*	*(1220)*	*(1220)*	*(1220)*	—	
Hollow Shaft OHL lbs	3550	4090	3550	4090	3550	3550	4090	3550	3550	3550	3550	3550	3550	—	
(N)	*(15800)*	*(18200)*	*(15800)*	*(18200)*	*(15800)*	*(15800)*	*(18200)*	*(15800)*	*(15800)*	*(15800)*	*(15800)*	*(15800)*	*(15800)*	—	
Solid Shaft OHL lbs	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	—	
(N)	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4A115
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	—	
(N)	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4A120
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	—	
(N)	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4A125
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	—	
(N)	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	

Frame Size Selection Tables 50 RPM

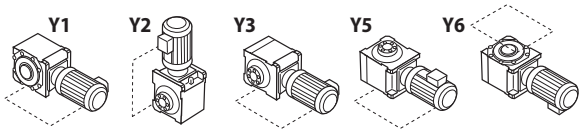
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	4.55	3.85	3.57	3.13	2.78	2.38	2.27	2.00	1.79	1.43	1.28	1.09	0.943	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4A140
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	
(N)	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4A145
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	
(N)	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4B120
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	8265	10085	11060	12565	13805	10970	14245	15575	15750	14420	15750	15750	15750	
(N•m)	*(934)*	*(1140)*	*(1250)*	*(1420)*	*(1560)*	*(1240)*	*(1610)*	*(1760)*	*(1780)*	*(1630)*	*(1780)*	*(1780)*	*(1780)*	
Hollow Shaft OHL lbs	9595	9350	9215	8945	8720	9215	8610	8295	8250	8565	8250	8250	8250	
(N)	*(42700)*	*(41600)*	*(41000)*	*(39800)*	*(38800)*	*(41000)*	*(38300)*	*(36900)*	*(36700)*	*(38100)*	*(36700)*	*(36700)*	*(36700)*	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4B125
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	8265	10085	11060	12565	13805	10970	14245	15575	17255	17075	18670	18935	18935	
(N•m)	*(934)*	*(1140)*	*(1250)*	*(1420)*	*(1560)*	*(1240)*	*(1610)*	*(1760)*	*(1950)*	*(1930)*	*(2110)*	*(2140)*	*(2140)*	
Hollow Shaft OHL lbs	9595	9350	9215	8945	8720	9215	8610	8295	7845	7890	7395	7325	7325	
(N)	*(42700)*	*(41600)*	*(41000)*	*(39800)*	*(38800)*	*(41000)*	*(38300)*	*(36900)*	*(34900)*	*(35100)*	*(32900)*	*(32600)*	*(32600)*	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4B140
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	12920	15750	17255	19730	21590	21590	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(1460)*	*(1780)*	*(1950)*	*(2230)*	*(2440)*	*(2440)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	
Hollow Shaft OHL lbs	8875	8250	7845	7055	6290	6290	5710	5710	5710	5710	5710	5710	5710	
(N)	*(39500)*	*(36700)*	*(34900)*	*(31400)*	*(28000)*	*(28000)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4B145
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	12920	15750	17255	19730	21590	21590	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(1460)*	*(1780)*	*(1950)*	*(2230)*	*(2440)*	*(2440)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	
Hollow Shaft OHL lbs	8875	8250	7845	7055	6290	6290	5710	5710	5710	5710	5710	5710	5710	
(N)	*(39500)*	*(36700)*	*(34900)*	*(31400)*	*(28000)*	*(28000)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	

Frame Size Selection Tables 50 RPM



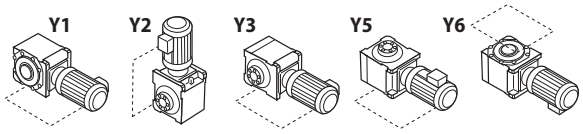
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	0.833	0.746	0.676	0.625	0.568	0.490	0.446	0.407	0.331	0.279	0.242	0.201	0.164	0.120	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4A140
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	—	
(N)	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4A145
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	—	
(N)	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4B120
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	15660	14335	15660	14420	15750	15660	14420	15750	15750	15750	15750	15750	15750	—	
(N•m)	*(1770)*	*(1620)*	*(1770)*	*(1630)*	*(1780)*	*(1770)*	*(1630)*	*(1780)*	*(1780)*	*(1780)*	*(1780)*	*(1780)*	*(1780)*	—	
Hollow Shaft OHL lbs	8295	8585	8270	8565	8250	8295	8565	8250	8250	8250	8250	8250	8250	—	
(N)	*(36900)*	*(38200)*	*(36800)*	*(38100)*	*(36700)*	*(36900)*	*(38100)*	*(36700)*	*(36700)*	*(36700)*	*(36700)*	*(36700)*	*(36700)*	—	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	—	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4B125
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	18935	17345	18935	17345	18935	18935	17345	18935	18935	18935	18935	17785	18935	—	
(N•m)	*(2140)*	*(1960)*	*(2140)*	*(1960)*	*(2140)*	*(2140)*	*(1960)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2010)*	*(2140)*	—	
Hollow Shaft OHL lbs	7325	7845	7325	7845	7325	7325	7845	7325	7325	7325	7325	7685	7325	—	
(N)	*(32600)*	*(34900)*	*(32600)*	*(34900)*	*(32600)*	*(32600)*	*(34900)*	*(32600)*	*(32600)*	*(32600)*	*(32600)*	*(34200)*	*(32600)*	—	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	—	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4B140
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	—	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	—	
Hollow Shaft OHL lbs	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	—	
(N)	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	—	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	—	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4B145
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	—	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	—	
Hollow Shaft OHL lbs	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	—	
(N)	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	—	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	—	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	—	

Frame Size Selection Tables 50 RPM

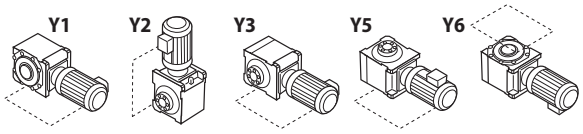
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	4.55	3.85	3.57	3.13	2.78	2.38	2.27	2.00	1.79	1.43	1.28	1.09	0.943	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4B160
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	16370	19910	21855	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(1850)*	*(2250)*	*(2470)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	
Hollow Shaft OHL lbs	8090	6965	6180	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	
(N)	*(36000)*	*(31000)*	*(27500)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4B165
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	16370	19910	21855	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(1850)*	*(2250)*	*(2470)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	
Hollow Shaft OHL lbs	8090	6965	6180	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	
(N)	*(36000)*	*(31000)*	*(27500)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4C140
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	12920	15750	17255	19730	21590	21590	27610	30175	34510	33625	36810	36810	36810	
(N•m)	*(1460)*	*(1780)*	*(1950)*	*(2230)*	*(2440)*	*(2440)*	*(3120)*	*(3410)*	*(3900)*	*(3800)*	*(4160)*	*(4160)*	*(4160)*	
Hollow Shaft OHL lbs	15710	15485	15350	15105	14900	14900	14050	13600	12720	12900	12160	12160	12160	
(N)	*(69900)*	*(68900)*	*(68300)*	*(67200)*	*(66300)*	*(66300)*	*(62500)*	*(60500)*	*(56600)*	*(57400)*	*(54100)*	*(54100)*	*(54100)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4C145
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	12920	15750	17255	19730	21590	21590	27610	30175	34510	35485	38845	41150	40795	
(N•m)	*(1460)*	*(1780)*	*(1950)*	*(2230)*	*(2440)*	*(2440)*	*(3120)*	*(3410)*	*(3900)*	*(4010)*	*(4390)*	*(4650)*	*(4610)*	
Hollow Shaft OHL lbs	15710	15485	15350	15105	14900	14900	14050	13600	12720	12475	11645	10945	11060	
(N)	*(69900)*	*(68900)*	*(68300)*	*(67200)*	*(66300)*	*(66300)*	*(62500)*	*(60500)*	*(56600)*	*(55500)*	*(51800)*	*(48700)*	*(49200)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4C160
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	28845	35220	38495	43980	45485	39820	43360	45485	45485	45485	45485	45485	45485	
(N•m)	*(3260)*	*(3980)*	*(4350)*	*(4970)*	*(5140)*	*(4500)*	*(4900)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	
Hollow Shaft OHL lbs	13825	12565	11735	10000	9415	11350	10225	9415	9415	9415	9415	9415	9415	
(N)	*(61500)*	*(55900)*	*(52200)*	*(44500)*	*(41900)*	*(50500)*	*(45500)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4C165
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	28845	35220	38495	43980	45485	39820	43360	45485	45485	45485	45485	45485	45485	
(N•m)	*(3260)*	*(3980)*	*(4350)*	*(4970)*	*(5140)*	*(4500)*	*(4900)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	
Hollow Shaft OHL lbs	13825	12565	11735	10000	9415	11350	10225	9415	9415	9415	9415	9415	9415	
(N)	*(61500)*	*(55900)*	*(52200)*	*(44500)*	*(41900)*	*(50500)*	*(45500)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	

Frame Size Selection Tables 50 RPM



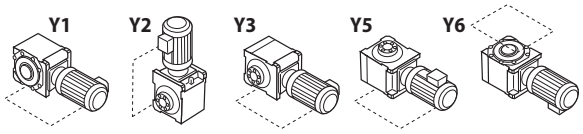
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	0.833	0.746	0.676	0.625	0.568	0.490	0.446	0.407	0.331	0.279	0.242	0.201	0.164	0.120	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4B160
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	—	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	—	
Hollow Shaft OHL lbs	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	—	
(N)	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	—	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	—	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4B165
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	—	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	—	
Hollow Shaft OHL lbs	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	—	
(N)	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	—	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	—	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4C140
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	36810	33625	36810	33625	36810	36810	33625	36810	36810	36810	36810	36810	36810	—	
(N•m)	*(4160)*	*(3800)*	*(4160)*	*(3800)*	*(4160)*	*(4160)*	*(3800)*	*(4160)*	*(4160)*	*(4160)*	*(4160)*	*(4160)*	*(4160)*	—	
Hollow Shaft OHL lbs	12160	12900	12160	12900	12160	12160	12900	12160	12160	12160	12160	12160	12160	—	
(N)	*(54100)*	*(57400)*	*(54100)*	*(57400)*	*(54100)*	*(54100)*	*(57400)*	*(54100)*	*(54100)*	*(54100)*	*(54100)*	*(54100)*	*(54100)*	—	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	—	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4C145
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	41150	36810	40265	37610	41150	41150	37610	41150	41150	41150	41150	39820	37520	—	
(N•m)	*(4650)*	*(4160)*	*(4550)*	*(4250)*	*(4650)*	*(4650)*	*(4250)*	*(4650)*	*(4650)*	*(4650)*	*(4650)*	*(4500)*	*(4240)*	—	
Hollow Shaft OHL lbs	10945	12180	11240	11955	10945	10945	11955	10945	10945	10945	10945	11375	11980	—	
(N)	*(48700)*	*(54200)*	*(50000)*	*(53200)*	*(48700)*	*(48700)*	*(53200)*	*(48700)*	*(48700)*	*(48700)*	*(48700)*	*(50600)*	*(53300)*	—	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	—	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4C160
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	—	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	—	
Hollow Shaft OHL lbs	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	—	
(N)	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	—	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	—	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4C165
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	—	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	—	
Hollow Shaft OHL lbs	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	—	
(N)	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	—	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	—	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	—	

Frame Size Selection Tables 50 RPM

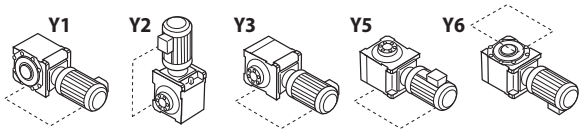
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	4.55	3.85	3.57	3.13	2.78	2.38	2.27	2.00	1.79	1.43	1.28	1.09	0.943	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4C170
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	35225	45925	43365	45490	43900	40615	43360	45485	45485	45485	45485	45485	45485	
(N•m)	*(3980)*	*(4850)*	*(4900)*	*(5140)*	*(4960)*	*(4590)*	*(4900)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	
Hollow Shaft OHL lbs	12565	10405	10225	9415	10025	11125	10250	9415	9415	9415	9415	9415	9415	
(N)	*(55900)*	*(46300)*	*(45500)*	*(41900)*	*(44600)*	*(49500)*	*(45600)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4C175
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	35225	42925	43365	45490	43900	40615	43360	45485	45485	45485	45485	45485	45485	
(N•m)	*(3980)*	*(4850)*	*(4900)*	*(5140)*	*(4960)*	*(4590)*	*(4900)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	
Hollow Shaft OHL lbs	12565	10405	10225	9415	10025	11125	10250	9415	9415	9415	9415	9415	9415	
(N)	*(55900)*	*(46300)*	*(45500)*	*(41900)*	*(44600)*	*(49500)*	*(45600)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4D160
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	39820	48230	52740	52740	48230	52740	52740	52740	
(N•m)	—	—	—	—	—	*(4500)*	*(5450)*	*(5960)*	*(5960)*	*(5450)*	*(5960)*	*(5960)*	*(5960)*	
Hollow Shaft OHL lbs	—	—	—	—	—	19825	18680	17915	17915	18680	17915	17915	17915	
(N)	—	—	—	—	—	*(88200)*	*(83100)*	*(79700)*	*(79700)*	*(83100)*	*(79700)*	*(79700)*	*(79700)*	
Solid Shaft OHL lbs	—	—	—	—	—	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	—	—	—	—	—	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4D165
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	39820	49645	54335	56105	57695	63095	63095	63095	
(N•m)	—	—	—	—	—	*(4500)*	*(5610)*	*(6140)*	*(6340)*	*(6520)*	*(7130)*	*(7130)*	*(7130)*	
Hollow Shaft OHL lbs	—	—	—	—	—	19825	18430	17625	17285	16970	15755	15755	15755	
(N)	—	—	—	—	—	*(88200)*	*(82000)*	*(78400)*	*(76900)*	*(75500)*	*(70100)*	*(70100)*	*(70100)*	
Solid Shaft OHL lbs	—	—	—	—	—	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	—	—	—	—	—	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4D170
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	35220	42920	46900	53625	58670	55840	69555	76015	76015	69555	76015	75925	76015	
(N•m)	*(3980)*	*(4850)*	*(5300)*	*(6060)*	*(6630)*	*(6310)*	*(7860)*	*(8590)*	*(8590)*	*(7860)*	*(8590)*	*(8580)*	*(8590)*	
Hollow Shaft OHL lbs	20365	19445	18880	17780	16790	17355	14050	11825	11825	14050	11825	11865	11825	
(N)	*(90600)*	*(86500)*	*(84000)*	*(79100)*	*(74700)*	*(77200)*	*(62500)*	*(52600)*	*(52600)*	*(62500)*	*(52600)*	*(52800)*	*(52600)*	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4D175
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	35220	42920	46900	53625	58670	55840	74955	77165	77165	77165	77165	77165	77165	
(N•m)	*(3980)*	*(4850)*	*(5300)*	*(6060)*	*(6630)*	*(6310)*	*(8470)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	
Hollow Shaft OHL lbs	20365	19445	18880	17780	16790	17355	12250	11375	11375	11375	11375	11375	11375	
(N)	*(90600)*	*(86500)*	*(84000)*	*(79100)*	*(74700)*	*(77200)*	*(54500)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	

Frame Size Selection Tables 50 RPM



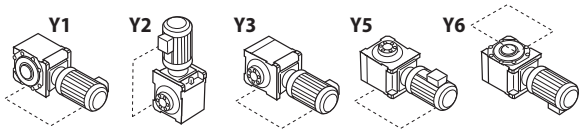
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	0.833	0.746	0.676	0.625	0.568	0.490	0.446	0.407	0.331	0.279	0.242	0.201	0.164	0.120	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4C170
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	—	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	—	
Hollow Shaft OHL lbs	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	—	
(N)	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	—	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	—	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4C175
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	—	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	—	
Hollow Shaft OHL lbs	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	—	
(N)	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	—	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	—	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4D160
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	52740	48230	52740	48230	52740	52740	48230	52740	52120	52740	52740	52740	52740	—	
(N•m)	*(5960)*	*(5450)*	*(5960)*	*(5450)*	*(5960)*	*(5960)*	*(5450)*	*(5960)*	*(5890)*	*(5960)*	*(5960)*	*(5960)*	*(5960)*	—	
Hollow Shaft OHL lbs	17915	18680	17915	18680	17915	17915	18680	17915	18025	17915	17915	17915	17915	—	
(N)	*(79700)*	*(83100)*	*(79700)*	*(83100)*	*(79700)*	*(79700)*	*(83100)*	*(79700)*	*(80200)*	*(79700)*	*(79700)*	*(79700)*	*(79700)*	—	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	—	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4D165
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	63095	57695	63095	57695	63095	63095	57695	63095	63095	63095	63095	63095	61680	—	
(N•m)	*(7130)*	*(6520)*	*(7130)*	*(6520)*	*(7130)*	*(7130)*	*(6520)*	*(7130)*	*(7130)*	*(7130)*	*(7130)*	*(7130)*	*(6970)*	—	
Hollow Shaft OHL lbs	15755	16970	15755	16970	15755	15755	16970	15755	15755	15755	15755	15755	16115	—	
(N)	*(70100)*	*(75500)*	*(70100)*	*(75500)*	*(70100)*	*(70100)*	*(75500)*	*(70100)*	*(70100)*	*(70100)*	*(70100)*	*(70100)*	*(71700)*	—	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	—	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4D170
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	76015	69555	76015	69555	76015	76015	69555	76015	76015	76015	76015	76015	76015	—	
(N•m)	*(8590)*	*(7860)*	*(8590)*	*(7860)*	*(8590)*	*(8590)*	*(7860)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	—	
Hollow Shaft OHL lbs	11825	14050	11825	14050	11825	11825	14050	11825	11825	11825	11825	11825	11825	—	
(N)	*(52600)*	*(62500)*	*(52600)*	*(62500)*	*(52600)*	*(52600)*	*(62500)*	*(52600)*	*(52600)*	*(52600)*	*(52600)*	*(52600)*	*(52600)*	—	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	—	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4D175
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	—	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	—	
Hollow Shaft OHL lbs	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	—	
(N)	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	—	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	—	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	—	

Frame Size Selection Tables 50 RPM

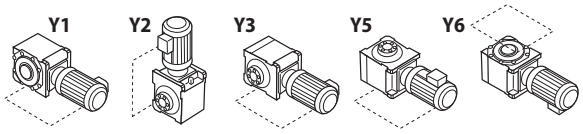
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	4.55	3.85	3.57	3.13	2.78	2.38	2.27	2.00	1.79	1.43	1.28	1.09	0.943	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4D180
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	46635	56810	62210	71060	77175	70350	66635	72920	74155	77165	77165	77165	77165	
(N•m)	*(5270)*	*(6420)*	*(7030)*	*(8030)*	*(8720)*	*(7950)*	*(7530)*	*(8240)*	*(8380)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	
Hollow Shaft OHL lbs	18905	17130	15960	13530	11375	13800	14855	12970	12565	11375	11375	11375	11375	
(N)	*(84100)*	*(76200)*	*(71000)*	*(60200)*	*(50600)*	*(61400)*	*(66100)*	*(57700)*	*(55900)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4D185
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	46635	56810	62210	71060	77175	71325	67695	74070	75040	77165	77165	77165	77165	
(N•m)	*(5270)*	*(6420)*	*(7030)*	*(8030)*	*(8720)*	*(8060)*	*(7650)*	*(8370)*	*(8480)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	
Hollow Shaft OHL lbs	18905	17130	15960	13530	11375	13465	14565	12585	12160	11375	11375	11375	11375	
(N)	*(84100)*	*(76200)*	*(71000)*	*(60200)*	*(50600)*	*(59900)*	*(64800)*	*(56000)*	*(54100)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4E170
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	35220	42920	46900	53625	58670	55840	69555	76015	76015	69555	76015	75925	76015	
(N•m)	*(3980)*	*(4850)*	*(5300)*	*(6060)*	*(6630)*	*(6310)*	*(7860)*	*(8590)*	*(8590)*	*(7860)*	*(8590)*	*(8580)*	*(8590)*	
Hollow Shaft OHL lbs	22030	21625	21420	21085	20835	20970	20275	19940	19940	20275	19940	19960	19940	
(N)	*(98000)*	*(96200)*	*(95300)*	*(93800)*	*(92700)*	*(93300)*	*(90200)*	*(88700)*	*(88700)*	*(90200)*	*(88700)*	*(88800)*	*(88700)*	
Solid Shaft OHL lbs	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	
(N)	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4E175
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	35220	42920	46900	53625	58670	55840	74955	81945	78230	86545	86990	86990	86990	
(N•m)	*(3980)*	*(4850)*	*(5300)*	*(6060)*	*(6630)*	*(6310)*	*(8470)*	*(9260)*	*(8840)*	*(9780)*	*(9830)*	*(9830)*	*(9830)*	
Hollow Shaft OHL lbs	22030	21420	21085	20840	20835	20970	20005	19645	19850	19420	19400	19400	19400	
(N)	*(98000)*	*(95300)*	*(93800)*	*(92700)*	*(92700)*	*(93300)*	*(89000)*	*(87400)*	*(88300)*	*(86400)*	*(86300)*	*(86300)*	*(86300)*	
Solid Shaft OHL lbs	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	
(N)	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4E180
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	46635	56810	62210	71060	77695	70350	66635	72920	74155	102665	102665	102665	102665	
(N•m)	*(5270)*	*(6420)*	*(7030)*	*(8030)*	*(8780)*	*(7950)*	*(7530)*	*(8240)*	*(8380)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	
Hollow Shaft OHL lbs	21445	20925	20660	20210	19870	20230	20435	20120	20050	18430	18430	18430	18430	
(N)	*(95400)*	*(93100)*	*(91900)*	*(89900)*	*(88400)*	*(90000)*	*(90900)*	*(89500)*	*(89200)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	
Solid Shaft OHL lbs	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	
(N)	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4E185
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	46635	56810	62210	71060	77695	71325	67695	74070	75040	102665	102665	102665	102665	
(N•m)	*(5270)*	*(6420)*	*(7030)*	*(8030)*	*(8780)*	*(8060)*	*(7650)*	*(8370)*	*(8480)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	
Hollow Shaft OHL lbs	21445	20925	20660	20210	19870	20185	20365	20050	20005	18430	18430	18430	18430	
(N)	*(95400)*	*(93100)*	*(91900)*	*(89900)*	*(88400)*	*(89800)*	*(90600)*	*(89200)*	*(89000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	
Solid Shaft OHL lbs	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	
(N)	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	

Frame Size Selection Tables 50 RPM



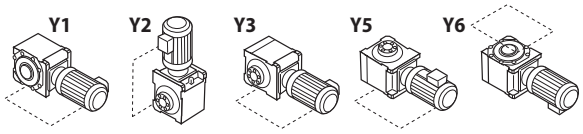
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	0.833	0.746	0.676	0.625	0.568	0.490	0.446	0.407	0.331	0.279	0.242	0.201	0.164	0.120	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4D180
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	—	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	—	
Hollow Shaft OHL lbs	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	—	
(N)	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	—	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	—	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4D185
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	—	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	—	
Hollow Shaft OHL lbs	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	—	
(N)	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	—	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	—	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4E170
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	76015	69555	76015	69555	76015	76015	69555	76015	76015	76015	76015	76015	76015	—	
(N•m)	*(8590)*	*(7860)*	*(8590)*	*(7860)*	*(8590)*	*(8590)*	*(7860)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	*(8590)*	—	
Hollow Shaft OHL lbs	19940	20275	19940	20275	19940	19940	20275	19940	19940	19940	19940	19940	19940	—	
(N)	*(88700)*	*(90200)*	*(88700)*	*(90200)*	*(88700)*	*(88700)*	*(90200)*	*(88700)*	*(88700)*	*(88700)*	*(88700)*	*(88700)*	*(88700)*	—	
Solid Shaft OHL lbs	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	—	
(N)	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4E175
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	86990	86545	86990	86545	86990	86990	86545	94690	94690	94690	94690	94690	94690	—	
(N•m)	*(9830)*	*(9780)*	*(9830)*	*(9780)*	*(9830)*	*(9830)*	*(9780)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	—	
Hollow Shaft OHL lbs	19400	19420	19400	19420	19400	19400	19420	18995	18995	18995	18995	18995	18995	—	
(N)	*(86300)*	*(86400)*	*(86300)*	*(86400)*	*(86300)*	*(86300)*	*(86400)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	—	
Solid Shaft OHL lbs	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	—	
(N)	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4E180
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	
Hollow Shaft OHL lbs	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	—	
(N)	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	—	
(N)	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4E185
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	
Hollow Shaft OHL lbs	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	—	
(N)	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	—	
(N)	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	—	

Frame Size Selection Tables 50 RPM

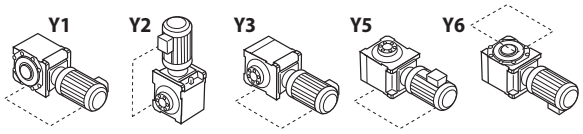
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions



Dimensions on pages 2.156 - 2.166

Output RPM	4.55	3.85	3.57	3.13	2.78	2.38	2.27	2.00	1.79	1.43	1.28	1.09	0.943	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4E190
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	76735	93815	102665	102665	102665	88065	82740	90275	92045	102665	102665	102665	102665	
(N•m)	*(8760)*	*(10600)*	*(11600)*	*(11600)*	*(11600)*	*(9950)*	*(9350)*	*(10200)*	*(10400)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	
Hollow Shaft OHL lbs	19915	19060	18520	18430	18430	19330	19600	19220	19130	18430	18430	18430	18430	
(N)	*(88600)*	*(84800)*	*(82400)*	*(82000)*	*(82000)*	*(86000)*	*(87200)*	*(85500)*	*(85100)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	
Solid Shaft OHL lbs	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	
(N)	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4E195
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	76735	93815	102665	102665	102665	89390	84510	92045	93815	102665	102665	102665	102665	
(N•m)	*(8670)*	*(10600)*	*(11600)*	*(11600)*	*(11600)*	*(10100)*	*(9550)*	*(10400)*	*(10600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	
Hollow Shaft OHL lbs	19915	19060	18520	18430	18430	19265	19510	19130	19040	18430	18430	18430	18430	
(N)	*(88600)*	*(84800)*	*(82400)*	*(82000)*	*(82000)*	*(85700)*	*(86800)*	*(85100)*	*(84700)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	
Solid Shaft OHL lbs	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	
(N)	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4F180
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	46635	56810	62210	71060	77695	70350	66635	72920	74155	111500	122120	122120	122120	
(N•m)	*(5270)*	*(6420)*	*(7030)*	*(8030)*	*(8780)*	*(7950)*	*(7530)*	*(8240)*	*(8380)*	*(12600)*	*(13800)*	*(13800)*	*(13800)*	
Hollow Shaft OHL lbs	30120	29670	29450	29000	28775	29225	29225	29000	29000	27425	26975	26975	26975	
(N)	*(134000)*	*(132000)*	*(131000)*	*(129000)*	*(128000)*	*(130000)*	*(130000)*	*(129000)*	*(129000)*	*(122000)*	*(120000)*	*(120000)*	*(120000)*	
Solid Shaft OHL lbs	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	
(N)	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4F185
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	46635	56810	62210	71060	77695	71325	67695	74070	75040	131855	144245	147785	147785	
(N•m)	*(5270)*	*(6420)*	*(7030)*	*(8030)*	*(8780)*	*(8060)*	*(7650)*	*(8370)*	*(8480)*	*(14900)*	*(16300)*	*(16700)*	*(16700)*	
Hollow Shaft OHL lbs	30120	29670	29450	29000	28775	29000	29225	29000	29000	26525	25850	25850	25850	
(N)	*(134000)*	*(132000)*	*(131000)*	*(129000)*	*(128000)*	*(129000)*	*(130000)*	*(129000)*	*(129000)*	*(118000)*	*(115000)*	*(115000)*	*(115000)*	
Solid Shaft OHL lbs	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	
(N)	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4F190
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	76735	93815	102665	116830	128335	88050	82740	90265	92035	159290	159290	159290	159290	
(N•m)	*(8670)*	*(10600)*	*(11600)*	*(13200)*	*(14500)*	*(9950)*	*(9350)*	*(10200)*	*(10400)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	
Hollow Shaft OHL lbs	28775	28100	27650	27200	26525	28325	28550	28325	28100	25175	25175	25175	25175	
(N)	*(128000)*	*(125000)*	*(123000)*	*(121000)*	*(118000)*	*(126000)*	*(127000)*	*(126000)*	*(125000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	
Solid Shaft OHL lbs	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	
(N)	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4F195
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	76735	93815	102665	116830	128335	89380	84510	92035	93805	159290	159290	159290	159290	
(N•m)	*(8670)*	*(10600)*	*(11600)*	*(13200)*	*(14500)*	*(10100)*	*(9550)*	*(10400)*	*(10600)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	
Hollow Shaft OHL lbs	28775	28100	27650	27200	26525	28325	28550	28100	28100	25175	25175	25175	25175	
(N)	*(128000)*	*(125000)*	*(123000)*	*(121000)*	*(118000)*	*(126000)*	*(127000)*	*(125000)*	*(125000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	
Solid Shaft OHL lbs	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	
(N)	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	

Frame Size Selection Tables 50 RPM



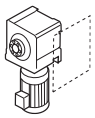
Single Reduction
Y1, Y2, Y3, Y5, Y6 Mounting Positions

Dimensions on pages 2.156 - 2.166

Output RPM	0.833	0.746	0.676	0.625	0.568	0.490	0.446	0.407	0.331	0.279	0.242	0.201	0.164	0.120	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4E190
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	
Hollow Shaft OHL lbs	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	—	
(N)	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	—	
(N)	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4E195
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	102665	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	
Hollow Shaft OHL lbs	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	18430	—	
(N)	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	—	
(N)	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4F180
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	122120	110620	121235	111500	122120	122120	111500	122120	122120	122120	121235	121235	122120	—	
(N•m)	*(13800)*	*(12500)*	*(13700)*	*(12600)*	*(13800)*	*(13800)*	*(12600)*	*(13800)*	*(13800)*	*(13800)*	*(13700)*	*(13700)*	*(13800)*	—	
Hollow Shaft OHL lbs	26975	27425	26975	27425	26975	26975	27425	26975	26975	26975	26975	26975	26975	—	
(N)	*(120000)*	*(122000)*	*(120000)*	*(122000)*	*(120000)*	*(120000)*	*(122000)*	*(120000)*	*(120000)*	*(120000)*	*(120000)*	*(120000)*	*(120000)*	—	
Solid Shaft OHL lbs	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	—	
(N)	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4F185
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	150440	137165	150440	137165	149555	150440	137165	150440	150440	150440	150440	135395	150440	—	
(N•m)	*(17000)*	*(15500)*	*(17000)*	*(15500)*	*(16900)*	*(17000)*	*(15500)*	*(17000)*	*(17000)*	*(17000)*	*(17000)*	*(15300)*	*(17000)*	—	
Hollow Shaft OHL lbs	25625	26300	25625	26300	25625	25625	26300	25625	25625	25625	25625	26300	25625	—	
(N)	*(114000)*	*(117000)*	*(114000)*	*(117000)*	*(114000)*	*(114000)*	*(117000)*	*(114000)*	*(114000)*	*(114000)*	*(114000)*	*(117000)*	*(114000)*	—	
Solid Shaft OHL lbs	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	—	
(N)	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4F190
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	—	
(N•m)	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	—	
Hollow Shaft OHL lbs	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	—	
(N)	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	—	
Solid Shaft OHL lbs	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	—	
(N)	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4F195
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	159290	—	
(N•m)	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	*(18000)*	—	
Hollow Shaft OHL lbs	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	25175	—	
(N)	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	*(112000)*	—	
Solid Shaft OHL lbs	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530		
(N)	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*		

Frame Size Selection Tables 60 Hz, 1750 RPM

Single Reduction
Y4 Mounting Position[1]

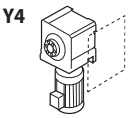


Dimensions on pages 2.156–2.166

Output RPM	159	135	125	109	97.2	83.3	79.5	70.0	62.5	50.0	44.9	38.0	33.0	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	—	—	—	—	—	**3.15**	—	—	**3.15**	**3.15**	**3.15**	**3.15**	**3.15**	**4A100**
(kW)	—	—	—	—	—	***(2.35)***	—	—	***(2.35)***	***(2.35)***	***(2.35)***	***(2.35)***	***(2.35)***	
Output Torque in•lbs	—	—	—	—	—	2195	—	—	2927	3658	4076	4808	5540	
(N•m)	—	—	—	—	—	*(248)*	—	—	*(331)*	*(413)*	*(461)*	*(543)*	*(626)*	
Hollow Shaft OHL lbs	—	—	—	—	—	4470	—	—	4785	5055	5170	5350	5530	
(N)	—	—	—	—	—	*(19900)*	—	—	*(21300)*	*(22500)*	*(23000)*	*(23800)*	*(24600)*	
Solid Shaft OHL lbs	—	—	—	—	—	3480	—	—	3980	4350	4510	4550	4580	
(N)	—	—	—	—	—	*(15470)*	—	—	*(17700)*	*(19340)*	*(20060)*	*(20230)*	*(20370)*	
Input Power HP	—	—	—	—	—	**4.26**	—	—	**4.26**	**4.26**	**4.26**	**4.26**	**4.26**	**4A105**
(kW)	—	—	—	—	—	***(3.18)***	—	—	***(3.18)***	***(3.18)***	***(3.18)***	***(3.18)***	***(3.18)***	
Output Torque in•lbs	—	—	—	—	—	2973	—	—	3964	4955	5522	6513	7504	
(N•m)	—	—	—	—	—	*(336)*	—	—	*(448)*	*(560)*	*(624)*	*(736)*	*(848)*	
Hollow Shaft OHL lbs	—	—	—	—	—	4360	—	—	4650	4875	4965	5125	5100	
(N)	—	—	—	—	—	*(19400)*	—	—	*(20700)*	*(21700)*	*(22100)*	*(22800)*	*(22700)*	
Solid Shaft OH lbs	—	—	—	—	—	3480	—	—	3980	4350	4510	4550	4580	
(N)	—	—	—	—	—	*(15470)*	—	—	*(17700)*	*(19340)*	*(20060)*	*(20230)*	*(20370)*	
Input Power HP	—	—	—	—	—	**4.76**	—	—	**4.76**	**4.76**	**4.76**	**4.76**	**4.76**	**4A110**
(kW)	—	—	—	—	—	***(3.55)***	—	—	***(3.55)***	***(3.55)***	***(3.55)***	***(3.55)***	***(3.55)***	
Output Torque in•lbs	—	—	—	—	—	3319	—	—	4425	5531	6164	7271	8378	
(N•m)	—	—	—	—	—	*(375)*	—	—	*(500)*	*(625)*	*(696)*	*(822)*	*(947)*	
Hollow Shaft OHL lbs	—	—	—	—	—	4315	—	—	4585	4785	4875	5010	4785	
(N)	—	—	—	—	—	*(19200)*	—	—	*(20400)*	*(21300)*	*(21700)*	*(22300)*	*(21300)*	
Solid Shaft OHL lbs	—	—	—	—	—	3480	—	—	3980	4350	4510	4550	4580	
(N)	—	—	—	—	—	*(15470)*	—	—	*(17700)*	*(19340)*	*(20060)*	*(20230)*	*(20370)*	
Input Power HP	—	—	—	—	—	**5.26**	—	—	**5.26**	**5.26**	**5.26**	**5.23**	**5.23**	**4A115**
(kW)	—	—	—	—	—	***(3.92)***	—	—	***(3.92)***	***(3.92)***	***(3.92)***	***(3.90)***	***(3.90)***	
Output Torque in•lbs	—	—	—	—	—	3664	—	—	4886	6107	6805	7988	9204	
(N•m)	—	—	—	—	—	*(414)*	—	—	*(552)*	*(690)*	*(769)*	*(903)*	*(1040)*	
Hollow Shaft OHL lbs	—	—	—	—	—	4270	—	—	4515	4720	4785	4920	4470	
(N)	—	—	—	—	—	*(19000)*	—	—	*(20100)*	*(21000)*	*(21300)*	*(21900)*	*(19900)*	
Solid Shaft OHL lbs	—	—	—	—	—	3480	—	—	3980	4350	4510	4550	4580	
(N)	—	—	—	—	—	*(15470)*	—	—	*(17700)*	*(19340)*	*(20060)*	*(20230)*	*(20370)*	
Input Power HP	—	—	—	—	—	**6.80**	—	—	**6.80**	**6.80**	**6.80**	—	—	**4A120**
(kW)	—	—	—	—	—	***(5.07)***	—	—	***(5.07)***	***(5.07)***	***(5.07)***	—	—	
Output Torque in•lbs	—	—	—	—	—	4741	—	—	6321	7902	8805	—	—	
(N•m)	—	—	—	—	—	*(536)*	—	—	*(714)*	*(893)*	*(995)*	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	3930	—	—	4065	4470	4515	—	—	
(N)	—	—	—	—	—	*(17500)*	—	—	*(18100)*	*(19900)*	*(20100)*	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	3480	—	—	3980	4350	4510	—	—	
(N)	—	—	—	—	—	*(15470)*	—	—	*(17700)*	*(19340)*	*(20060)*	—	—	
Input Power HP	—	—	—	—	—	**7.80**	—	—	**9.31**	**7.94**	**7.41**	**6.27**	**5.43**	**4A125**
(kW)	—	—	—	—	—	***(5.81)***	—	—	***(6.95)***	***(5.92)***	***(5.52)***	***(4.67)***	***(4.05)***	
Output Torque in•lbs	—	—	—	—	—	5437	—	—	8660	9226	9593	9574	9560	
(N•m)	—	—	—	—	—	*(614)*	—	—	*(978)*	*(1042)*	*(1084)*	*(1082)*	*(1080)*	
Hollow Shaft OHL lbs	—	—	—	—	—	3795	—	—	3910	4270	4315	4315	4315	
(N)	—	—	—	—	—	*(16900)*	—	—	*(17400)*	*(19000)*	*(19200)*	*(19200)*	*(19200)*	
Solid Shaft OHL lbs	—	—	—	—	—	3480	—	—	3980	4350	4510	4550	4580	
(N)	—	—	—	—	—	*(15470)*	—	—	*(17700)*	*(19340)*	*(20060)*	*(20230)*	*(20370)*	

Note: [1] Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for Y4 ratings not listed in the table.

Frame Size Selection Tables 60 Hz, 1750 RPM



Single Reduction
Y4 Mounting Position[1]

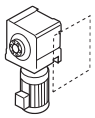
Dimensions on pages 2.156–2.166

Output RPM	29.2	26.1	23.6	21.9	19.9	17.2	15.6	14.2	11.6	9.78	8.45	7.03	5.74	4.20	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	**2.66**	**2.58**	**2.58**	**1.70**	**1.70**	**1.62**	**1.31**	**1.31**	**1.05**	**0.751**	**0.692**	**0.584**	**0.581**	**0.282**	
(kW)	***(1.99)***	***(1.93)***	***(1.93)***	***(1.27)***	***(1.27)***	***(1.21)***	***(0.975)***	***(0.975)***	***(0.780)***	***(0.560)***	***(0.516)***	***(0.436)***	***(0.433)***	***(0.210)***	
Output Torque in•lbs	5305	5744	6344	4523	4975	5496	4862	5340	5245	4464	4756	4832	5884	3899	
(N•m)	*(599)*	*(649)*	*(717)*	*(511)*	*(562)*	*(621)*	*(549)*	*(603)*	*(593)*	*(504)*	*(537)*	*(546)*	*(665)*	*(441)*	**4A100**
Hollow Shaft OHL lbs	5640	5530	5415	5775	5710	5595	5730	5640	5640	5800	5755	5730	5505	5890	
(N)	*(25100)*	*(24600)*	*(24100)*	*(25700)*	*(25400)*	*(24900)*	*(25500)*	*(25100)*	*(25100)*	*(25800)*	*(25600)*	*(25500)*	*(24500)*	*(26200)*	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	4540	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	
Input Power HP	**3.29**	**3.13**	**3.13**	**2.24**	**2.24**	**2.13**	**1.61**	**1.61**	**1.45**	**1.04**	**0.950**	**0.753**	**0.758**	**0.384**	
(kW)	***(2.46)***	***(2.34)***	***(2.34)***	***(1.67)***	***(1.67)***	***(1.59)***	***(1.20)***	***(1.20)***	***(1.08)***	***(0.776)***	***(0.708)***	***(0.561)***	***(0.565)***	***(0.286)***	
Output Torque in•lbs	6562	6968	7696	5959	6554	7221	5975	6561	7295	6186	6528	6222	7675	5316	
(N•m)	*(742)*	*(787)*	*(870)*	*(673)*	*(741)*	*(816)*	*(675)*	*(741)*	*(824)*	*(699)*	*(738)*	*(703)*	*(867)*	*(601)*	**4A105**
Hollow Shaft OHL lbs	5350	5235	5035	5485	5350	5170	5485	5350	5145	5440	5350	5440	5010	5640	
(N)	*(23800)*	*(23300)*	*(22400)*	*(24400)*	*(23800)*	*(23000)*	*(24400)*	*(23800)*	*(22900)*	*(24200)*	*(23800)*	*(24200)*	*(22300)*	*(25100)*	
Solid Shaft OH lbs	4580	4580	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	4540	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	
Input Power HP	**4.26**	**3.65**	**3.65**	**2.57**	**2.57**	**2.55**	**2.02**	**2.02**	**1.74**	**1.27**	**1.15**	**0.897**	**0.887**	**—**	
(kW)	***(3.18)***	***(2.72)***	***(2.72)***	***(1.91)***	***(1.91)***	***(1.90)***	***(1.50)***	***(1.50)***	***(1.30)***	***(0.944)***	***(0.859)***	***(0.669)***	***(0.661)***	**—**	
Output Torque in•lbs	8491	8126	8975	6816	7497	8649	7496	8233	8741	7520	7919	7416	8981	—	
(N•m)	*(959)*	*(918)*	*(1014)*	*(770)*	*(847)*	*(977)*	*(847)*	*(930)*	*(988)*	*(850)*	*(895)*	*(838)*	*(1015)*	—	**4A110**
Hollow Shaft OHL lbs	4740	4855	4560	5280	5080	4675	5080	4830	4630	5080	4945	5100	4540	—	
(N)	*(21100)*	*(21600)*	*(20300)*	*(23500)*	*(22600)*	*(20800)*	*(22600)*	*(21500)*	*(20600)*	*(22600)*	*(22000)*	*(22700)*	*(20200)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	—	
Input Power HP	**4.79**	**4.17**	**3.88**	**2.98**	**2.98**	**2.81**	**2.42**	**2.33**	**1.90**	**1.49**	**1.35**	**1.02**	**0.937**	**—**	
(kW)	***(3.57)***	***(3.11)***	***(2.89)***	***(2.22)***	***(2.22)***	***(2.10)***	***(1.81)***	***(1.74)***	***(1.41)***	***(1.11)***	***(1.01)***	***(0.758)***	***(0.698)***	**—**	
Output Torque in•lbs	9550	9284	9535	7915	8707	9517	9018	9509	9502	8855	9309	8399	9486	—	
(N•m)	*(1079)*	*(1049)*	*(1077)*	*(894)*	*(984)*	*(1075)*	*(1019)*	*(1074)*	*(1074)*	*(1001)*	*(1052)*	*(949)*	*(1072)*	—	**4A115**
Hollow Shaft OHL lbs	4315	4380	4315	4945	4650	4315	4515	4315	4315	4585	4380	4765	4315	—	
(N)	*(19200)*	*(19500)*	*(19200)*	*(22000)*	*(20700)*	*(19200)*	*(20100)*	*(19200)*	*(19200)*	*(20400)*	*(19500)*	*(21200)*	*(19200)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	—	
Input Power HP	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	
(kW)	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	**4A120**
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**4.79**	**4.24**	**3.88**	**3.56**	**3.26**	**2.81**	**2.55**	**2.33**	**1.90**	**1.60**	**1.38**	**1.15**	**0.937**	**—**	
(kW)	***(3.57)***	***(3.16)***	***(2.89)***	***(2.66)***	***(2.43)***	***(2.10)***	***(1.90)***	***(1.74)***	***(1.41)***	***(1.19)***	***(1.03)***	***(0.856)***	***(0.698)***	**—**	
Output Torque in•lbs	9550	9442	9535	9470	9524	9517	9470	9509	9502	9497	9493	9489	9486	—	
(N•m)	*(1079)*	*(1067)*	*(1077)*	*(1070)*	*(1076)*	*(1075)*	*(1070)*	*(1074)*	*(1074)*	*(1073)*	*(1073)*	*(1072)*	*(1072)*	—	**4A125**
Hollow Shaft OHL lbs	4315	4315	4315	4315	4315	4315	4315	4315	4315	4315	4315	4315	4315	—	
(N)	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	—	

Note: [1] Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for Y4 ratings not listed in the table.

Frame Size Selection Tables 60 Hz, 1750 RPM

Single Reduction
Y4 Mounting Position[1]

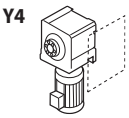


Dimensions on pages 2.156–2.166

Output RPM	159	135	125	109	97.2	83.3	79.5	70.0	62.5	50.0	44.9	38.0	33.0	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4A140
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	—	—	—	—	—	**13.6**	—	—	**10.2**	**8.10**	**7.41**	**6.27**	**5.43**	4A145
(kW)	—	—	—	—	—	***(10.1)***	—	—	***(7.60)***	***(6.04)***	***(5.52)***	***(4.67)***	***(4.05)***	
Output Torque in•lbs	—	—	—	—	—	9470	—	—	9470	9416	9593	9574	9560	
(N•m)	—	—	—	—	—	*(1070)*	—	—	*(1070)*	*(1064)*	*(1084)*	*(1082)*	*(1080)*	
Hollow Shaft OHL lbs	—	—	—	—	—	3460	—	—	3885	4245	4315	4315	4315	
(N)	—	—	—	—	—	*(15400)*	—	—	*(17300)*	*(18900)*	*(19200)*	*(19200)*	*(19200)*	
Solid Shaft OHL lbs	—	—	—	—	—	3480	—	—	3980	4350	4510	4550	4580	
(N)	—	—	—	—	—	*(15470)*	—	—	*(17700)*	*(19340)*	*(20060)*	*(20230)*	*(20370)*	
Input Power HP	—	—	—	—	—	**6.80**	—	—	**6.80**	**6.80**	**6.80**	**6.80**	**6.80**	4B120
(kW)	—	—	—	—	—	***(5.07)***	—	—	***(5.07)***	***(5.07)***	***(5.07)***	***(5.07)***	***(5.07)***	
Output Torque in•lbs	—	—	—	—	—	4741	—	—	6321	7902	8805	10385	11965	
(N•m)	—	—	—	—	—	*(536)*	—	—	*(714)*	*(893)*	*(995)*	*(1173)*	*(1352)*	
Hollow Shaft OHL lbs	—	—	—	—	—	5775	—	—	6135	6630	6765	6990	7170	
(N)	—	—	—	—	—	*(25700)*	—	—	*(27300)*	*(29500)*	*(30100)*	*(31100)*	*(31900)*	
Solid Shaft OHL lbs	—	—	—	—	—	3670	—	—	4320	4860	5120	5590	5970	
(N)	—	—	—	—	—	*(16320)*	—	—	*(19210)*	*(21610)*	*(22770)*	*(24860)*	*(26550)*	
Input Power HP	—	—	—	—	—	**7.80**	—	—	**9.31**	**7.94**	**7.94**	**7.94**	**7.94**	4B125
(kW)	—	—	—	—	—	***(5.81)***	—	—	***(6.95)***	***(5.92)***	***(5.92)***	***(5.92)***	***(5.92)***	
Output Torque in•lbs	—	—	—	—	—	5437	—	—	8660	9226	10281	12126	13971	
(N•m)	—	—	—	—	—	*(614)*	—	—	*(978)*	*(1042)*	*(1162)*	*(1370)*	*(1579)*	
Hollow Shaft OHL lbs	—	—	—	—	—	5665	—	—	6000	6495	6605	6810	6965	
(N)	—	—	—	—	—	*(25200)*	—	—	*(26700)*	*(28900)*	*(29400)*	*(30300)*	*(31000)*	
Solid Shaft OHL lbs	—	—	—	—	—	3670	—	—	4320	4860	5120	5590	5970	
(N)	—	—	—	—	—	*(16320)*	—	—	*(19210)*	*(21610)*	*(22770)*	*(24860)*	*(26550)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4B140
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	—	—	—	—	—	**14.9**	—	—	**14.9**	**14.9**	**14.7**	**10.2**	**10.2**	4B145
(kW)	—	—	—	—	—	***(11.1)***	—	—	***(11.1)***	***(11.1)***	***(11.0)***	***(7.58)***	***(7.58)***	
Output Torque in•lbs	—	—	—	—	—	10389	—	—	13852	17315	19096	15516	17877	
(N•m)	—	—	—	—	—	*(1174)*	—	—	*(1565)*	*(1956)*	*(2158)*	*(1753)*	*(2020)*	
Hollow Shaft OHL lbs	—	—	—	—	—	5100	—	—	4965	5460	5665	6065	6425	
(N)	—	—	—	—	—	*(22700)*	—	—	*(22100)*	*(24300)*	*(25200)*	*(27000)*	*(28600)*	
Solid Shaft OHL lbs	—	—	—	—	—	3670	—	—	4320	4860	5120	5590	5970	
(N)	—	—	—	—	—	*(16320)*	—	—	*(19210)*	*(21610)*	*(22770)*	*(24860)*	*(26550)*	

Note: [1] Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for Y4 ratings not listed in the table.

Frame Size Selection Tables 60 Hz, 1750 RPM



Single Reduction
Y4 Mounting Position[1]

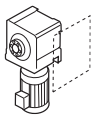
Dimensions on pages 2.156–2.166

Output RPM	29.2	26.1	23.6	21.9	19.9	17.2	15.6	14.2	11.6	9.78	8.45	7.03	5.74	4.20	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4A140
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**4.79**	**4.24**	**3.88**	**3.56**	**3.26**	**2.81**	**2.55**	**2.33**	**1.90**	**1.60**	**1.38**	**1.15**	**0.937**	—	4A145
(kW)	***(3.57)***	***(3.16)***	***(2.89)***	***(2.66)***	***(2.43)***	***(2.10)***	***(1.90)***	***(1.74)***	***(1.41)***	***(1.19)***	***(1.03)***	***(0.856)***	***(0.698)***	—	
Output Torque in•lbs	9550	9442	9535	9470	9524	9517	9470	9509	9502	9497	9493	9489	9486	—	
(N•m)	*(1079)*	*(1067)*	*(1077)*	*(1070)*	*(1076)*	*(1075)*	*(1070)*	*(1074)*	*(1074)*	*(1073)*	*(1073)*	*(1072)*	*(1072)*	—	
Hollow Shaft OHL lbs	4315	4315	4315	4315	4315	4315	4315	4315	4315	4315	4315	4315	4315	—	
(N)	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	*(19200)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	—	
Input Power HP	**6.80**	**5.31**	**5.31**	**4.14**	**4.14**	**4.02**	**3.34**	**3.34**	**2.57**	**2.30**	**1.75**	**1.28**	**1.27**	—	4B120
(kW)	***(5.07)***	***(3.96)***	***(3.96)***	***(3.09)***	***(3.09)***	***(2.99)***	***(2.49)***	***(2.49)***	***(1.91)***	***(1.72)***	***(1.30)***	***(0.957)***	***(0.944)***	—	
Output Torque in•lbs	13545	11817	13051	11003	12104	13601	12438	13659	12869	13685	12028	10608	12818	—	
(N•m)	*(1530)*	*(1335)*	*(1475)*	*(1243)*	*(1368)*	*(1537)*	*(1405)*	*(1543)*	*(1454)*	*(1546)*	*(1359)*	*(1199)*	*(1448)*	—	
Hollow Shaft OHL lbs	7325	7820	7955	8405	8565	8765	8965	8745	8900	8745	9055	9280	8900	—	
(N)	*(32600)*	*(34800)*	*(35400)*	*(37400)*	*(38100)*	*(39000)*	*(39900)*	*(38900)*	*(39600)*	*(38900)*	*(40300)*	*(41300)*	*(39600)*	—	
Solid Shaft OHL lbs	6330	6650	6920	7110	7320	7400	7450	7490	7580	7600	7470	7320	7190	—	
(N)	*(28150)*	*(29570)*	*(30780)*	*(31620)*	*(32550)*	*(32910)*	*(33130)*	*(33310)*	*(33710)*	*(33800)*	*(33220)*	*(32550)*	*(31980)*	—	
Input Power HP	**7.59**	**6.55**	**6.55**	**5.30**	**5.30**	**5.05**	**4.26**	**4.26**	**3.19**	**3.06**	**2.17**	**1.61**	**1.52**	—	4B125
(kW)	***(5.66)***	***(4.88)***	***(4.88)***	***(3.96)***	***(3.96)***	***(3.77)***	***(3.18)***	***(3.18)***	***(2.38)***	***(2.28)***	***(1.62)***	***(1.20)***	***(1.13)***	—	
Output Torque in•lbs	15118	14573	16095	14091	15500	17111	15857	17415	16009	18159	14932	13283	15349	—	
(N•m)	*(1708)*	*(1646)*	*(1818)*	*(1592)*	*(1751)*	*(1933)*	*(1792)*	*(1968)*	*(1809)*	*(2052)*	*(1687)*	*(1501)*	*(1734)*	—	
Hollow Shaft OHL lbs	7170	7530	7640	8070	8205	7910	8225	7820	8205	7595	8475	8810	8360	—	
(N)	*(31900)*	*(33500)*	*(34000)*	*(35900)*	*(36500)*	*(35200)*	*(36600)*	*(34800)*	*(36500)*	*(33800)*	*(37700)*	*(39200)*	*(37200)*	—	
Solid Shaft OHL lbs	6330	6650	6920	7110	7320	7400	7450	7490	7580	7600	7470	7320	7190	—	
(N)	*(28150)*	*(29570)*	*(30780)*	*(31620)*	*(32550)*	*(32910)*	*(33130)*	*(33310)*	*(33710)*	*(33800)*	*(33220)*	*(32550)*	*(31980)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4B140
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**7.45**	**7.45**	**7.45**	**7.10**	**6.49**	**5.01**	**5.01**	**4.63**	**2.98**	**2.98**	**2.75**	**2.03**	**1.86**	—	4B145
(kW)	***(5.56)***	***(5.56)***	***(5.56)***	***(5.29)***	***(4.84)***	***(3.74)***	***(3.74)***	***(3.46)***	***(2.22)***	***(2.22)***	***(2.05)***	***(1.52)***	***(1.39)***	—	
Output Torque in•lbs	14841	16573	18304	18852	18959	16973	18637	18929	14940	17711	18897	16798	18883	—	
(N•m)	*(1677)*	*(1872)*	*(2068)*	*(2130)*	*(2142)*	*(1918)*	*(2106)*	*(2139)*	*(1688)*	*(2001)*	*(2135)*	*(1898)*	*(2133)*	—	
Hollow Shaft OHL lbs	6740	7055	7325	7350	7350	7350	7350	7350	7350	7350	7350	7350	7350	—	
(N)	*(30000)*	*(31400)*	*(32600)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	—	
Solid Shaft OHL lbs	6330	6650	6920	7110	7320	7400	7450	7490	7580	7600	7470	7320	7190	—	
(N)	*(28150)*	*(29570)*	*(30780)*	*(31620)*	*(32550)*	*(32910)*	*(33130)*	*(33310)*	*(33710)*	*(33800)*	*(33220)*	*(32550)*	*(31980)*	—	

Note: [1] Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for Y4 ratings not listed in the table.

Frame Size Selection Tables 60 Hz, 1750 RPM

Single Reduction
Y4 Mounting Position[1]

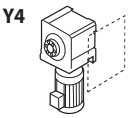


Dimensions on pages 2.156–2.166

Output RPM	159	135	125	109	97.2	83.3	79.5	70.0	62.5	50.0	44.9	38.0	33.0	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4B160
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	—	—	—	—	—	—	—	—	**20.3**	**16.1**	**14.7**	**12.5**	**10.8**	4B165
(kW)	—	—	—	—	—	—	—	—	***(15.1)***	***(12.0)***	***(11.0)***	***(9.30)***	***(8.06)***	
Output Torque in•lbs	—	—	—	—	—	—	—	—	18852	18745	19096	19059	19031	
(N•m)	—	—	—	—	—	—	—	—	*(2130)*	*(2118)*	*(2158)*	*(2153)*	*(2150)*	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	4965	5460	5665	6065	6425	
(N)	—	—	—	—	—	—	—	—	*(22100)*	*(24300)*	*(25200)*	*(27000)*	*(28600)*	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	4320	4860	5120	5590	5970	
(N)	—	—	—	—	—	—	—	—	*(19210)*	*(21610)*	*(22770)*	*(24860)*	*(26550)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4C140
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	—	—	—	—	—	—	—	—	**14.9**	**14.9**	**14.9**	**10.2**	**10.2**	4C145
(kW)	—	—	—	—	—	—	—	—	***(11.1)***	***(11.1)***	***(11.1)***	***(7.58)***	***(7.58)***	
Output Torque in•lbs	—	—	—	—	—	—	—	—	13852	17315	19294	15516	17877	
(N•m)	—	—	—	—	—	—	—	—	*(1565)*	*(1956)*	*(2180)*	*(1753)*	*(2020)*	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	7845	8045	8475	8250	8405	
(N)	—	—	—	—	—	—	—	—	*(34900)*	*(35800)*	*(37700)*	*(36700)*	*(37400)*	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	5720	6460	6850	7500	8030	
(N)	—	—	—	—	—	—	—	—	*(25440)*	*(28730)*	*(30460)*	*(33360)*	*(35710)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4C160
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	—	—	—	—	—	—	—	—	**20.3**	**20.3**	**20.3**	**14.9**	**14.9**	4C165
(kW)	—	—	—	—	—	—	—	—	***(15.2)***	***(15.2)***	***(15.2)***	***(11.1)***	***(11.1)***	
Output Torque in•lbs	—	—	—	—	—	—	—	—	18889	23611	26309	22757	26220	
(N•m)	—	—	—	—	—	—	—	—	*(2134)*	*(2668)*	*(2973)*	*(2571)*	*(2962)*	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	6785	6720	7010	7575	8045	
(N)	—	—	—	—	—	—	—	—	*(30200)*	*(29900)*	*(31200)*	*(33700)*	*(35800)*	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	5720	6460	6850	7500	8030	
(N)	—	—	—	—	—	—	—	—	*(25440)*	*(28730)*	*(30460)*	*(33360)*	*(35710)*	

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Frame Size Selection Tables 60 Hz, 1750 RPM



Single Reduction
Y4 Mounting Position[1]

Dimensions on pages 2.156–2.166

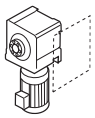
Output RPM	29.2	26.1	23.6	21.9	19.9	17.2	15.6	14.2	11.6	9.78	8.45	7.03	5.74	4.20	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4B160
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**9.54**	**8.45**	**7.72**	**7.09**	**6.49**	**5.59**	**5.07**	**4.63**	**3.77**	**3.18**	**2.75**	**2.28**	**1.86**	—	4B165
(kW)	***(7.11)***	***(6.30)***	***(5.76)***	***(5.29)***	***(4.84)***	***(4.17)***	***(3.78)***	***(3.45)***	***(2.81)***	***(2.37)***	***(2.05)***	***(1.70)***	***(1.39)***	—	
Output Torque in•lbs	18800	18800	18800	18800	18800	18800	18800	18800	18800	18800	18800	18800	18800	—	
(N•m)	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	*(2130)*	—	
Hollow Shaft OHL lbs	6740	7055	7325	7350	7350	7350	7350	7350	7350	7350	7350	7350	7350	—	
(N)	*(30000)*	*(31400)*	*(32600)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	—	
Solid Shaft OHL lbs	6750	7080	7330	7360	7360	7360	7360	7360	7360	7360	7360	7360	7360	—	
(N)	*(30000)*	*(31500)*	*(32600)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	*(32700)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4C140
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**7.45**	**7.45**	**7.45**	**7.45**	**7.45**	**5.01**	**5.01**	**5.01**	**2.98**	**2.98**	**2.98**	**2.03**	**2.03**	—	4C145
(kW)	***(5.56)***	***(5.56)***	***(5.56)***	***(5.56)***	***(5.56)***	***(3.74)***	***(3.74)***	***(3.74)***	***(2.22)***	***(2.22)***	***(2.22)***	***(1.52)***	***(1.52)***	—	
Output Torque in•lbs	14841	16573	18304	19788	21767	16973	18637	20467	14940	17711	20481	16798	20575	—	
(N•m)	*(1677)*	*(1872)*	*(2068)*	*(2236)*	*(2459)*	*(1918)*	*(2106)*	*(2313)*	*(1688)*	*(2001)*	*(2314)*	*(1898)*	*(2325)*	—	
Hollow Shaft OHL lbs	9055	9395	9460	10495	11015	10945	11015	11420	12340	12925	12925	12945	12925	—	
(N)	*(40300)*	*(41800)*	*(42100)*	*(46700)*	*(49000)*	*(48700)*	*(49000)*	*(50800)*	*(54900)*	*(57500)*	*(57500)*	*(57600)*	*(57500)*	—	
Solid Shaft OHL lbs	8540	9080	9510	9830	10190	10920	11330	11700	12410	12820	12750	12660	12590	—	
(N)	*(37980)*	*(40380)*	*(42300)*	*(43720)*	*(45320)*	*(48570)*	*(50390)*	*(52040)*	*(55190)*	*(57020)*	*(56710)*	*(56310)*	*(56000)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4C160
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**14.9**	**10.2**	**10.2**	**10.2**	**10.2**	**10.2**	**10.1**	**9.27**	**5.01**	**5.01**	**5.01**	**2.98**	**2.98**	—	4C165
(kW)	***(11.1)***	***(7.58)***	***(7.58)***	***(7.58)***	***(7.58)***	***(7.58)***	***(7.56)***	***(6.91)***	***(3.74)***	***(3.74)***	***(3.74)***	***(2.22)***	***(2.22)***	—	
Output Torque in•lbs	29682	22599	24960	26984	29682	34405	37703	37857	25127	29786	34445	24636	30177	—	
(N•m)	*(3354)*	*(2553)*	*(2820)*	*(3049)*	*(3354)*	*(3887)*	*(4260)*	*(4277)*	*(2839)*	*(3365)*	*(3892)*	*(2784)*	*(3410)*	—	
Hollow Shaft OHL lbs	8495	8920	9280	9595	9980	10585	10990	11420	11935	11935	11935	11935	11935	—	
(N)	*(37800)*	*(39700)*	*(41300)*	*(42700)*	*(44400)*	*(47100)*	*(48900)*	*(50800)*	*(53100)*	*(53100)*	*(53100)*	*(53100)*	*(53100)*	—	
Solid Shaft OHL lbs	8540	9080	9510	9830	10190	10920	11330	11700	12410	12820	12750	12660	12590	—	
(N)	*(37980)*	*(40380)*	*(42300)*	*(43720)*	*(45320)*	*(48570)*	*(50390)*	*(52040)*	*(55190)*	*(57020)*	*(56710)*	*(56310)*	*(56000)*	—	

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Frame Size Selection Tables 60 Hz, 1750 RPM

Single Reduction
Y4 Mounting Position[1]

Y4

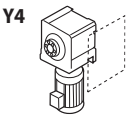


Dimensions on pages 2.156–2.166

Output RPM	159	135	125	109	97.2	83.3	79.5	70.0	62.5	50.0	44.9	38.0	33.0	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4C170
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	—	—	—	—	—	—	—	—	—	**19.1**	**19.1**	**19.1**	**16.1**	4C175
(kW)	—	—	—	—	—	—	—	—	—	***(14.2)***	***(14.2)***	***(14.2)***	***(12.0)***	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	22198	24735	29175	28267	
(N•m)	—	—	—	—	—	—	—	—	—	*(2508)*	*(2795)*	*(3296)*	*(3194)*	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	6720	7010	7575	8045	
(N)	—	—	—	—	—	—	—	—	—	*(29900)*	*(31200)*	*(33700)*	*(35800)*	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	6460	6850	7500	8030	
(N)	—	—	—	—	—	—	—	—	—	*(28730)*	*(30460)*	*(33360)*	*(35710)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4D160
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	—	—	—	—	—	—	—	—	—	**20.3**	**20.3**	**14.9**	**14.9**	4D165
(kW)	—	—	—	—	—	—	—	—	—	***(15.2)***	***(15.2)***	***(11.1)***	***(11.1)***	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	23611	26309	22757	26220	
(N•m)	—	—	—	—	—	—	—	—	—	*(2668)*	*(2973)*	*(2571)*	*(2963)*	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	11825	11980	12385	12520	
(N)	—	—	—	—	—	—	—	—	—	*(52600)*	*(53300)*	*(55100)*	*(55700)*	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	9230	9770	10710	11480	
(N)	—	—	—	—	—	—	—	—	—	*(41050)*	*(43450)*	*(47630)*	*(51060)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4D170
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	—	—	—	—	—	—	—	—	—	**19.1**	**19.1**	**19.1**	**16.1**	4D175
(kW)	—	—	—	—	—	—	—	—	—	***(14.2)***	***(14.2)***	***(14.2)***	***(12.0)***	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	22198	24735	29175	28267	
(N•m)	—	—	—	—	—	—	—	—	—	*(2508)*	*(2795)*	*(3297)*	*(3194)*	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	11060	11125	11170	11645	
(N)	—	—	—	—	—	—	—	—	—	*(49200)*	*(49500)*	*(49700)*	*(51800)*	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	9230	9770	10710	11480	
(N)	—	—	—	—	—	—	—	—	—	*(41050)*	*(43450)*	*(47630)*	*(51060)*	

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Frame Size Selection Tables 60 Hz, 1750 RPM



Single Reduction
Y4 Mounting Position[1]

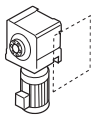
Dimensions on pages 2.156–2.166

Output RPM	29.2	26.1	23.6	21.9	19.9	17.2	15.6	14.2	11.6	9.78	8.45	7.03	5.74	4.20	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4C170
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**13.0**	**13.0**	**13.0**	**14.2**	**13.0**	**11.2**	**10.1**	**9.27**	**7.54**	**6.36**	**5.50**	**4.57**	**3.73**	—	4C175
(kW)	***(9.71)***	***(9.71)***	***(9.71)***	***(10.6)***	***(9.68)***	***(8.34)***	***(7.56)***	***(6.91)***	***(5.63)***	***(4.74)***	***(4.10)***	***(3.41)***	***(2.78)***	—	
Output Torque in•lbs	25946	28973	32000	37703	37919	37889	37703	37857	37829	37809	37795	37779	37765	—	
(N•m)	*(2932)*	*(3274)*	*(3616)*	*(4260)*	*(4284)*	*(4281)*	*(4260)*	*(4277)*	*(4274)*	*(4272)*	*(4270)*	*(4268)*	*(4267)*	—	
Hollow Shaft OHL lbs	8495	8920	9280	9595	9980	10585	10990	11420	11935	11935	11935	11935	11935	—	
(N)	*(37800)*	*(39700)*	*(41300)*	*(42700)*	*(44400)*	*(47100)*	*(48900)*	*(50800)*	*(53100)*	*(53100)*	*(53100)*	*(53100)*	*(53100)*	—	
Solid Shaft OHL lbs	8540	9080	9510	9830	10190	10920	11330	11700	12410	12820	12750	12660	12590	—	
(N)	*(37980)*	*(40380)*	*(42300)*	*(43720)*	*(45320)*	*(48570)*	*(50390)*	*(52040)*	*(55190)*	*(57020)*	*(56710)*	*(56310)*	*(56000)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4D160
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**14.9**	**10.2**	**10.2**	**10.2**	**10.2**	**10.2**	**10.2**	**10.2**	**5.01**	**5.01**	**5.01**	**2.98**	**2.98**	—	4D165
(kW)	***(11.1)***	***(7.58)***	***(7.58)***	***(7.58)***	***(7.58)***	***(7.58)***	***(7.58)***	***(7.58)***	***(3.74)***	***(3.74)***	***(3.74)***	***(2.22)***	***(2.22)***	—	
Output Torque in•lbs	29682	22599	24960	26984	29682	34405	37778	41488	25127	29786	34445	24636	30177	—	
(N•m)	*(3354)*	*(2554)*	*(2820)*	*(3049)*	*(3354)*	*(3888)*	*(4269)*	*(4688)*	*(2839)*	*(3366)*	*(3892)*	*(2784)*	*(3410)*	—	
Hollow Shaft OHL lbs	13395	14185	14340	14700	14835	16295	16455	15960	17870	16500	17890	15915	17915	—	
(N)	*(59600)*	*(63100)*	*(63800)*	*(65400)*	*(66000)*	*(72500)*	*(73200)*	*(71000)*	*(79500)*	*(73400)*	*(79600)*	*(70800)*	*(79700)*	—	
Solid Shaft OHL lbs	12230	13000	13630	14090	14590	15170	15500	15790	16360	16690	16660	16620	16590	—	
(N)	*(54390)*	*(57820)*	*(60620)*	*(62670)*	*(64890)*	*(67470)*	*(68940)*	*(70230)*	*(72760)*	*(74230)*	*(74100)*	*(73920)*	*(73790)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4D170
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**13.0**	**13.0**	**13.0**	**14.9**	**14.9**	**14.9**	**10.2**	**10.2**	**10.2**	**7.45**	**7.45**	**5.01**	**5.01**	—	4D175
(kW)	***(9.71)***	***(9.71)***	***(9.71)***	***(11.1)***	***(11.1)***	***(11.1)***	***(7.58)***	***(7.58)***	***(7.58)***	***(5.56)***	***(5.56)***	***(3.74)***	***(3.74)***	—	
Output Torque in•lbs	25946	28973	32000	39577	43534	50460	37778	41488	50932	44276	51202	41434	50753	—	
(N•m)	*(2932)*	*(3274)*	*(3616)*	*(4472)*	*(4919)*	*(5702)*	*(4269)*	*(4688)*	*(5755)*	*(5003)*	*(5786)*	*(4682)*	*(5735)*	—	
Hollow Shaft OHL lbs	12295	12900	13420	13870	14410	15305	15555	15555	15555	15555	15555	15555	15555	—	
(N)	*(54700)*	*(57400)*	*(59700)*	*(61700)*	*(64100)*	*(68100)*	*(69200)*	*(69200)*	*(69200)*	*(69200)*	*(69200)*	*(69200)*	*(69200)*	—	
Solid Shaft OHL lbs	12230	13000	13630	14090	14590	15170	15500	15790	16360	16690	16660	16620	16590	—	
(N)	*(54390)*	*(57820)*	*(60620)*	*(62670)*	*(64890)*	*(67470)*	*(68940)*	*(70230)*	*(72760)*	*(74230)*	*(74100)*	*(73920)*	*(73790)*	—	

Note: [1] Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for Y4 ratings not listed in the table.

Frame Size Selection Tables 60 Hz, 1750 RPM

Single Reduction
Y4 Mounting Position[1]

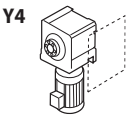


Dimensions on pages 2.156–2.166

Output RPM	159	135	125	109	97.2	83.3	79.5	70.0	62.5	50.0	44.9	38.0	33.0	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4D180
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	—	—	—	—	—	—	—	—	—	**26.0**	**26.0**	**26.0**	**19.1**	4D185
(kW)	—	—	—	—	—	—	—	—	—	***(19.4)***	***(19.4)***	***(19.4)***	***(14.2)***	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	30271	33730	39784	33615	
(N•m)	—	—	—	—	—	—	—	—	—	*(3420)*	*(3811)*	*(4495)*	*(3798)*	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	8945	9215	9685	10115	
(N)	—	—	—	—	—	—	—	—	—	*(39800)*	*(41000)*	*(43100)*	*(45000)*	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	9230	9770	10710	11480	
(N)	—	—	—	—	—	—	—	—	—	*(41050)*	*(43450)*	*(47630)*	*(51060)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4E170
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	—	—	—	—	—	—	—	—	—	**19.1**	**19.1**	**19.1**	**16.1**	4E175
(kW)	—	—	—	—	—	—	—	—	—	***(14.2)***	***(14.2)***	***(14.2)***	***(12.0)***	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	22198	24735	29175	28267	
(N•m)	—	—	—	—	—	—	—	—	—	*(2508)*	*(2795)*	*(3297)*	*(3194)*	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	15620	15845	16160	16365	
(N)	—	—	—	—	—	—	—	—	—	*(69500)*	*(70500)*	*(71900)*	*(72800)*	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	13300	14030	15220	16200	
(N)	—	—	—	—	—	—	—	—	—	*(59150)*	*(62400)*	*(67690)*	*(72050)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4E180
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	—	—	—	—	—	—	—	—	—	**26.0**	**26.0**	**26.0**	**19.1**	4E185
(kW)	—	—	—	—	—	—	—	—	—	***(19.4)***	***(19.4)***	***(19.4)***	***(14.2)***	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	30271	33730	39784	33615	
(N•m)	—	—	—	—	—	—	—	—	—	*(3420)*	*(3811)*	*(4495)*	*(3798)*	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	13530	13440	13845	14590	
(N)	—	—	—	—	—	—	—	—	—	*(60200)*	*(59800)*	*(61600)*	*(64900)*	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	13300	14030	15220	16200	
(N)	—	—	—	—	—	—	—	—	—	*(59150)*	*(62400)*	*(67690)*	*(72050)*	

Note: [1] Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for Y4 ratings not listed in the table.

Frame Size Selection Tables 60 Hz, 1750 RPM



Single Reduction
Y4 Mounting Position[1]

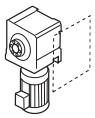
Dimensions on pages 2.156–2.166

Output RPM	29.2	26.1	23.6	21.9	19.9	17.2	15.6	14.2	11.6	9.78	8.45	7.03	5.74	4.20	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4D180
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**19.1**	**19.1**	**19.1**	**16.1**	**16.1**	**13.0**	**13.0**	**13.0**	**9.55**	**6.51**	**10.16**	**7.45**	**7.45**	—	4D185
(kW)	***(14.2)***	***(14.2)***	***(14.2)***	***(12.0)***	***(12.0)***	***(9.71)***	***(9.71)***	***(9.71)***	***(7.12)***	***(4.86)***	***(7.58)***	***(5.56)***	***(5.56)***	—	
Output Torque in•lbs	38054	42494	46934	42667	46934	44109	48433	53190	47885	38703	69821	61591	75443	—	
(N•m)	*(4300)*	*(4802)*	*(5303)*	*(4821)*	*(5303)*	*(4984)*	*(5473)*	*(6010)*	*(5411)*	*(4373)*	*(7889)*	*(6960)*	*(8525)*	—	
Hollow Shaft OHL lbs	10495	10855	11195	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	—	
(N)	*(46700)*	*(48300)*	*(49800)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	—	
Solid Shaft OHL lbs	12230	13000	13630	14090	14590	15170	15500	15790	16360	16690	16660	16620	16590	—	
(N)	*(54390)*	*(57820)*	*(60620)*	*(62670)*	*(64890)*	*(67470)*	*(68940)*	*(70230)*	*(72760)*	*(74230)*	*(74100)*	*(73920)*	*(73790)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4E170
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**13.0**	**13.0**	**13.0**	**14.9**	**14.9**	**14.9**	**10.2**	**10.2**	**10.2**	**7.45**	**7.45**	**5.01**	**5.01**	—	4E175
(kW)	***(9.71)***	***(9.71)***	***(9.71)***	***(11.1)***	***(11.1)***	***(11.1)***	***(7.58)***	***(7.58)***	***(7.58)***	***(5.56)***	***(5.56)***	***(3.74)***	***(3.74)***	—	
Output Torque in•lbs	25946	28973	32000	39577	43534	50460	37778	41488	50932	44276	51202	41434	50753	—	
(N•m)	*(2932)*	*(3274)*	*(3616)*	*(4472)*	*(4919)*	*(5702)*	*(4269)*	*(4688)*	*(5755)*	*(5003)*	*(5786)*	*(4682)*	*(5735)*	—	
Hollow Shaft OHL lbs	17690	17890	18545	19310	19825	20140	19985	19625	19960	19490	19940	19805	19940	—	
(N)	*(78700)*	*(79600)*	*(82500)*	*(85900)*	*(88200)*	*(89600)*	*(88900)*	*(87300)*	*(88800)*	*(86700)*	*(88700)*	*(88100)*	*(88700)*	—	
Solid Shaft OHL lbs	17180	18190	19010	19590	20230	20610	20820	21020	21380	21620	21700	21790	21870	—	
(N)	*(76410)*	*(80900)*	*(84550)*	*(87130)*	*(89980)*	*(91670)*	*(92600)*	*(93490)*	*(95090)*	*(96160)*	*(96520)*	*(96920)*	*(97270)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4E180
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**19.1**	**19.1**	**19.1**	**16.1**	**16.1**	**13.0**	**13.0**	**13.0**	**9.6**	**6.51**	**10.16**	**7.45**	**7.45**	—	4E185
(kW)	***(14.2)***	***(14.2)***	***(14.2)***	***(12.0)***	***(12.0)***	***(9.71)***	***(9.71)***	***(9.71)***	***(7.12)***	***(4.86)***	***(7.58)***	***(5.56)***	***(5.56)***	—	
Output Torque in•lbs	38054	42494	46934	42667	46934	44109	48433	53190	47885	38703	69821	61591	75443	—	
(N•m)	*(4300)*	*(4802)*	*(5303)*	*(4821)*	*(5303)*	*(4984)*	*(5473)*	*(6010)*	*(5411)*	*(4373)*	*(7889)*	*(6960)*	*(8525)*	—	
Hollow Shaft OHL lbs	15395	16320	16860	17580	18140	19285	18430	18430	18430	18430	18430	18430	18430	—	
(N)	*(68500)*	*(72600)*	*(75000)*	*(78200)*	*(80700)*	*(85800)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	17180	18190	19010	19590	20230	20610	20820	21020	21380	21620	21700	21790	21870	—	
(N)	*(76410)*	*(80900)*	*(84550)*	*(87130)*	*(89980)*	*(91670)*	*(92600)*	*(93490)*	*(95090)*	*(96160)*	*(96520)*	*(96920)*	*(97270)*	—	

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Frame Size Selection Tables 60 Hz, 1750 RPM

Single Reduction
Y4 Mounting Position[1]

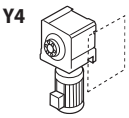


Dimensions on pages 2.156–2.166

Output RPM	159	135	125	109	97.2	83.3	79.5	70.0	62.5	50.0	44.9	38.0	33.0	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4E190
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	—	—	—	—	—	—	—	—	—	**32.1**	**32.1**	**32.1**	**32.1**	4E195
(kW)	—	—	—	—	—	—	—	—	—	***(24.0)***	***(24.0)***	***(24.0)***	***(24.0)***	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	37334	41600	49067	56534	
(N•m)	—	—	—	—	—	—	—	—	—	*(4219)*	*(4701)*	*(5544)*	*(6388)*	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	12855	13215	13915	14590	
(N)	—	—	—	—	—	—	—	—	—	*(57200)*	*(58800)*	*(61900)*	*(64900)*	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	13300	14030	15220	16200	
(N)	—	—	—	—	—	—	—	—	—	*(59150)*	*(62400)*	*(67690)*	*(72050)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4F180
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	—	—	—	—	—	—	—	—	—	**26.0**	**26.0**	**26.0**	**19.1**	4F185
(kW)	—	—	—	—	—	—	—	—	—	***(19.4)***	***(19.4)***	***(19.4)***	***(14.2)***	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	30271	33730	39784	33615	
(N•m)	—	—	—	—	—	—	—	—	—	*(3420)*	*(3811)*	*(4495)*	*(3798)*	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	26975	27425	28100	28325	
(N)	—	—	—	—	—	—	—	—	—	*(120000)*	*(122000)*	*(125000)*	*(126000)*	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	23340	24520	26590	28060	
(N)	—	—	—	—	—	—	—	—	—	*(103810)*	*(109060)*	*(118270)*	*(124810)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4F190
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	—	—	—	—	—	—	—	—	—	**32.1**	**32.1**	**32.1**	**32.1**	4F195
(kW)	—	—	—	—	—	—	—	—	—	***(24.0)***	***(24.0)***	***(24.0)***	***(24.0)***	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	37334	41600	49067	56534	
(N•m)	—	—	—	—	—	—	—	—	—	*(4219)*	*(4701)*	*(5544)*	*(6388)*	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	25850	26300	26750	26525	
(N)	—	—	—	—	—	—	—	—	—	*(115000)*	*(117000)*	*(119000)*	*(118000)*	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	23340	24520	26590	28060	
(N)	—	—	—	—	—	—	—	—	—	*(103810)*	*(109060)*	*(118270)*	*(124810)*	

Note: [1] Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for Y4 ratings not listed in the table.

Frame Size Selection Tables 60 Hz, 1750 RPM



Single Reduction
Y4 Mounting Position[1]

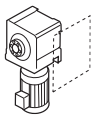
Dimensions on pages 2.156–2.166

Output RPM	29.2	26.1	23.6	21.9	19.9	17.2	15.6	14.2	11.6	9.78	8.45	7.03	5.74	4.20	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4E190
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**32.1**	**19.1**	**19.1**	**19.1**	**19.1**	**19.1**	**16.1**	**16.1**	**13.0**	**9.55**	**9.55**	**6.51**	**6.51**	—	4E195
(kW)	***(24.0)***	***(14.2)***	***(14.2)***	***(14.2)***	***(14.2)***	***(14.2)***	***(12.0)***	***(12.0)***	***(9.71)***	***(7.12)***	***(7.12)***	***(4.86)***	***(4.86)***	—	
Output Torque in•lbs	64001	42494	46934	50739	55813	64693	59734	65601	65298	56765	65644	53838	65947	—	
(N•m)	*(7232)*	*(4802)*	*(5303)*	*(5733)*	*(6307)*	*(7310)*	*(6750)*	*(7413)*	*(7378)*	*(6414)*	*(7417)*	*(6084)*	*(7452)*	—	
Hollow Shaft OHL lbs	15395	16320	16860	17580	18140	19285	18430	18430	18430	18430	18430	18430	18430	—	
(N)	*(68500)*	*(72600)*	*(75000)*	*(78200)*	*(80700)*	*(85800)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	17180	18190	19010	19590	20230	20610	20820	21020	21380	21620	21700	21790	21870	—	
(N)	*(76410)*	*(80900)*	*(84550)*	*(87130)*	*(89980)*	*(91670)*	*(92600)*	*(93490)*	*(95090)*	*(96160)*	*(96520)*	*(96920)*	*(97270)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4F180
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**19.1**	**19.1**	**19.1**	**16.1**	**16.1**	**13.0**	**13.0**	**13.0**	**9.55**	**6.51**	**10.2**	**7.45**	**7.45**	—	4F185
(kW)	***(14.2)***	***(14.2)***	***(14.2)***	***(12.0)***	***(12.0)***	***(9.71)***	***(9.71)***	***(9.71)***	***(7.12)***	***(4.86)***	***(7.58)***	***(5.56)***	***(5.56)***	—	
Output Torque in•lbs	38054	42494	46934	42667	46934	44109	48433	53190	47885	38703	69821	61591	75443	—	
(N•m)	*(4300)*	*(4802)*	*(5303)*	*(4821)*	*(5303)*	*(4984)*	*(5473)*	*(6010)*	*(5411)*	*(4373)*	*(7889)*	*(6960)*	*(8525)*	—	
Hollow Shaft OHL lbs	27650	27200	26750	27425	27200	27425	27200	26750	26750	26975	27425	27425	27200	—	
(N)	*(123000)*	*(121000)*	*(119000)*	*(122000)*	*(121000)*	*(122000)*	*(121000)*	*(119000)*	*(119000)*	*(120000)*	*(122000)*	*(122000)*	*(121000)*	—	
Solid Shaft OHL lbs	28900	28920	28940	28950	28970	28970	28970	28970	28970	28990	29140	29300	29440	—	
(N)	*(128540)*	*(128630)*	*(128720)*	*(128760)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128940)*	*(129610)*	*(130320)*	*(130940)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4F190
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**32.1**	**19.1**	**19.1**	**19.1**	**19.1**	**19.1**	**16.1**	**16.1**	**13.0**	**9.55**	**9.55**	**6.51**	**6.51**	—	4F195
(kW)	***(24.0)***	***(14.2)***	***(14.2)***	***(14.2)***	***(14.2)***	***(14.2)***	***(12.0)***	***(12.0)***	***(9.71)***	***(7.12)***	***(7.12)***	***(4.86)***	***(4.86)***	—	
Output Torque in•lbs	64001	42494	46934	50739	55813	64693	59734	65601	65298	56765	65644	53838	65947	—	
(N•m)	*(7232)*	*(4802)*	*(5303)*	*(5733)*	*(6307)*	*(7310)*	*(6750)*	*(7413)*	*(7378)*	*(6414)*	*(7417)*	*(6084)*	*(7452)*	—	
Hollow Shaft OHL lbs	25850	25850	25400	25850	25400	25400	25625	25400	25400	25400	25400	25400	25400	—	
(N)	*(115000)*	*(115000)*	*(113000)*	*(115000)*	*(113000)*	*(113000)*	*(114000)*	*(113000)*	*(113000)*	*(113000)*	*(113000)*	*(113000)*	*(113000)*	—	
Solid Shaft OHL lbs	28900	28920	28940	28950	28970	28970	28970	28970	28970	28990	29140	29300	29440	—	
(N)	*(128540)*	*(128630)*	*(128720)*	*(128760)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128940)*	*(129610)*	*(130320)*	*(130940)*	—	

Note: [1] Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for Y4 ratings not listed in the table.

Frame Size Selection Tables 50 Hz, 1450 RPM

Single Reduction
Y4 Mounting Position[1]

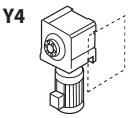


Dimensions on pages 2.156–2.166

Output RPM	131.8	111.5	103.6	90.6	80.6	69.0	65.9	58.0	51.8	41.4	37.2	31.5	27.4	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	—	—	—	—	—	**3.15**	—	—	**3.15**	**3.15**	**3.15**	**3.15**	**3.15**	**4A100**
(kW)	—	—	—	—	—	***(2.35)***	—	—	***(2.35)***	***(2.35)***	***(2.35)***	***(2.35)***	***(2.35)***	
Output Torque in•lbs	—	—	—	—	—	2649	—	—	3532	4415	4920	5803	6686	
(N•m)	—	—	—	—	—	*(299)*	—	—	*(399)*	*(499)*	*(556)*	*(656)*	*(755)*	
Hollow Shaft OHL lbs	—	—	—	—	—	4675	—	—	5010	5280	5370	5550	5325	
(N)	—	—	—	—	—	*(20800)*	—	—	*(22300)*	*(23500)*	*(23900)*	*(24700)*	*(23700)*	
Solid Shaft OHL lbs	—	—	—	—	—	3800	—	—	4290	4530	4560	4580	4580	
(N)	—	—	—	—	—	*(16900)*	—	—	*(19080)*	*(20140)*	*(20280)*	*(20370)*	*(20370)*	
Input Power HP	—	—	—	—	—	**4.26**	—	—	**4.26**	**4.26**	**4.26**	**4.26**	**4.26**	**4A105**
(kW)	—	—	—	—	—	***(3.18)***	—	—	***(3.18)***	***(3.18)***	***(3.18)***	***(3.18)***	***(3.18)***	
Output Torque in•lbs	—	—	—	—	—	3588	—	—	4784	5981	6664	7860	9056	
(N•m)	—	—	—	—	—	*(405)*	—	—	*(541)*	*(676)*	*(753)*	*(888)*	*(1023)*	
Hollow Shaft OHL lbs	—	—	—	—	—	4540	—	—	4830	5055	5145	4990	4515	
(N)	—	—	—	—	—	*(20200)*	—	—	*(21500)*	*(22500)*	*(22900)*	*(22200)*	*(20100)*	
Solid Shaft OHL lbs	—	—	—	—	—	3800	—	—	4290	4530	4560	4580	4580	
(N)	—	—	—	—	—	*(16900)*	—	—	*(19080)*	*(20140)*	*(20280)*	*(20370)*	*(20370)*	
Input Power HP	—	—	—	—	—	**4.76**	—	—	**4.76**	**4.76**	**4.76**	**4.76**	**4.76**	**4A110**
(kW)	—	—	—	—	—	***(3.55)***	—	—	***(3.55)***	***(3.55)***	***(3.55)***	***(3.55)***	***(3.55)***	
Output Torque in•lbs	—	—	—	—	—	4005	—	—	5341	6676	7439	8776	10111	
(N•m)	—	—	—	—	—	*(453)*	—	—	*(603)*	*(754)*	*(840)*	*(992)*	*(1142)*	
Hollow Shaft OHL lbs	—	—	—	—	—	4495	—	—	4765	4965	5035	4650	4020	
(N)	—	—	—	—	—	*(20000)*	—	—	*(21200)*	*(22100)*	*(22400)*	*(20700)*	*(17900)*	
Solid Shaft OHL lbs	—	—	—	—	—	3800	—	—	4290	4530	4560	4580	4580	
(N)	—	—	—	—	—	*(16900)*	—	—	*(19080)*	*(20140)*	*(20280)*	*(20370)*	*(20370)*	
Input Power HP	—	—	—	—	—	**5.26**	—	—	**5.26**	**5.26**	**5.26**	**5.23**	**5.23**	**4A115**
(kW)	—	—	—	—	—	***(3.92)***	—	—	***(3.92)***	***(3.92)***	***(3.92)***	***(3.90)***	***(3.90)***	
Output Torque in•lbs	—	—	—	—	—	4423	—	—	5897	7371	8213	9641	11108	
(N•m)	—	—	—	—	—	*(500)*	—	—	*(666)*	*(833)*	*(928)*	*(1089)*	*(1255)*	
Hollow Shaft OHL lbs	—	—	—	—	—	4425	—	—	4695	4855	4855	4270	3435	
(N)	—	—	—	—	—	*(19700)*	—	—	*(20900)*	*(21600)*	*(21600)*	*(19000)*	*(15300)*	
Solid Shaft OHL lbs	—	—	—	—	—	3800	—	—	4290	4530	4560	4580	4580	
(N)	—	—	—	—	—	*(16900)*	—	—	*(19080)*	*(20140)*	*(20280)*	*(20370)*	*(20370)*	
Input Power HP	—	—	—	—	—	**6.80**	—	—	**6.80**	**6.80**	**6.80**	—	—	**4A120**
(kW)	—	—	—	—	—	***(5.07)***	—	—	***(5.07)***	***(5.07)***	***(5.07)***	—	—	
Output Torque in•lbs	—	—	—	—	—	5722	—	—	7629	9536	10626	—	—	
(N•m)	—	—	—	—	—	*(646)*	—	—	*(862)*	*(1077)*	*(1201)*	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	4020	—	—	4110	4245	3750	—	—	
(N)	—	—	—	—	—	*(17900)*	—	—	*(18300)*	*(18900)*	*(16700)*	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	3800	—	—	4290	4530	4560	—	—	
(N)	—	—	—	—	—	*(16900)*	—	—	*(19080)*	*(20140)*	*(20280)*	—	—	
Input Power HP	—	—	—	—	—	**9.34**	—	—	**9.31**	**7.94**	**7.40**	**6.26**	**5.43**	**4A125**
(kW)	—	—	—	—	—	***(6.96)***	—	—	***(6.95)***	***(5.92)***	***(5.52)***	***(4.67)***	***(4.05)***	
Output Torque in•lbs	—	—	—	—	—	7858	—	—	10452	11135	11565	11543	11526	
(N•m)	—	—	—	—	—	*(888)*	—	—	*(1181)*	*(1258)*	*(1307)*	*(1304)*	*(1302)*	
Hollow Shaft OHL lbs	—	—	—	—	—	3885	—	—	3210	3280	3120	3120	3120	
(N)	—	—	—	—	—	*(17300)*	—	—	*(14300)*	*(14600)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	—	—	—	—	—	3800	—	—	4290	4530	4560	4580	4580	
(N)	—	—	—	—	—	*(16900)*	—	—	*(19080)*	*(20140)*	*(20280)*	*(20370)*	*(20370)*	

Note: [1] Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for Y4 ratings not listed in the table.

Frame Size Selection Tables 50 Hz, 1450 RPM



Single Reduction
Y4 Mounting Position[1]

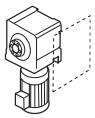
Dimensions on pages 2.156–2.166

Output RPM	24.2	21.6	19.6	18.1	16.48	14.22	12.95	11.79	9.60	8.10	7.00	5.82	4.75	3.48	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	**2.66**	**2.55**	**2.55**	**1.70**	**1.70**	**1.62**	**1.31**	**1.31**	**1.05**	**0.751**	**0.692**	**0.584**	**0.581**	**0.282**	**4A100**
(kW)	***(1.99)***	***(1.90)***	***(1.90)***	***(1.27)***	***(1.27)***	***(1.21)***	***(0.975)***	***(0.975)***	***(0.780)***	***(0.560)***	***(0.516)***	***(0.436)***	***(0.433)***	***(0.210)***	
Output Torque in•lbs	6403	6851	7567	5458	6004	6633	5869	6445	6330	5387	5740	5831	7101	4706	
(N•m)	*(723)*	*(774)*	*(855)*	*(617)*	*(678)*	*(749)*	*(663)*	*(728)*	*(715)*	*(609)*	*(649)*	*(659)*	*(802)*	*(532)*	
Hollow Shaft OHL lbs	5395	5260	5055	5595	5485	5325	5505	5370	5415	5620	5550	5530	5190	5755	
(N)	*(24000)*	*(23400)*	*(22500)*	*(24900)*	*(24400)*	*(23700)*	*(24500)*	*(23900)*	*(24100)*	*(25000)*	*(24700)*	*(24600)*	*(23100)*	*(25600)*	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	4540	4540	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	
Input Power HP	**3.29**	**3.06**	**3.06**	**2.24**	**2.24**	**2.13**	**1.61**	**1.61**	**1.45**	**1.04**	**0.913**	**0.678**	**0.674**	**0.384**	**4A105**
(kW)	***(2.46)***	***(2.28)***	***(2.28)***	***(1.67)***	***(1.67)***	***(1.59)***	***(1.20)***	***(1.20)***	***(1.08)***	***(0.776)***	***(0.681)***	***(0.506)***	***(0.503)***	***(0.286)***	
Output Torque in•lbs	7920	8221	9080	7191	7910	8715	7211	7919	8804	7465	7572	6765	8242	6416	
(N•m)	*(895)*	*(929)*	*(1026)*	*(813)*	*(894)*	*(985)*	*(815)*	*(895)*	*(995)*	*(844)*	*(856)*	*(764)*	*(931)*	*(725)*	
Hollow Shaft OHL lbs	4945	4810	4515	5170	4945	4650	5170	4945	4605	5080	5055	5305	4830	5395	
(N)	*(22000)*	*(21400)*	*(20100)*	*(23000)*	*(22000)*	*(20700)*	*(23000)*	*(22000)*	*(20500)*	*(22600)*	*(22500)*	*(23600)*	*(21500)*	*(24000)*	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	4540	4540	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	*(20190)*	
Input Power HP	**4.26**	**3.65**	**3.65**	**2.57**	**2.57**	**2.55**	**2.02**	**2.02**	**1.74**	**1.27**	**1.15**	**0.897**	**0.887**	**—**	**4A110**
(kW)	***(3.18)***	***(2.72)***	***(2.72)***	***(1.91)***	***(1.91)***	***(1.90)***	***(1.50)***	***(1.50)***	***(1.300)***	***(0.944)***	***(0.859)***	***(0.669)***	***(0.661)***	**—**	
Output Torque in•lbs	10248	9807	10832	8226	9049	10438	9047	9936	10549	9076	9557	8950	10839	—	
(N•m)	*(1158)*	*(1108)*	*(1224)*	*(929)*	*(1022)*	*(1179)*	*(1022)*	*(1123)*	*(1192)*	*(1025)*	*(1080)*	*(1011)*	*(1225)*	—	
Hollow Shaft OHL lbs	3955	4110	3595	4830	4515	3820	4495	4090	3750	4495	4270	4540	3550	—	
(N)	*(17600)*	*(18300)*	*(16000)*	*(21500)*	*(20100)*	*(17000)*	*(20000)*	*(18200)*	*(16700)*	*(20000)*	*(19000)*	*(20200)*	*(15800)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*		
Input Power HP	**4.79**	**4.17**	**3.88**	**2.98**	**2.98**	**2.81**	**2.42**	**2.33**	**1.89**	**1.49**	**1.35**	**1.02**	**0.936**	**—**	**4A115**
(kW)	***(3.57)***	***(3.11)***	***(2.89)***	***(2.22)***	***(2.22)***	***(2.09)***	***(1.81)***	***(1.73)***	***(1.41)***	***(1.11)***	***(1.01)***	***(0.758)***	***(0.698)***	**—**	
Output Torque in•lbs	11513	11204	11495	9553	10508	11473	10884	11464	11455	10687	11236	10136	11436	—	
(N•m)	*(1301)*	*(1266)*	*(1299)*	*(1079)*	*(1187)*	*(1296)*	*(1230)*	*(1295)*	*(1294)*	*(1208)*	*(1269)*	*(1145)*	*(1292)*	—	
Hollow Shaft OHL lbs	3120	3255	3120	4270	3775	3120	3505	3120	3120	3660	3280	3975	3120	—	
(N)	*(13900)*	*(14500)*	*(13900)*	*(19000)*	*(16800)*	*(13900)*	*(15600)*	*(13900)*	*(13900)*	*(16300)*	*(14600)*	*(17700)*	*(13900)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	—	
Input Power HP	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**4A120**
(kW)	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	**—**	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**4.79**	**4.24**	**3.88**	**3.56**	**3.26**	**2.81**	**2.54**	**2.33**	**1.89**	**1.60**	**1.38**	**1.15**	**0.936**	**—**	**4A125**
(kW)	***(3.57)***	***(3.16)***	***(2.89)***	***(2.66)***	***(2.43)***	***(2.09)***	***(1.90)***	***(1.73)***	***(1.41)***	***(1.19)***	***(1.03)***	***(0.855)***	***(0.698)***	**—**	
Output Torque in•lbs	11513	11383	11495	11417	11482	11473	11417	11464	11455	11449	11445	11440	11436	—	
(N•m)	*(1301)*	*(1286)*	*(1299)*	*(1290)*	*(1297)*	*(1296)*	*(1290)*	*(1295)*	*(1294)*	*(1294)*	*(1293)*	*(1293)*	*(1292)*	—	
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	—	

Note: [1] Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for Y4 ratings not listed in the table.

Frame Size Selection Tables 50 Hz, 1450 RPM

Single Reduction
Y4 Mounting Position[1]

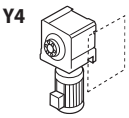


Dimensions on pages 2.156–2.166

Output RPM	131.8	111.5	103.6	90.6	80.6	69.0	65.9	58.0	51.8	41.4	37.2	31.5	27.4	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4A140
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	—	—	—	—	—	**13.6**	—	—	**10.2**	**8.09**	**7.40**	**6.26**	**5.43**	4A145
(kW)	—	—	—	—	—	***(10.1)***	—	—	***(7.59)***	***(6.04)***	***(5.52)***	***(4.67)***	***(4.05)***	
Output Torque in•lbs	—	—	—	—	—	11417	—	—	11417	11352	11565	11543	11526	
(N•m)	—	—	—	—	—	*(1290)*	—	—	*(1290)*	*(1283)*	*(1307)*	*(1304)*	*(1302)*	
Hollow Shaft OHL lbs	—	—	—	—	—	3120	—	—	3120	3120	3120	3120	3120	
(N)	—	—	—	—	—	*(13900)*	—	—	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	
Solid Shaft OHL lbs	—	—	—	—	—	3800	—	—	4290	4530	4560	4580	4580	
(N)	—	—	—	—	—	*(16900)*	—	—	*(19080)*	*(20140)*	*(20280)*	*(20370)*	*(20370)*	
Input Power HP	—	—	—	—	—	**6.80**	—	—	**6.80**	**6.80**	**6.80**	**6.80**	**6.80**	4B120
(kW)	—	—	—	—	—	***(5.07)***	—	—	***(5.07)***	***(5.07)***	***(5.07)***	***(5.07)***	***(5.07)***	
Output Torque in•lbs	—	—	—	—	—	5722	—	—	7629	9536	10626	12533	14441	
(N•m)	—	—	—	—	—	*(646)*	—	—	*(862)*	*(1077)*	*(1201)*	*(1416)*	*(1632)*	
Hollow Shaft OHL lbs	—	—	—	—	—	6000	—	—	6335	6900	7010	7235	7415	
(N)	—	—	—	—	—	*(26700)*	—	—	*(28200)*	*(30700)*	*(31200)*	*(32200)*	*(33000)*	
Solid Shaft OHL lbs	—	—	—	—	—	4100	—	—	4780	5360	5650	6100	6520	
(N)	—	—	—	—	—	*(18230)*	—	—	*(21260)*	*(23840)*	*(25130)*	*(27130)*	*(29000)*	
Input Power HP	—	—	—	—	—	**9.34**	—	—	**9.31**	**7.94**	**7.94**	**7.94**	**7.94**	4B125
(kW)	—	—	—	—	—	***(6.96)***	—	—	***(6.95)***	***(5.92)***	***(5.92)***	***(5.92)***	***(5.92)***	
Output Torque in•lbs	—	—	—	—	—	7858	—	—	10452	11135	12408	14635	16862	
(N•m)	—	—	—	—	—	*(888)*	—	—	*(1181)*	*(1258)*	*(1402)*	*(1653)*	*(1905)*	
Hollow Shaft OHL lbs	—	—	—	—	—	5890	—	—	6180	6720	6830	7010	7145	
(N)	—	—	—	—	—	*(26200)*	—	—	*(27500)*	*(29900)*	*(30400)*	*(31200)*	*(31800)*	
Solid Shaft OHL lbs	—	—	—	—	—	4100	—	—	4780	5360	5650	6100	6520	
(N)	—	—	—	—	—	*(18230)*	—	—	*(21260)*	*(23840)*	*(25130)*	*(27130)*	*(29000)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4B140
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	—	—	—	—	—	**14.9**	—	—	**14.9**	**14.9**	**14.7**	**10.2**	**10.2**	4B145
(kW)	—	—	—	—	—	(11.1)	—	—	(11.1)	(11.1)	(11.0)	(7.58)	(7.58)	
Output Torque in•lbs	—	—	—	—	—	12538	—	—	16718	20897	23041	18726	21576	
(N•m)	—	—	—	—	—	*(1417)*	—	—	*(1889)*	*(2361)*	*(2603)*	*(2116)*	*(2438)*	
Hollow Shaft OHL lbs	—	—	—	—	—	4945	—	—	4965	5460	5710	5710	5710	
(N)	—	—	—	—	—	*(22000)*	—	—	*(22100)*	*(24300)*	*(25400)*	*(25400)*	*(25400)*	
Solid Shaft OHL lbs	—	—	—	—	—	4100	—	—	4780	5360	5650	6100	6520	
(N)	—	—	—	—	—	*(18230)*	—	—	*(21260)*	*(23840)*	*(25130)*	*(27130)*	*(29000)*	

Note: [1] Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for Y4 ratings not listed in the table.

Frame Size Selection Tables 50 Hz, 1450 RPM



Single Reduction
Y4 Mounting Position[1]

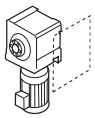
Dimensions on pages 2.156–2.166

Output RPM	24.2	21.6	19.6	18.1	16.48	14.22	12.95	11.79	9.60	8.10	7.00	5.82	4.75	3.48	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4A140
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**4.79**	**4.24**	**3.88**	**3.56**	**3.26**	**2.81**	**2.54**	**2.33**	**1.89**	**1.60**	**1.38**	**1.15**	**0.936**	—	4A145
(kW)	***(3.57)***	***(3.16)***	***(2.89)***	***(2.66)***	***(2.43)***	***(2.09)***	***(1.90)***	***(1.73)***	***(1.41)***	***(1.19)***	***(1.03)***	***(0.855)***	***(0.698)***	—	
Output Torque in•lbs	11513	11383	11495	11417	11482	11473	11417	11464	11455	11449	11445	11440	11436	—	
(N•m)	*(1301)*	*(1286)*	*(1299)*	*(1290)*	*(1297)*	*(1296)*	*(1290)*	*(1295)*	*(1294)*	*(1294)*	*(1293)*	*(1293)*	*(1292)*	—	
Hollow Shaft OHL lbs	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	3120	—	
(N)	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	*(13900)*	—	
Solid Shaft OHL lbs	4580	4580	4580	4580	4580	4580	4580	4580	4570	4560	4550	4540	4540	—	
(N)	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20370)*	*(20320)*	*(20280)*	*(20230)*	*(20190)*	*(20190)*	—	
Input Power HP	**6.56**	**5.31**	**5.31**	**4.14**	**4.14**	**3.84**	**3.18**	**3.18**	**2.57**	**2.19**	**1.75**	**1.28**	**1.27**	—	4B120
(kW)	***(4.89)***	***(3.96)***	***(3.96)***	***(3.09)***	***(3.09)***	***(2.87)***	***(2.37)***	***(2.37)***	***(1.91)***	***(1.63)***	***(1.30)***	***(0.957)***	***(0.944)***	—	
Output Torque in•lbs	15763	14250	15738	13280	14608	15709	14292	15696	15532	15676	14517	12803	15471	—	
(N•m)	*(1781)*	*(1610)*	*(1778)*	*(1500)*	*(1650)*	*(1775)*	*(1615)*	*(1773)*	*(1755)*	*(1771)*	*(1640)*	*(1447)*	*(1748)*	—	
Hollow Shaft OHL lbs	7595	8090	8205	8720	8540	8295	8610	8295	8315	8295	8565	8900	8340	—	
(N)	*(33800)*	*(36000)*	*(36500)*	*(38800)*	*(38000)*	*(36900)*	*(38300)*	*(36900)*	*(37000)*	*(36900)*	*(38100)*	*(39600)*	*(37100)*	—	
Solid Shaft OHL lbs	6870	7140	7330	7370	7420	7490	7530	7570	7580	7430	7320	7200	7120	—	
(N)	*(30550)*	*(31750)*	*(32600)*	*(32780)*	*(33000)*	*(33310)*	*(33490)*	*(33670)*	*(33710)*	*(33040)*	*(32550)*	*(32020)*	*(31660)*	—	
Input Power HP	**7.59**	**6.43**	**6.43**	**5.30**	**5.30**	**4.66**	**3.86**	**3.86**	**3.14**	**2.65**	**2.17**	**1.53**	**1.38**	—	4B125
(kW)	***(5.66)***	***(4.79)***	***(4.79)***	***(3.96)***	***(3.96)***	***(3.47)***	***(2.88)***	***(2.88)***	***(2.34)***	***(1.97)***	***(1.62)***	***(1.14)***	***(1.03)***	—	
Output Torque in•lbs	18246	17264	19068	17006	18707	19032	17305	19004	19002	18980	18021	15228	16823	—	
(N•m)	*(2061)*	*(1951)*	*(2154)*	*(1921)*	*(2114)*	*(2150)*	*(1955)*	*(2147)*	*(2147)*	*(2144)*	*(2036)*	*(1721)*	*(1901)*	—	
Hollow Shaft OHL lbs	7350	7755	7325	7935	7440	7325	7845	7325	7325	7325	7640	8385	7980	—	
(N)	*(32700)*	*(34500)*	*(32600)*	*(35300)*	*(33100)*	*(32600)*	*(34900)*	*(32600)*	*(32600)*	*(32600)*	*(34000)*	*(37300)*	*(35500)*	—	
Solid Shaft OHL lbs	6870	7140	7330	7370	7420	7490	7530	7570	7580	7430	7320	7200	7120	—	
(N)	*(30550)*	*(31750)*	*(32600)*	*(32780)*	*(33000)*	*(33310)*	*(33490)*	*(33670)*	*(33710)*	*(33040)*	*(32550)*	*(32020)*	*(31660)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4B140
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**7.45**	**7.45**	**7.45**	**7.09**	**6.49**	**5.01**	**5.01**	**4.63**	**2.98**	**2.98**	**2.75**	**2.03**	**1.86**	—	4B145
(kW)	***(5.56)***	***(5.56)***	***(5.56)***	***(5.29)***	***(4.84)***	***(3.74)***	***(3.74)***	***(3.46)***	***(2.22)***	***(2.22)***	***(2.05)***	***(1.52)***	***(1.39)***	—	
Output Torque in•lbs	17912	20002	22091	22746	22876	20485	22493	22839	18031	21375	22801	20273	22783	—	
(N•m)	*(2024)*	*(2260)*	*(2496)*	*(2570)*	*(2585)*	*(2314)*	*(2541)*	*(2580)*	*(2037)*	*(2415)*	*(2576)*	*(2291)*	*(2574)*	—	
Hollow Shaft OHL lbs	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	—	
(N)	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	—	
Solid Shaft OHL lbs	6870	7140	7330	7370	7420	7490	7530	7570	7580	7430	7320	7200	7120	—	
(N)	*(30550)*	*(31750)*	*(32600)*	*(32780)*	*(33000)*	*(33310)*	*(33490)*	*(33670)*	*(33710)*	*(33040)*	*(32550)*	*(32020)*	*(31660)*	—	

Note: [1] Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for Y4 ratings not listed in the table.

Frame Size Selection Tables 50 Hz, 1450 RPM

Single Reduction
Y4 Mounting Position[1]

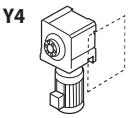


Dimensions on pages 2.156–2.166

Output RPM	131.8	111.5	103.6	90.6	80.6	69.0	65.9	58.0	51.8	41.4	37.2	31.5	27.4	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4B160
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	—	—	—	—	—	—	—	—	**20.3**	**16.1**	**14.7**	**12.5**	**10.8**	4B165
(kW)	—	—	—	—	—	—	—	—	***(15.1)***	***(12.0)***	***(11.0)***	***(9.30)***	***(8.06)***	
Output Torque in•lbs	—	—	—	—	—	—	—	—	22746	22617	23041	22996	22963	
(N•m)	—	—	—	—	—	—	—	—	*(2570)*	*(2555)*	*(2603)*	*(2598)*	*(2594)*	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	4965	5460	5710	5710	5710	
(N)	—	—	—	—	—	—	—	—	*(22100)*	*(24300)*	*(25400)*	*(25400)*	*(25400)*	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	4780	5360	5650	6100	6520	
(N)	—	—	—	—	—	—	—	—	*(21260)*	*(23840)*	*(25130)*	*(27130)*	*(29000)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4C140
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	—	—	—	—	—	—	—	—	**14.9**	**14.9**	**14.9**	**10.2**	**10.2**	4C145
(kW)	—	—	—	—	—	—	—	—	***(11.1)***	***(11.1)***	***(11.1)***	***(7.58)***	***(7.58)***	
Output Torque in•lbs	—	—	—	—	—	—	—	—	16718	20897	23285	18726	21576	
(N•m)	—	—	—	—	—	—	—	—	*(1889)*	*(2361)*	*(2631)*	*(2116)*	*(2438)*	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	8025	8180	8250	8295	8430	
(N)	—	—	—	—	—	—	—	—	*(35700)*	*(36400)*	*(36700)*	*(36900)*	*(37500)*	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	6250	7170	7580	8210	8860	
(N)	—	—	—	—	—	—	—	—	*(27800)*	*(31890)*	*(33710)*	*(36510)*	*(39400)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4C160
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	—	—	—	—	—	—	—	—	**20.3**	**20.3**	**20.3**	**14.9**	**14.9**	4C165
(kW)	—	—	—	—	—	—	—	—	***(15.2)***	***(15.2)***	***(15.2)***	***(11.1)***	***(11.1)***	
Output Torque in•lbs	—	—	—	—	—	—	—	—	22797	28496	31753	27465	31644	
(N•m)	—	—	—	—	—	—	—	—	*(2576)*	*(3220)*	*(3588)*	*(3103)*	*(3575)*	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	6765	6560	6900	7485	8000	
(N)	—	—	—	—	—	—	—	—	*(30100)*	*(29200)*	*(30700)*	*(33300)*	*(35600)*	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	6250	7170	7580	8210	8860	
(N)	—	—	—	—	—	—	—	—	*(27800)*	*(31890)*	*(33710)*	*(36510)*	*(39400)*	

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Frame Size Selection Tables 50 Hz, 1450 RPM



Single Reduction
Y4 Mounting Position[1]

Dimensions on pages 2.156–2.166

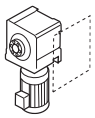
Output RPM	24.2	21.6	19.6	18.1	16.48	14.22	12.95	11.79	9.60	8.10	7.00	5.82	4.75	3.48	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4B160
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**9.54**	**8.45**	**7.72**	**7.09**	**6.49**	**5.59**	**5.07**	**4.63**	**3.77**	**3.18**	**2.75**	**2.28**	**1.86**	—	4B165
(kW)	***(7.11)***	***(6.30)***	***(5.76)***	***(5.29)***	***(4.84)***	***(4.17)***	***(3.78)***	***(3.46)***	***(2.81)***	***(2.37)***	***(2.05)***	***(1.70)***	***(1.39)***	—	
Output Torque in•lbs	22937	22678	22901	22746	22876	22858	22746	22839	22821	22810	22801	22792	22783	—	
(N•m)	*(2592)*	*(2562)*	*(2587)*	*(2570)*	*(2585)*	*(2583)*	*(2570)*	*(2580)*	*(2578)*	*(2577)*	*(2576)*	*(2575)*	*(2574)*	—	
Hollow Shaft OHL lbs	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	5710	—	
(N)	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	*(25400)*	—	
Solid Shaft OHL lbs	6870	7140	7330	7370	7420	7490	7530	7570	7580	7430	7320	7200	7120	—	
(N)	*(30550)*	*(31750)*	*(32600)*	*(32780)*	*(33000)*	*(33310)*	*(33490)*	*(33670)*	*(33710)*	*(33040)*	*(32550)*	*(32020)*	*(31660)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4C140
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**7.45**	**7.45**	**7.45**	**7.45**	**7.45**	**5.01**	**5.01**	**5.01**	**2.98**	**2.98**	**2.98**	**2.03**	**2.03**	—	4C145
(kW)	***(5.56)***	***(5.56)***	***(5.56)***	***(5.56)***	***(5.56)***	***(3.74)***	***(3.74)***	***(3.74)***	***(2.22)***	***(2.22)***	***(2.22)***	***(1.52)***	***(1.52)***	—	
Output Torque in•lbs	17912	20002	22091	23882	26271	20485	22493	24702	18031	21375	24718	20273	24832	—	
(N•m)	*(2024)*	*(2260)*	*(2496)*	*(2698)*	*(2968)*	*(2314)*	*(2541)*	*(2791)*	*(2037)*	*(2415)*	*(2793)*	*(2291)*	*(2806)*	—	
Hollow Shaft OHL lbs	9125	9980	10045	10720	10810	10970	11845	10945	11910	12495	12540	12610	12540	—	
(N)	*(40600)*	*(44400)*	*(44700)*	*(47700)*	*(48100)*	*(48800)*	*(52700)*	*(48700)*	*(53000)*	*(55600)*	*(55800)*	*(56100)*	*(55800)*	—	
Solid Shaft OHL lbs	9420	9870	10260	10660	11100	11710	12050	12360	12810	12720	12660	12590	12550	—	
(N)	*(41900)*	*(43900)*	*(45630)*	*(47410)*	*(49370)*	*(52080)*	*(53590)*	*(54970)*	*(56970)*	*(56570)*	*(56310)*	*(56000)*	*(55820)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4C160
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**14.9**	**10.2**	**10.2**	**10.2**	**10.2**	**10.2**	**10.1**	**9.27**	**5.01**	**5.01**	**5.01**	**2.98**	**2.98**	—	4C165
(kW)	***(11.1)***	***(7.58)***	***(7.58)***	***(7.58)***	***(7.58)***	***(7.58)***	***(7.56)***	***(6.91)***	***(3.74)***	***(3.74)***	***(3.74)***	***(2.22)***	***(2.22)***	—	
Output Torque in•lbs	35824	27275	30124	32567	35824	41523	45492	45678	30325	35948	41572	29734	36421	—	
(N•m)	*(4048)*	*(3082)*	*(3404)*	*(3680)*	*(4048)*	*(4691)*	*(5140)*	*(5161)*	*(3426)*	*(4062)*	*(4697)*	*(3359)*	*(4115)*	—	
Hollow Shaft OHL lbs	8450	8900	9305	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	—	
(N)	*(37600)*	*(39600)*	*(41400)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	—	
Solid Shaft OHL lbs	9420	9870	10260	10660	11100	11710	12050	12360	12810	12720	12660	12590	12550	—	
(N)	*(41900)*	*(43900)*	*(45630)*	*(47410)*	*(49370)*	*(52080)*	*(53590)*	*(54970)*	*(56970)*	*(56570)*	*(56310)*	*(56000)*	*(55820)*	—	

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Frame Size Selection Tables 50 Hz, 1450 RPM

Single Reduction
Y4 Mounting Position[1]

Y4

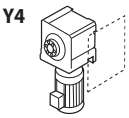


Dimensions on pages 2.156–2.166

Output RPM	131.8	111.5	103.6	90.6	80.6	69.0	65.9	58.0	51.8	41.4	37.2	31.5	27.4	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4C170
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	—	—	—	—	—	—	—	—	—	**19.1**	**19.1**	**19.1**	**16.1**	4C175
(kW)	—	—	—	—	—	—	—	—	—	***(14.2)***	***(14.2)***	***(14.2)***	***(12.0)***	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	26791	29853	35211	34115	
(N•m)	—	—	—	—	—	—	—	—	—	*(3027)*	*(3373)*	*(3978)*	*(3855)*	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	6560	6900	7485	8000	
(N)	—	—	—	—	—	—	—	—	—	*(29200)*	*(30700)*	*(33300)*	*(35600)*	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	7170	7580	8210	8860	
(N)	—	—	—	—	—	—	—	—	—	*(31890)*	*(33710)*	*(36510)*	*(39400)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4D160
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	—	—	—	—	—	—	—	—	—	**20.3**	**20.3**	**14.9**	**14.9**	4D165
(kW)	—	—	—	—	—	—	—	—	—	***(15.2)***	***(15.2)***	***(11.1)***	***(11.1)***	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	28496	31753	27465	31644	
(N•m)	—	—	—	—	—	—	—	—	—	*(3220)*	*(3588)*	*(3103)*	*(3576)*	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	12070	12180	12565	12675	
(N)	—	—	—	—	—	—	—	—	—	*(53700)*	*(54200)*	*(55900)*	*(56400)*	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	10240	10830	11740	12690	
(N)	—	—	—	—	—	—	—	—	—	*(45540)*	*(48170)*	*(52210)*	*(56440)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4D170
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	—	—	—	—	—	—	—	—	—	**19.1**	**19.1**	**19.1**	**16.1**	4D175
(kW)	—	—	—	—	—	—	—	—	—	***(14.2)***	***(14.2)***	***(14.2)***	***(12.0)***	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	26791	29853	35211	34115	
(N•m)	—	—	—	—	—	—	—	—	—	*(3027)*	*(3373)*	*(3979)*	*(3855)*	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	11125	11170	11080	11375	
(N)	—	—	—	—	—	—	—	—	—	*(49500)*	*(49700)*	*(49300)*	*(50600)*	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	10240	10830	11740	12690	
(N)	—	—	—	—	—	—	—	—	—	*(45540)*	*(48170)*	*(52210)*	*(56440)*	

Note: [1] Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for Y4 ratings not listed in the table.

Frame Size Selection Tables 50 Hz, 1450 RPM



Single Reduction
Y4 Mounting Position[1]

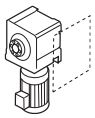
Dimensions on pages 2.156–2.166

Output RPM	24.2	21.6	19.6	18.1	16.48	14.22	12.95	11.79	9.60	8.10	7.00	5.82	4.75	3.48	Frame Size
Ratio	**60**	**67**	**74**	**80**	**88**	**102**	**112**	**123**	**151**	**179**	**207**	**249**	**305**	**417**	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4C170
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**13.0**	**13.0**	**13.0**	**14.2**	**13.0**	**11.2**	**10.1**	**9.27**	**7.54**	**6.36**	**5.50**	**4.57**	**3.73**	—	4C175
(kW)	***(9.71)***	***(9.71)***	***(9.71)***	***(10.58)***	***(9.67)***	***(8.34)***	***(7.56)***	***(6.91)***	***(5.62)***	***(4.74)***	***(4.10)***	***(3.41)***	***(2.78)***	—	
Output Torque in•lbs	31314	34968	38621	45492	45752	45716	45492	45678	45643	45619	45602	45583	45567	—	
(N•m)	*(3538)*	*(3951)*	*(4364)*	*(5140)*	*(5169)*	*(5165)*	*(5140)*	*(5161)*	*(5157)*	*(5154)*	*(5152)*	*(5150)*	*(5148)*	—	
Hollow Shaft OHL lbs	8450	8900	9305	9415	9415	9415	9415	9415	9415	9415	9415	9415	9415	—	
(N)	*(37600)*	*(39600)*	*(41400)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	*(41900)*	—	
Solid Shaft OHL lbs	9420	9870	10260	10660	11100	11710	12050	12360	12810	12720	12660	12590	12550	—	
(N)	*(41900)*	*(43900)*	*(45630)*	*(47410)*	*(49370)*	*(52080)*	*(53590)*	*(54970)*	*(56970)*	*(56570)*	*(56310)*	*(56000)*	*(55820)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4D160
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**14.9**	**10.2**	**10.2**	**10.2**	**10.2**	**10.2**	**10.2**	**10.2**	**5.01**	**5.01**	**5.01**	**2.98**	**2.98**	—	4D165
(kW)	***(11.1)***	***(7.58)***	***(7.58)***	***(7.58)***	***(7.58)***	***(7.58)***	***(7.58)***	***(7.58)***	***(3.74)***	***(3.74)***	***(3.74)***	***(2.22)***	***(2.22)***	—	
Output Torque in•lbs	35824	27275	30124	32567	35824	41523	45594	50072	30325	35948	41572	29734	36421	—	
(N•m)	*(4048)*	*(3082)*	*(3404)*	*(3680)*	*(4048)*	*(4692)*	*(5152)*	*(5658)*	*(3427)*	*(4062)*	*(4697)*	*(3360)*	*(4115)*	—	
Hollow Shaft OHL lbs	13600	14455	14565	15465	15620	15960	16970	15755	15755	15755	15755	15755	16115	—	
(N)	*(60500)*	*(64300)*	*(64800)*	*(68800)*	*(69500)*	*(71000)*	*(75500)*	*(70100)*	*(70100)*	*(70100)*	*(70100)*	*(70100)*	*(71700)*	—	
Solid Shaft OHL lbs	13500	14150	14650	14960	15320	15800	16070	16310	16690	16650	16620	16590	16580	—	
(N)	*(60040)*	*(62930)*	*(65160)*	*(66540)*	*(68140)*	*(70270)*	*(71470)*	*(72540)*	*(74230)*	*(74050)*	*(73920)*	*(73790)*	*(73740)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4D170
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**13.0**	**13.0**	**13.0**	**14.9**	**14.9**	**14.9**	**10.2**	**10.2**	**10.2**	**7.45**	**7.45**	**5.01**	**5.01**	—	4D175
(kW)	***(9.71)***	***(9.71)***	***(9.71)***	***(11.1)***	***(11.1)***	***(11.1)***	***(7.58)***	***(7.58)***	***(7.58)***	***(5.56)***	***(5.56)***	***(3.74)***	***(3.74)***	—	
Output Torque in•lbs	31314	34968	38621	47765	52541	60900	45594	50072	61470	53437	61796	50007	61253	—	
(N•m)	*(3538)*	*(3951)*	*(4364)*	*(5397)*	*(5937)*	*(6881)*	*(5152)*	*(5658)*	*(6946)*	*(6038)*	*(6983)*	*(5651)*	*(6921)*	—	
Hollow Shaft OHL lbs	11485	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	—	
(N)	*(51100)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	—	
Solid Shaft OHL lbs	13500	14150	14650	14960	15320	15800	16070	16310	16690	16650	16620	16590	16580	—	
(N)	*(60040)*	*(62930)*	*(65160)*	*(66540)*	*(68140)*	*(70270)*	*(71470)*	*(72540)*	*(74230)*	*(74050)*	*(73920)*	*(73790)*	*(73740)*	—	

Note: [1] Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for Y4 ratings not listed in the table.

Frame Size Selection Tables 50 Hz, 1450 RPM

Single Reduction
Y4 Mounting Position[1]

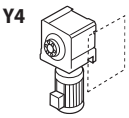


Dimensions on pages 2.156–2.166

Output RPM	131.8	111.5	103.6	90.6	80.6	69.0	65.9	58.0	51.8	41.4	37.2	31.5	27.4	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4D180
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	—	—	—	—	—	—	—	—	—	**26.0**	**26.0**	**26.0**	**19.1**	4D185
(kW)	—	—	—	—	—	—	—	—	—	***(19.4)***	***(19.4)***	***(19.4)***	***(14.2)***	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	36533	40709	48015	40570	
(N•m)	—	—	—	—	—	—	—	—	—	*(4128)*	*(4600)*	*(5426)*	*(4584)*	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	9460	9755	10250	10700	
(N)	—	—	—	—	—	—	—	—	—	*(42100)*	*(43400)*	*(45600)*	*(47600)*	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	10240	10830	11740	12690	
(N)	—	—	—	—	—	—	—	—	—	*(45540)*	*(48170)*	*(52210)*	*(56440)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4E170
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	—	—	—	—	—	—	—	—	—	**19.1**	**19.1**	**19.1**	**16.1**	4E175
(kW)	—	—	—	—	—	—	—	—	—	***(14.2)***	***(14.2)***	***(14.2)***	***(12.0)***	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	26791	29853	35211	34115	
(N•m)	—	—	—	—	—	—	—	—	—	*(3027)*	*(3373)*	*(3979)*	*(3855)*	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	16005	16185	16430	16565	
(N)	—	—	—	—	—	—	—	—	—	*(71200)*	*(72000)*	*(73100)*	*(73700)*	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	14630	15370	16550	17780	
(N)	—	—	—	—	—	—	—	—	—	*(65070)*	*(68360)*	*(73610)*	*(79080)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4E180
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	—	—	—	—	—	—	—	—	—	**26.0**	**26.0**	**26.0**	**19.1**	4E185
(kW)	—	—	—	—	—	—	—	—	—	***(19.4)***	***(19.4)***	***(19.4)***	***(14.2)***	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	36533	40709	48015	40570	
(N•m)	—	—	—	—	—	—	—	—	—	*(4128)*	*(4600)*	*(5426)*	*(4584)*	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	13530	13935	14880	15825	
(N)	—	—	—	—	—	—	—	—	—	*(60200)*	*(62000)*	*(66200)*	*(70400)*	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	14630	15370	16550	17780	
(N)	—	—	—	—	—	—	—	—	—	*(65070)*	*(68360)*	*(73610)*	*(79080)*	

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Frame Size Selection Tables 50 Hz, 1450 RPM



Single Reduction
Y4 Mounting Position[1]

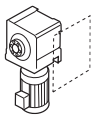
Dimensions on pages 2.156–2.166

Output RPM	24.2	21.6	19.6	18.1	16.48	14.22	12.95	11.79	9.60	8.10	7.00	5.82	4.75	3.48	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4D180
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**19.1**	**19.1**	**19.1**	**16.1**	**16.1**	**13.0**	**13.0**	**13.0**	**9.55**	**6.51**	**9.33**	**7.45**	**6.32**	—	4D185
(kW)	***(14.2)***	***(14.2)***	***(14.2)***	***(12.0)***	***(12.0)***	***(9.71)***	***(9.71)***	***(9.71)***	***(7.12)***	***(4.86)***	***(6.95)***	***(5.56)***	***(4.72)***	—	
Output Torque in•lbs	45928	51286	56644	51495	56644	53234	58454	64194	57792	46711	77364	74334	77304	—	
(N•m)	*(5190)*	*(5795)*	*(6401)*	*(5819)*	*(6401)*	*(6015)*	*(6605)*	*(7254)*	*(6530)*	*(5278)*	*(8742)*	*(8399)*	*(8735)*	—	
Hollow Shaft OHL lbs	11125	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	11375	—	
(N)	*(49500)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	*(50600)*	—	
Solid Shaft OHL lbs	13500	14150	14650	14960	15320	15800	16070	16310	16690	16650	16620	16590	16580	—	
(N)	*(60040)*	*(62930)*	*(65160)*	*(66540)*	*(68140)*	*(70270)*	*(71470)*	*(72540)*	*(74230)*	*(74050)*	*(73920)*	*(73790)*	*(73740)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4E170
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**13.0**	**13.0**	**13.0**	**14.9**	**14.9**	**14.9**	**10.2**	**10.2**	**10.2**	**7.45**	**7.45**	**5.01**	**5.01**	—	4E175
(kW)	***(9.71)***	***(9.71)***	***(9.71)***	***(11.1)***	***(11.1)***	***(11.1)***	***(7.58)***	***(7.58)***	***(7.58)***	***(5.56)***	***(5.56)***	***(3.74)***	***(3.74)***	—	
Output Torque in•lbs	31314	34968	38621	47765	52541	60900	45594	50072	61470	53437	61796	50007	61253	—	
(N•m)	*(3538)*	*(3951)*	*(4364)*	*(5397)*	*(5937)*	*(6881)*	*(5152)*	*(5658)*	*(6946)*	*(6038)*	*(6983)*	*(5651)*	*(6921)*	—	
Hollow Shaft OHL lbs	18025	18250	18835	19555	19400	19400	19420	18995	19175	18995	19150	19085	19150	—	
(N)	*(80200)*	*(81200)*	*(83800)*	*(87000)*	*(86300)*	*(86300)*	*(86400)*	*(84500)*	*(85300)*	*(84500)*	*(85200)*	*(84900)*	*(85200)*	—	
Solid Shaft OHL lbs	18840	19670	20270	20480	20700	21020	21200	21360	21630	21720	21790	21860	21920	—	
(N)	*(83800)*	*(87490)*	*(90160)*	*(91090)*	*(92070)*	*(93490)*	*(94290)*	*(95000)*	*(96210)*	*(96610)*	*(96920)*	*(97230)*	*(97500)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4E180
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**19.1**	**19.1**	**19.1**	**16.1**	**16.1**	**13.0**	**13.0**	**13.0**	**9.55**	**6.51**	**10.16**	**7.45**	**7.45**	—	4E185
(kW)	***(14.2)***	***(14.2)***	***(14.2)***	***(12.0)***	***(12.0)***	***(9.71)***	***(9.71)***	***(9.71)***	***(7.12)***	***(4.86)***	***(7.58)***	***(5.56)***	***(5.56)***	—	
Output Torque in•lbs	45928	51286	56644	51495	56644	53234	58454	64194	57792	46711	84267	74334	91052	—	
(N•m)	*(5190)*	*(5795)*	*(6401)*	*(5819)*	*(6401)*	*(6015)*	*(6605)*	*(7254)*	*(6530)*	*(5278)*	*(9522)*	*(8399)*	*(10288)*	—	
Hollow Shaft OHL lbs	16700	17670	18250	18995	19400	19400	18430	18430	18430	18430	18430	18430	18430	—	
(N)	*(74300)*	*(78600)*	*(81200)*	*(84500)*	*(86300)*	*(86300)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	18840	19670	20270	20480	20700	21020	21200	21360	21630	21720	21790	21860	21920	—	
(N)	*(83800)*	*(87490)*	*(90160)*	*(91090)*	*(92070)*	*(93490)*	*(94290)*	*(95000)*	*(96210)*	*(96610)*	*(96920)*	*(97230)*	*(97500)*	—	

Note: [1] Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for Y4 ratings not listed in the table.

Frame Size Selection Tables 50 Hz, 1450 RPM

Single Reduction
Y4 Mounting Position[1]

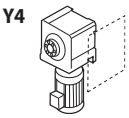


Dimensions on pages 2.156–2.166

Output RPM	131.8	111.5	103.6	90.6	80.6	69.0	65.9	58.0	51.8	41.4	37.2	31.5	27.4	Frame Size
Ratio	11	13	14	16	18	21	22	25	28	35	39	46	53	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4E190
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	—	—	—	—	—	—	—	—	—	**32.1**	**32.1**	**32.1**	**32.1**	4E195
(kW)	—	—	—	—	—	—	—	—	—	***(24.0)***	***(24.0)***	***(24.0)***	***(24.0)***	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	45058	50207	59219	68231	
(N•m)	—	—	—	—	—	—	—	—	—	*(5091)*	*(5673)*	*(6691)*	*(7710)*	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	13600	14005	14880	15825	
(N)	—	—	—	—	—	—	—	—	—	*(60500)*	*(62300)*	*(66200)*	*(70400)*	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	14630	15370	16550	17780	
(N)	—	—	—	—	—	—	—	—	—	*(65070)*	*(68360)*	*(73610)*	*(79080)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4F180
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	—	—	—	—	—	—	—	—	—	**26.0**	**26.0**	**26.0**	**19.1**	4F185
(kW)	—	—	—	—	—	—	—	—	—	***(19.4)***	***(19.4)***	***(19.4)***	***(14.2)***	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	36533	40709	48015	40570	
(N•m)	—	—	—	—	—	—	—	—	—	*(4128)*	*(4600)*	*(5426)*	*(4584)*	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	27875	28100	27425	27425	
(N)	—	—	—	—	—	—	—	—	—	*(124000)*	*(125000)*	*(122000)*	*(122000)*	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	25560	26850	28470	28910	
(N)	—	—	—	—	—	—	—	—	—	*(113690)*	*(119420)*	*(126630)*	*(128590)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4F190
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	—	—	—	—	—	—	—	—	—	**32.1**	**32.1**	**32.1**	**32.1**	4F195
(kW)	—	—	—	—	—	—	—	—	—	***(24.0)***	***(24.0)***	***(24.0)***	***(24.0)***	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	45058	50207	59219	68231	
(N•m)	—	—	—	—	—	—	—	—	—	*(5091)*	*(5673)*	*(6691)*	*(7710)*	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	26525	26975	26300	25400	
(N)	—	—	—	—	—	—	—	—	—	*(118000)*	*(120000)*	*(117000)*	*(113000)*	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	25560	26850	28470	28910	
(N)	—	—	—	—	—	—	—	—	—	*(113690)*	*(119420)*	*(126630)*	*(128590)*	

Note: [1] Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for Y4 ratings not listed in the table.

Frame Size Selection Tables 50 Hz, 1450 RPM



Single Reduction
Y4 Mounting Position[1]

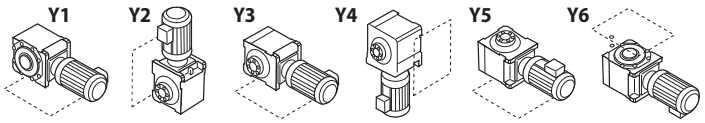
Dimensions on pages 2.156–2.166

Output RPM	24.2	21.6	19.6	18.1	16.48	14.22	12.95	11.79	9.60	8.10	7.00	5.82	4.75	3.48	Frame Size
Ratio	60	67	74	80	88	102	112	123	151	179	207	249	305	417	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4E190
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**32.1**	**19.1**	**19.1**	**19.1**	**19.1**	**19.1**	**16.1**	**16.1**	**13.0**	**9.55**	**9.55**	**6.51**	**6.51**	—	4E195
(kW)	***(24.0)***	***(14.2)***	***(14.2)***	***(14.2)***	***(14.2)***	***(14.2)***	***(12.0)***	***(12.0)***	***(9.71)***	***(7.12)***	***(7.12)***	***(4.86)***	***(4.86)***	—	
Output Torque in•lbs	77242	51286	56644	61237	67361	78077	72093	79173	78808	68509	79225	64977	79591	—	
(N•m)	*(8728)*	*(5795)*	*(6401)*	*(6920)*	*(7611)*	*(8822)*	*(8146)*	*(8946)*	*(8905)*	*(7741)*	*(8952)*	*(7342)*	*(8993)*	—	
Hollow Shaft OHL lbs	16700	17670	18250	18995	19400	19400	18430	18430	18430	18430	18430	18430	18430	—	
(N)	*(74300)*	*(78600)*	*(81200)*	*(84500)*	*(86300)*	*(86300)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	*(82000)*	—	
Solid Shaft OHL lbs	18840	19670	20270	20480	20700	21020	21200	21360	21630	21720	21790	21860	21920	—	
(N)	*(83800)*	*(87490)*	*(90160)*	*(91090)*	*(92070)*	*(93490)*	*(94290)*	*(95000)*	*(96210)*	*(96610)*	*(96920)*	*(97230)*	*(97500)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4F180
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**19.1**	**19.1**	**19.1**	**16.1**	**16.1**	**13.0**	**13.0**	**13.0**	**9.55**	**6.51**	**10.2**	**7.45**	**7.45**	—	4F185
(kW)	***(14.2)***	***(14.2)***	***(14.2)***	***(12.0)***	***(12.0)***	***(9.71)***	***(9.71)***	***(9.71)***	***(7.12)***	***(4.86)***	***(7.58)***	***(5.56)***	***(5.56)***	—	
Output Torque in•lbs	45928	51286	56644	51495	56644	53234	58454	64194	57792	46711	84267	74334	91052	—	
(N•m)	*(5190)*	*(5795)*	*(6401)*	*(5819)*	*(6401)*	*(6015)*	*(6605)*	*(7254)*	*(6530)*	*(5278)*	*(9522)*	*(8399)*	*(10288)*	—	
Hollow Shaft OHL lbs	26975	26300	25625	26525	26075	26525	26300	25625	25625	25850	26300	26525	26075	—	
(N)	*(120000)*	*(117000)*	*(114000)*	*(118000)*	*(116000)*	*(118000)*	*(117000)*	*(114000)*	*(114000)*	*(115000)*	*(117000)*	*(118000)*	*(116000)*	—	
Solid Shaft OHL lbs	28940	28950	28970	28970	28970	28970	28970	28970	29010	29180	29300	29430	29530	—	
(N)	*(128720)*	*(128760)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(129030)*	*(129790)*	*(130320)*	*(130900)*	*(131340)*	—	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4F190
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**32.1**	**19.1**	**19.1**	**19.1**	**19.1**	**19.1**	**16.1**	**16.1**	**13.0**	**9.55**	**9.55**	**6.51**	**6.51**	—	4F195
(kW)	***(24.0)***	***(14.2)***	***(14.2)***	***(14.2)***	***(14.2)***	***(14.2)***	***(12.0)***	***(12.0)***	***(9.71)***	***(7.12)***	***(7.12)***	***(4.86)***	***(4.86)***	—	
Output Torque in•lbs	77242	51286	56644	61237	67361	78077	72093	79173	78808	68509	79225	64977	79591	—	
(N•m)	*(8728)*	*(5795)*	*(6401)*	*(6920)*	*(7611)*	*(8822)*	*(8146)*	*(8946)*	*(8905)*	*(7741)*	*(8952)*	*(7342)*	*(8993)*	—	
Hollow Shaft OHL lbs	25400	25175	25400	25175	25400	25400	25175	25400	25400	25400	25400	25400	25400	—	
(N)	*(113000)*	*(112000)*	*(113000)*	*(112000)*	*(113000)*	*(113000)*	*(112000)*	*(113000)*	*(113000)*	*(113000)*	*(113000)*	*(113000)*	*(113000)*	—	
Solid Shaft OHL lbs	28940	28950	28970	28970	28970	28970	28970	28970	29010	29180	29300	29430	29530	—	
(N)	*(128720)*	*(128760)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(128850)*	*(129030)*	*(129790)*	*(130320)*	*(130900)*	*(131340)*	—	

Note: [1] Please visit Sumitomo's Product Configurator at www.sumitomodrive.com/Configurator for Y4 ratings not listed in the table.

Frame Size Selection Tables 60 Hz, 1750 RPM

Double Reduction
Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions

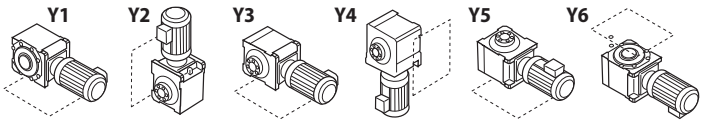


Dimensions on pages 2.168 - 2.177

Output RPM	4.81	4.13	3.49	3.03	2.56	2.16	1.83	1.57	1.33	1.06	0.89	0.77	0.68	Frame Size
Ratio	364	424	501	578	683	809	956	1117	1320	1656	1957	2272	2559	
Input Power HP *(kW)*	**0.546** *(0.407)*	**0.546** *(0.407)*	**0.546** *(0.407)*	**0.496** *(0.37)*	**0.420** *(0.313)*	**0.354** *(0.264)*	**0.300** *(0.224)*	**0.256** *(0.191)*	**0.217** *(0.162)*	**0.173** *(0.129)*	**0.146** *(0.109)*	0.134 *(0.100)*	0.134 *(0.100)*	4A10DA
Output Torque in•lbs *(N•m)*	6255 *(707)*	7280 *(823)*	8610 *(973)*	9025 *(1020)*	9025 *(1020)*	9025 *(1020)*	9025 *(1020)*	9025 *(1020)*	9025 *(1020)*	9025 *(1020)*	9025 *(1020)*	8935 *(1010)*	9025 *(1020)*	
Hollow Shaft OHL lbs *(N)*	5325 *(23700)*	5010 *(22300)*	4495 *(20000)*	4270 *(19000)*	4270 *(19000)*	4270 *(19000)*	4270 *(19000)*	4270 *(19000)*	4270 *(19000)*	4270 *(19000)*	4270 *(19000)*	4335 *(19300)*	4270 *(19000)*	
Solid Shaft OHL lbs *(N)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	
Input Power HP *(kW)*	**0.546** *(0.407)*	**0.546** *(0.407)*	**0.546** *(0.407)*	**0.546** *(0.407)*	**0.531** *(0.396)*	**0.448** *(0.334)*	**0.380** *(0.283)*	**0.325** *(0.242)*	**0.275** *(0.205)*	**0.219** *(0.163)*	**0.185** *(0.138)*	**0.160** *(0.119)*	**0.142** *(0.106)*	4A12DA
Output Torque in•lbs *(N•m)*	6255 *(707)*	7280 *(823)*	8610 *(973)*	9910 *(1120)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	
Hollow Shaft OHL lbs *(N)*	5325 *(23700)*	5010 *(22300)*	4495 *(20000)*	3775 *(16800)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	
Solid Shaft OHL lbs *(N)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	
Input Power HP *(kW)*	**0.995** *(0.742)*	**0.856** *(0.638)*	**0.724** *(0.540)*	**0.628** *(0.468)*	**0.531** *(0.396)*	**0.448** *(0.334)*	**0.380** *(0.283)*	**0.325** *(0.242)*	**0.275** *(0.205)*	**0.219** *(0.163)*	**0.185** *(0.138)*	**0.160** *(0.119)*	**0.142** *(0.106)*	4A12DB
Output Torque in•lbs *(N•m)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	
Hollow Shaft OHL lbs *(N)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	
Solid Shaft OHL lbs *(N)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	
Input Power HP *(kW)*	**0.546** *(0.407)*	**0.546** *(0.407)*	**0.546** *(0.407)*	**0.546** *(0.407)*	**0.531** *(0.396)*	**0.448** *(0.334)*	**0.380** *(0.283)*	**0.325** *(0.242)*	**0.275** *(0.205)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	4A14DA
Output Torque in•lbs *(N•m)*	6255 *(707)*	7280 *(823)*	8610 *(973)*	9910 *(1120)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	
Hollow Shaft OHL lbs *(N)*	5325 *(23700)*	5010 *(22300)*	4495 *(20000)*	3775 *(16800)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	
Solid Shaft OHL lbs *(N)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	
Input Power HP *(kW)*	**0.995** *(0.742)*	**0.856** *(0.638)*	**0.724** *(0.540)*	**0.628** *(0.468)*	**0.531** *(0.396)*	**0.448** *(0.334)*	**0.380** *(0.283)*	**0.325** *(0.242)*	**0.275** *(0.205)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	4A14DB
Output Torque in•lbs *(N•m)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	
Hollow Shaft OHL lbs *(N)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	
Solid Shaft OHL lbs *(N)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	
Input Power HP *(kW)*	**0.995** *(0.742)*	**0.856** *(0.638)*	**0.724** *(0.540)*	**0.628** *(0.468)*	**0.531** *(0.396)*	**0.448** *(0.334)*	**0.380** *(0.283)*	**0.325** *(0.242)*	**0.275** *(0.205)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	4A14DC
Output Torque in•lbs *(N•m)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	11415 *(1290)*	
Hollow Shaft OHL lbs *(N)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	2585 *(11500)*	
Solid Shaft OHL lbs *(N)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	4540 *(20190)*	

Note: The motor Input Powers listed in **GRAY** are to overcome breakaway torque requirements in cold temperature or high inertia applications.
A torque limiting device is recommended to protect the unit or the driven machine.

60 Hz, 1750 RPM Frame Size Selection Tables



Double Reduction
Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions

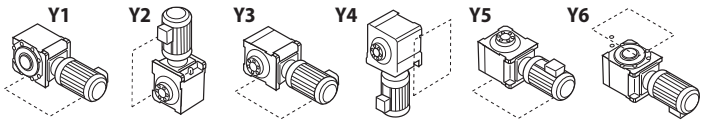
Dimensions on pages 2.168 - 2.177

Output RPM	0.59	0.50	0.40	0.34	0.27	0.24	0.20	0.16	0.14	0.11	0.10	0.08	0.07	Frame Size
Ratio	2944	3511	4365	5177	6472	7228	8880	10658	12184	15530	17966	21620	26492	
Input Power HP	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	—	—	4A10DA
(kW)	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	—	—	
Output Torque in•lbs	9025	8935	9025	9025	9025	8935	8935	9025	8935	9025	9025	—	—	
(N•m)	*(1020)*	*(1010)*	*(1020)*	*(1020)*	*(1020)*	*(1010)*	*(1010)*	*(1020)*	*(1010)*	*(1020)*	*(1020)*	—	—	
Hollow Shaft OHL lbs	4270	4335	4270	4270	4270	4335	4335	4270	4335	4270	4270	—	—	
(N)	*(19000)*	*(19300)*	*(19000)*	*(19000)*	*(19000)*	*(19300)*	*(19300)*	*(19000)*	*(19300)*	*(19000)*	*(19000)*	—	—	
Solid Shaft OHL lbs	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	—	—	
(N)	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	—	
Input Power HP	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	—	—	4A12DA
(kW)	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	—	—	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	—	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	—	
Hollow Shaft OHL lbs	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	—	—	
(N)	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	—	—	
Solid Shaft OHL lbs	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	—	—	
(N)	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	—	
Input Power HP	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	4A12DB
(kW)	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	
Hollow Shaft OHL lbs	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	
(N)	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	
Solid Shaft OHL lbs	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	
(N)	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	
Input Power HP	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	—	—	4A14DA
(kW)	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	—	—	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	—	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	—	
Hollow Shaft OHL lbs	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	—	—	
(N)	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	—	—	
Solid Shaft OHL lbs	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	—	—	
(N)	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	—	
Input Power HP	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	4A14DB
(kW)	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	
Hollow Shaft OHL lbs	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	
(N)	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	
Solid Shaft OHL lbs	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	
(N)	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	
Input Power HP	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	4A14DC
(kW)	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	
Hollow Shaft OHL lbs	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	
(N)	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	
Solid Shaft OHL lbs	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	
(N)	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	

Note: The motor Input Powers listed in **GRAY** are to overcome breakaway torque requirements in cold temperature or high inertia applications.
A torque limiting device is recommended to protect the unit or the driven machine.

Frame Size Selection Tables 60 Hz, 1750 RPM

Double Reduction
Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions

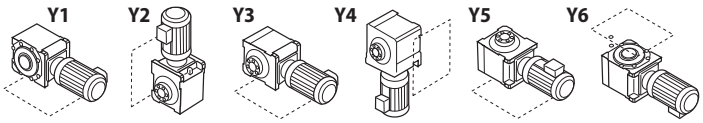


Dimensions on pages 2.168 - 2.177

Output RPM	4.81	4.13	3.49	3.03	2.56	2.16	1.83	1.57	1.33	1.06	0.89	0.77	0.68	Frame Size
Ratio	364	424	501	578	683	809	956	1117	1320	1656	1957	2272	2559	
Input Power HP	**0.546**	**0.546**	**0.546**	**0.546**	**0.546**	**0.546**	**0.546**	**0.539**	**0.456**	**0.363**	**0.307**	**0.266**	**0.235**	
(kW)	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.402)***	***(0.340)***	***(0.271)***	***(0.229)***	***(0.198)***	***(0.175)***	
Output Torque in•lbs	6255	7280	8610	9910	11765	13890	16460	18935	18935	18935	18935	18935	18935	
(N•m)	*(707)*	*(823)*	*(973)*	*(1120)*	*(1330)*	*(1570)*	*(1860)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	**4B12DA**
Hollow Shaft OHL lbs	9755	9640	9485	9305	8990	8520	7845	6945	6945	6945	6945	6945	6945	
(N)	*(43400)*	*(42900)*	*(42200)*	*(41400)*	*(40000)*	*(37900)*	*(34900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	
Input Power HP	**1.65**	**1.41**	**1.20**	**1.04**	**0.882**	**0.744**	**0.630**	**0.539**	**0.456**	**0.363**	**0.307**	**0.266**	**0.235**	
(kW)	***(1.23)***	***(1.05)***	***(0.897)***	***(0.777)***	***(0.658)***	***(0.555)***	***(0.470)***	***(0.402)***	***(0.340)***	***(0.271)***	***(0.229)***	***(0.198)***	***(0.175)***	
Output Torque in•lbs	18935	18760	18935	18935	18935	18935	18935	18935	18935	18935	18935	18935	18935	
(N•m)	*(2140)*	*(2120)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	**4B12DB**
Hollow Shaft OHL lbs	6945	7035	6945	6945	6945	6945	6945	6945	6945	6945	6945	6945	6945	
(N)	*(30900)*	*(31300)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	
Input Power HP	**0.546**	**0.546**	**0.546**	**0.546**	**0.546**	**0.546**	**0.546**	**0.546**	**0.546**	**0.436**	**0.369**	**0.318**	**0.282**	
(kW)	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.325)***	***(0.275)***	***(0.237)***	***(0.210)***	
Output Torque in•lbs	6255	7280	8610	9910	11765	13890	16460	19200	22650	22740	22740	22740	22740	
(N•m)	*(707)*	*(823)*	*(973)*	*(1120)*	*(1330)*	*(1570)*	*(1860)*	*(2170)*	*(2560)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	**4B14DA**
Hollow Shaft OHL lbs	9755	9640	9485	9305	8990	8520	7845	6855	5055	5010	5010	5010	5010	
(N)	*(43400)*	*(42900)*	*(42200)*	*(41400)*	*(40000)*	*(37900)*	*(34900)*	*(30500)*	*(22500)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	
Input Power HP	**1.98**	**1.70**	**1.45**	**1.25**	**1.06**	**0.893**	**0.755**	**0.646**	**0.547**	**0.436**	**0.369**	**0.318**	**0.282**	
(kW)	***(1.48)***	***(1.27)***	***(1.08)***	***(0.932)***	***(0.789)***	***(0.666)***	***(0.563)***	***(0.482)***	***(0.408)***	***(0.325)***	***(0.275)***	***(0.237)***	***(0.210)***	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	**4B14DB**
Hollow Shaft OHL lbs	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	
(N)	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	
Input Power HP	**1.98**	**1.70**	**1.45**	**1.25**	**1.06**	**0.893**	**0.755**	**0.646**	**0.547**	**0.436**	**0.369**	**0.318**	**0.282**	
(kW)	***(1.48)***	***(1.27)***	***(1.08)***	***(0.932)***	***(0.789)***	***(0.666)***	***(0.563)***	***(0.482)***	***(0.408)***	***(0.325)***	***(0.275)***	***(0.237)***	***(0.210)***	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	**4B14DC**
Hollow Shaft OHL lbs	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	
(N)	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	
Input Power HP	**1.98**	**1.70**	**1.45**	**1.25**	**1.06**	**0.893**	**0.755**	**0.646**	**0.547**	**0.536**	**0.536**	**0.536**	**0.536**	
(kW)	***(1.48)***	***(1.27)***	***(1.08)***	***(0.932)***	***(0.789)***	***(0.666)***	***(0.563)***	***(0.482)***	***(0.408)***	***(0.400)***	***(0.400)***	***(0.400)***	***(0.400)***	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	**4B16DA**
Hollow Shaft OHL lbs	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	
(N)	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	

Note: The motor Input Powers listed in **GRAY** are to overcome breakaway torque requirements in cold temperature or high inertia applications.
A torque limiting device is recommended to protect the unit or the driven machine.

60 Hz, 1750 RPM Frame Size Selection Tables



Double Reduction
Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions

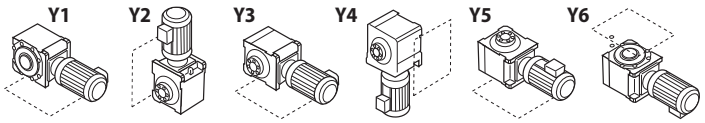
Dimensions on pages 2.168 - 2.177

Output RPM	0.59	0.50	0.40	0.34	0.27	0.24	0.20	0.16	0.14	0.11	0.10	0.08	0.07	Frame Size
Ratio	2944	3511	4365	5177	6472	7228	8880	10658	12184	15530	17966	21620	26492	
Input Power HP	**0.205**	**0.172**	**0.138**	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	—	—	4B12DA
(kW)	***(0.153)***	***(0.128)***	***(0.103)***	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	—	—	
Output Torque in•lbs	18935	18935	18935	18935	18935	18935	18935	18935	18935	18935	18935	—	—	
(N•m)	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	—	—	
Hollow Shaft OHL lbs	6945	6945	6945	6945	6945	6945	6945	6945	6945	6945	6945	—	—	
(N)	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	—	—	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	—	—	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	—	—	
Input Power HP	**0.205**	**0.172**	**0.138**	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	4B12DB
(kW)	***(0.153)***	***(0.128)***	***(0.103)***	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	
Output Torque in•lbs	18935	18935	18935	18935	18935	18935	18935	18935	18935	18935	18935	18935	18935	
(N•m)	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	
Hollow Shaft OHL lbs	6945	6945	6945	6945	6945	6945	6945	6945	6945	6945	6945	6945	6945	
(N)	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	
Input Power HP	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	—	—	4B14DA
(kW)	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	—	—	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	—	—	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	—	—	
Hollow Shaft OHL lbs	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	—	—	
(N)	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	—	—	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	—	—	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	—	—	
Input Power HP	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	4B14DB
(kW)	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	
Hollow Shaft OHL lbs	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	
(N)	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	
Input Power HP	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	4B14DC
(kW)	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	
Hollow Shaft OHL lbs	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	
(N)	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	
Input Power HP	0.536	0.536	0.536	0.536	0.536	0.536	0.268	0.268	0.268	0.268	0.268	0.268	0.268	4B16DA
(kW)	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	
Hollow Shaft OHL lbs	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	
(N)	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	

Note: The motor Input Powers listed in **GRAY** are to overcome breakaway torque requirements in cold temperature or high inertia applications.
A torque limiting device is recommended to protect the unit or the driven machine.

Frame Size Selection Tables 60 Hz, 1750 RPM

Double Reduction
Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions

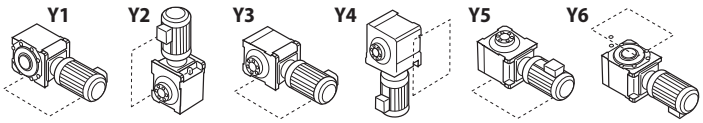


Dimensions on pages 2.168 - 2.177

Output RPM	4.81	4.13	3.49	3.03	2.56	2.16	1.83	1.57	1.33	1.06	0.89	0.77	0.68	Frame Size
Ratio	364	424	501	578	683	809	956	1117	1320	1656	1957	2272	2559	
Input Power HP	**1.98**	**1.70**	**1.45**	**1.25**	**1.06**	**0.893**	**0.755**	**0.646**	**0.547**	0.536	0.536	0.536	0.536	
(kW)	***(1.48)***	***(1.27)***	***(1.08)***	***(0.932)***	***(0.789)***	***(0.666)***	***(0.563)***	***(0.482)***	***(0.408)***	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	4B16DB
Hollow Shaft OHL lbs	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	
(N)	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	
Input Power HP	**1.98**	**1.70**	**1.45**	**1.25**	**1.06**	**0.893**	**0.755**	**0.646**	**0.547**	0.536	0.536	0.536	0.536	
(kW)	***(1.48)***	***(1.27)***	***(1.08)***	***(0.932)***	***(0.789)***	***(0.666)***	***(0.563)***	***(0.482)***	***(0.408)***	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	4B16DC
Hollow Shaft OHL lbs	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	
(N)	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	
Input Power HP	**0.546**	**0.546**	**0.546**	**0.546**	**0.546**	**0.546**	**0.546**	**0.546**	**0.546**	**0.546**	**0.546**	**0.546**	**0.512**	
(kW)	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.382)***	
Output Torque in•lbs	6255	7280	8610	9910	11765	13890	16460	19200	22650	28495	33625	39025	41235	
(N•m)	*(707)*	*(823)*	*(973)*	*(1120)*	*(1330)*	*(1570)*	*(1860)*	*(2170)*	*(2560)*	*(3220)*	*(3800)*	*(4410)*	*(4660)*	4C14DA
Hollow Shaft OHL lbs	16025	15980	15935	15845	15735	15575	15350	15060	14590	13645	12495	10945	10180	
(N)	*(71300)*	*(71100)*	*(70900)*	*(70500)*	*(70000)*	*(69300)*	*(68300)*	*(67000)*	*(64900)*	*(60700)*	*(55600)*	*(48700)*	*(45300)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	
Input Power HP	**2.04**	**2.04**	**2.04**	**2.04**	**1.90**	**1.58**	**1.34**	**1.17**	**0.992**	**0.791**	**0.669**	**0.577**	**0.512**	
(kW)	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.42)***	***(1.18)***	***(0.998)***	***(0.874)***	***(0.740)***	***(0.590)***	***(0.499)***	***(0.430)***	***(0.382)***	
Output Torque in•lbs	23360	27075	32035	36990	40885	40265	40265	41235	41235	41235	41235	41235	41235	
(N•m)	*(2640)*	*(3060)*	*(3620)*	*(4180)*	*(4620)*	*(4550)*	*(4550)*	*(4660)*	*(4660)*	*(4660)*	*(4660)*	*(4660)*	*(4660)*	4C14DB
Hollow Shaft OHL lbs	14500	13890	12880	11600	10315	10540	10540	10180	10180	10180	10180	10180	10180	
(N)	*(64500)*	*(61800)*	*(57300)*	*(51600)*	*(45900)*	*(46900)*	*(46900)*	*(45300)*	*(45300)*	*(45300)*	*(45300)*	*(45300)*	*(45300)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	
Input Power HP	**3.59**	**2.91**	**2.61**	**2.25**	**1.90**	**1.58**	**1.34**	**1.17**	**0.992**	**0.791**	**0.669**	**0.577**	**0.512**	
(kW)	***(2.68)***	***(2.17)***	***(1.95)***	***(1.68)***	***(1.42)***	***(1.18)***	***(0.998)***	***(0.874)***	***(0.740)***	***(0.590)***	***(0.499)***	***(0.430)***	***(0.382)***	
Output Torque in•lbs	41235	38935	41235	40885	40885	40265	40265	41235	41235	41235	41235	41235	41235	
(N•m)	*(4660)*	*(4400)*	*(4660)*	*(4620)*	*(4620)*	*(4550)*	*(4550)*	*(4660)*	*(4660)*	*(4660)*	*(4660)*	*(4660)*	*(4660)*	4C14DC
Hollow Shaft OHL lbs	10180	11015	10180	10315	10315	10540	10540	10180	10180	10180	10180	10180	10180	
(N)	*(45300)*	*(49000)*	*(45300)*	*(45900)*	*(45900)*	*(46900)*	*(46900)*	*(45300)*	*(45300)*	*(45300)*	*(45300)*	*(45300)*	*(45300)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	
Input Power HP	**2.04**	**2.04**	**2.04**	**2.04**	**2.04**	**1.78**	**1.52**	**1.29**	**1.09**	**0.872**	**0.738**	**0.636**	**0.565**	
(kW)	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.33)***	***(1.13)***	***(0.964)***	***(0.816)***	***(0.650)***	***(0.550)***	***(0.474)***	***(0.421)***	
Output Torque in•lbs	23360	27075	32035	36990	43715	45485	45485	45485	45485	45485	45485	45485	45485	
(N•m)	*(2640)*	*(3060)*	*(3620)*	*(4180)*	*(4940)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	4C16DA
Hollow Shaft OHL lbs	14500	13890	12880	11600	9190	8360	8360	8360	8360	8360	8360	8360	8360	
(N)	*(64500)*	*(61800)*	*(57300)*	*(51600)*	*(40900)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	

Note: The motor Input Powers listed in **GRAY** are to overcome breakaway torque requirements in cold temperature or high inertia applications.
A torque limiting device is recommended to protect the unit or the driven machine.

60 Hz, 1750 RPM Frame Size Selection Tables



Double Reduction
Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions

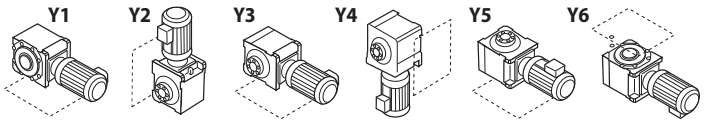
Dimensions on pages 2.168 - 2.177

Output RPM	0.59	0.50	0.40	0.34	0.27	0.24	0.20	0.16	0.14	0.11	0.10	0.08	0.07	Frame Size
Ratio	2944	3511	4365	5177	6472	7228	8880	10658	12184	15530	17966	21620	26492	
Input Power HP	0.536	0.536	0.536	0.536	0.536	0.536	0.268	0.268	0.268	0.268	0.268	0.268	0.268	4B16DB
(kW)	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	
Hollow Shaft OHL lbs	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	
(N)	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	
Input Power HP	0.536	0.536	0.536	0.536	0.536	0.536	0.268	0.268	0.268	0.268	0.268	0.268	0.268	4B16DC
(kW)	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	
Hollow Shaft OHL lbs	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	
(N)	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	
Input Power HP	**0.384**	**0.373**	**0.300**	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	—	—	4C14DA
(kW)	***(0.286)***	***(0.278)***	***(0.224)***	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	—	—	
Output Torque in•lbs	35575	41235	41235	37610	41235	41235	41235	37610	41235	37610	37610	—	—	
(N•m)	*(4020)*	*(4660)*	*(4660)*	*(4250)*	*(4660)*	*(4660)*	*(4660)*	*(4250)*	*(4660)*	*(4250)*	*(4250)*	—	—	
Hollow Shaft OHL lbs	11980	10180	10180	11420	10180	10180	10180	11420	10180	11420	11420	—	—	
(N)	*(53300)*	*(45300)*	*(45300)*	*(50800)*	*(45300)*	*(45300)*	*(45300)*	*(50800)*	*(45300)*	*(50800)*	*(50800)*	—	—	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	—	—	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	—	—	
Input Power HP	**0.445**	**0.373**	**0.300**	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	4C14DB
(kW)	***(0.332)***	***(0.278)***	***(0.224)***	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	41235	41235	41235	37610	41235	41235	41235	37610	41235	37610	37610	37610	37610	
(N•m)	*(4660)*	*(4660)*	*(4660)*	*(4250)*	*(4660)*	*(4660)*	*(4660)*	*(4250)*	*(4660)*	*(4250)*	*(4250)*	*(4250)*	*(4250)*	
Hollow Shaft OHL lbs	10180	10180	10180	11420	10180	10180	10180	11420	10180	11420	11420	11420	11420	
(N)	*(45300)*	*(45300)*	*(45300)*	*(50800)*	*(45300)*	*(45300)*	*(45300)*	*(50800)*	*(45300)*	*(50800)*	*(50800)*	*(50800)*	*(50800)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	
Input Power HP	**0.445**	**0.373**	**0.300**	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	4C14DC
(kW)	***(0.332)***	***(0.278)***	***(0.224)***	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	41235	41235	41235	37610	41235	41235	41235	37610	41235	37610	37610	37610	37610	
(N•m)	*(4660)*	*(4660)*	*(4660)*	*(4250)*	*(4660)*	*(4660)*	*(4660)*	*(4250)*	*(4660)*	*(4250)*	*(4250)*	*(4250)*	*(4250)*	
Hollow Shaft OHL lbs	10180	10180	10180	11420	10180	10180	10180	11420	10180	11420	11420	11420	11420	
(N)	*(45300)*	*(45300)*	*(45300)*	*(50800)*	*(45300)*	*(45300)*	*(45300)*	*(50800)*	*(45300)*	*(50800)*	*(50800)*	*(50800)*	*(50800)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	
Input Power HP	0.536	0.536	0.536	0.536	0.536	0.536	0.268	0.268	0.268	0.268	0.268	0.268	0.268	4C16DA
(kW)	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	
Hollow Shaft OHL lbs	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	
(N)	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	

Note: The motor Input Powers listed in **GRAY** are to overcome breakaway torque requirements in cold temperature or high inertia applications.
A torque limiting device is recommended to protect the unit or the driven machine.

Frame Size Selection Tables 60 Hz, 1750 RPM

Double Reduction
Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions

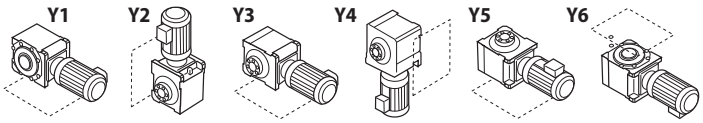


Dimensions on pages 2.168 - 2.177

Output RPM	4.81	4.13	3.49	3.03	2.56	2.16	1.83	1.57	1.33	1.06	0.89	0.77	0.68	Frame Size
Ratio	364	424	501	578	683	809	956	1117	1320	1656	1957	2272	2559	
Input Power HP	**3.97**	**3.41**	**2.88**	**2.49**	**2.12**	**1.78**	**1.52**	**1.29**	**1.09**	**0.872**	**0.738**	**0.636**	**0.565**	
(kW)	***(2.96)***	***(2.54)***	***(2.15)***	***(1.86)***	***(1.58)***	***(1.33)***	***(1.13)***	***(0.964)***	***(0.816)***	***(0.650)***	***(0.550)***	***(0.474)***	***(0.421)***	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	**4C16DB**
Hollow Shaft OHL lbs	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	
(N)	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	
Input Power HP	**3.97**	**3.41**	**2.88**	**2.49**	**2.12**	**1.78**	**1.52**	**1.29**	**1.09**	**0.872**	**0.738**	**0.636**	**0.565**	
(kW)	***(2.96)***	***(2.54)***	***(2.15)***	***(1.86)***	***(1.58)***	***(1.33)***	***(1.13)***	***(0.964)***	***(0.816)***	***(0.650)***	***(0.550)***	***(0.474)***	***(0.421)***	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	**4C16DC**
Hollow Shaft OHL lbs	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	
(N)	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	
Input Power HP	**2.04**	**2.04**	**2.04**	**2.04**	**2.04**	**1.78**	**1.52**	**1.29**	**1.09**	**0.872**	**0.738**	**0.636**	**0.565**	
(kW)	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.33)***	***(1.13)***	***(0.964)***	***(0.816)***	***(0.650)***	***(0.550)***	***(0.474)***	***(0.421)***	
Output Torque in•lbs	23360	27075	32035	36990	43715	45485	45485	45485	45485	45485	45485	45485	45485	
(N•m)	*(2640)*	*(3060)*	*(3620)*	*(4180)*	*(4940)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	**4C17DA**
Hollow Shaft OHL lbs	14500	13890	12880	11600	9190	8360	8360	8360	8360	8360	8360	8360	8360	
(N)	*(64500)*	*(61800)*	*(57300)*	*(51600)*	*(40900)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	
Input Power HP	**3.97**	**3.41**	**2.88**	**2.49**	**2.12**	**1.78**	**1.52**	**1.29**	**1.09**	**0.872**	**0.738**	**0.636**	**0.565**	
(kW)	***(2.96)***	***(2.54)***	***(2.15)***	***(1.86)***	***(1.58)***	***(1.33)***	***(1.13)***	***(0.964)***	***(0.816)***	***(0.650)***	***(0.550)***	***(0.474)***	***(0.421)***	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	**4C17DB**
Hollow Shaft OHL lbs	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	
(N)	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	
Input Power HP	**3.97**	**3.41**	**2.88**	**2.49**	**2.12**	**1.78**	**1.52**	**1.29**	**1.09**	**0.872**	**0.738**	**0.636**	**0.565**	
(kW)	***(2.96)***	***(2.54)***	***(2.15)***	***(1.86)***	***(1.58)***	***(1.33)***	***(1.13)***	***(0.964)***	***(0.816)***	***(0.650)***	***(0.550)***	***(0.474)***	***(0.421)***	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	**4C17DC**
Hollow Shaft OHL lbs	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	
(N)	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	
Input Power HP	**2.04**	**2.04**	**2.04**	**2.04**	**2.04**	**2.04**	**2.04**	**1.80**	**1.52**	**1.21**	**1.03**	**0.884**	**0.784**	
(kW)	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.34)***	***(1.13)***	***(0.904)***	***(0.765)***	***(0.659)***	***(0.585)***	
Output Torque in•lbs	23360	27075	32035	36990	43715	51770	61150	63270	63270	63270	63270	63270	63270	
(N•m)	*(2640)*	*(3060)*	*(3620)*	*(4180)*	*(4940)*	*(5850)*	*(6910)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	**4D16DA**
Hollow Shaft OHL lbs	21265	20970	20500	19940	18995	17600	15440	14855	14855	14855	14855	14855	14855	
(N)	*(94600)*	*(93300)*	*(91200)*	*(88700)*	*(84500)*	*(78300)*	*(68700)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	

Note: The motor Input Powers listed in **GRAY** are to overcome breakaway torque requirements in cold temperature or high inertia applications.
A torque limiting device is recommended to protect the unit or the driven machine.

60 Hz, 1750 RPM Frame Size Selection Tables



Double Reduction
Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions

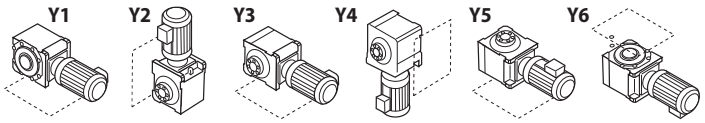
Dimensions on pages 2.168 - 2.177

Output RPM	0.59	0.50	0.40	0.34	0.27	0.24	0.20	0.16	0.14	0.11	0.10	0.08	0.07	Frame Size
Ratio	2944	3511	4365	5177	6472	7228	8880	10658	12184	15530	17966	21620	26492	
Input Power HP	0.536	0.536	0.536	0.536	0.536	0.536	0.268	0.268	0.268	0.268	0.268	0.268	0.268	4C16DB
(kW)	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	
Hollow Shaft OHL lbs	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	
(N)	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	
Input Power HP	0.536	0.536	0.536	0.536	0.536	0.536	0.268	0.268	0.268	0.268	0.268	0.268	0.268	4C16DC
(kW)	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	
Hollow Shaft OHL lbs	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	
(N)	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	
Input Power HP	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.268	0.268	0.268	0.268	0.268	4C17DA
(kW)	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	
Hollow Shaft OHL lbs	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	
(N)	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	
Input Power HP	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.268	0.268	0.268	0.268	0.268	4C17DB
(kW)	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	
Hollow Shaft OHL lbs	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	
(N)	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	
Input Power HP	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.268	0.268	0.268	0.268	0.268	4C17DC
(kW)	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	
Hollow Shaft OHL lbs	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	
(N)	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	
Input Power HP	**0.681**	**0.571**	0.536	0.536	0.536	0.536	0.268	0.268	0.268	0.268	0.268	0.268	0.268	4D16DA
(kW)	***(0.508)***	***(0.426)***	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	63270	63270	63270	61770	63270	63270	63270	61770	63270	61770	61770	61770	61770	
(N•m)	*(7150)*	*(7150)*	*(7150)*	*(6980)*	*(7150)*	*(7150)*	*(7150)*	*(6980)*	*(7150)*	*(6980)*	*(6980)*	*(6980)*	*(6980)*	
Hollow Shaft OHL lbs	14855	14855	14855	15260	14855	14855	14855	15260	14855	15260	15260	15260	15260	
(N)	*(66100)*	*(66100)*	*(66100)*	*(67900)*	*(66100)*	*(66100)*	*(66100)*	*(67900)*	*(66100)*	*(67900)*	*(67900)*	*(67900)*	*(67900)*	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	

Note: The motor Input Powers listed in **GRAY** are to overcome breakaway torque requirements in cold temperature or high inertia applications.
A torque limiting device is recommended to protect the unit or the driven machine.

Frame Size Selection Tables 60 Hz, 1750 RPM

Double Reduction
Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions

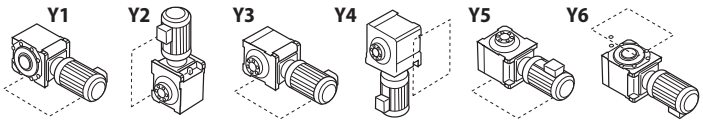


Dimensions on pages 2.168 - 2.177

Output RPM	4.81	4.13	3.49	3.03	2.56	2.16	1.83	1.57	1.33	1.06	0.89	0.77	0.68	Frame Size
Ratio	364	424	501	578	683	809	956	1117	1320	1656	1957	2272	2559	
Input Power HP	**4.26**	**4.26**	**4.01**	**3.47**	**2.94**	**2.48**	**2.11**	**1.80**	**1.52**	**1.21**	**1.03**	**0.884**	**0.784**	
(kW)	***(3.18)***	***(3.18)***	***(2.99)***	***(2.59)***	***(2.19)***	***(1.85)***	***(1.57)***	***(1.34)***	***(1.13)***	***(0.904)***	***(0.765)***	***(0.659)***	***(0.585)***	
Output Torque in•lbs	48935	56900	63270	63270	63270	63270	63270	63270	63270	63270	63270	63270	63270	
(N•m)	*(5530)*	*(6430)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	4D16DB
Hollow Shaft OHL lbs	18115	16500	14855	14855	14855	14855	14855	14855	14855	14855	14855	14855	14855	
(N)	*(80600)*	*(73400)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	
Input Power HP	**5.51**	**4.73**	**4.01**	**3.47**	**2.94**	**2.48**	**2.11**	**1.80**	**1.52**	**1.21**	**1.03**	**0.884**	**0.784**	
(kW)	***(4.11)***	***(3.53)***	***(2.99)***	***(2.59)***	***(2.19)***	***(1.85)***	***(1.57)***	***(1.34)***	***(1.13)***	***(0.904)***	***(0.765)***	***(0.659)***	***(0.585)***	
Output Torque in•lbs	63270	63270	63270	63270	63270	63270	63270	63270	63270	63270	63270	63270	63270	
(N•m)	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	4D16DC
Hollow Shaft OHL lbs	14855	14855	14855	14855	14855	14855	14855	14855	14855	14855	14855	14855	14855	
(N)	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	
Input Power HP	**2.04**	**2.04**	**2.04**	**2.04**	**2.04**	**2.04**	**2.04**	**2.04**	**1.85**	**1.48**	**1.25**	**1.08**	**0.957**	
(kW)	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.38)***	***(1.10)***	***(0.933)***	***(0.804)***	***(0.714)***	
Output Torque in•lbs	23360	27075	32035	36990	43715	51770	61150	71680	77165	77165	77165	77165	77165	
(N•m)	*(2640)*	*(3060)*	*(3620)*	*(4180)*	*(4940)*	*(5850)*	*(6910)*	*(8100)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	4D17DA
Hollow Shaft OHL lbs	21265	20970	20500	19940	18995	17600	15440	12115	9485	9485	9485	9485	9485	
(N)	*(94600)*	*(93300)*	*(91200)*	*(88700)*	*(84500)*	*(78300)*	*(68700)*	*(53900)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	
Input Power HP	**4.26**	**4.26**	**4.26**	**4.24**	**3.59**	**3.03**	**2.56**	**2.20**	**1.85**	**1.48**	**1.25**	**1.08**	**0.957**	
(kW)	***(3.18)***	***(3.18)***	***(3.18)***	***(3.16)***	***(2.68)***	***(2.26)***	***(1.91)***	***(1.64)***	***(1.38)***	***(1.10)***	***(0.933)***	***(0.804)***	***(0.714)***	
Output Torque in•lbs	48935	56900	67255	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	
(N•m)	*(5530)*	*(6430)*	*(7600)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	4D17DB
Hollow Shaft OHL lbs	18115	16500	13645	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	
(N)	*(80600)*	*(73400)*	*(60700)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	
Input Power HP	**6.73**	**5.78**	**4.89**	**4.24**	**3.59**	**3.03**	**2.56**	**2.20**	**1.85**	**1.48**	**1.25**	**1.08**	**0.957**	
(kW)	***(5.02)***	***(4.31)***	***(3.65)***	***(3.16)***	***(2.68)***	***(2.26)***	***(1.91)***	***(1.64)***	***(1.38)***	***(1.10)***	***(0.933)***	***(0.804)***	***(0.714)***	
Output Torque in•lbs	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	4D17DC
Hollow Shaft OHL lbs	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	
(N)	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	
Input Power HP	—	—	—	—	—	**3.03**	**2.56**	**2.20**	**1.85**	**1.48**	**1.25**	**1.08**	**0.96**	
(kW)	—	—	—	—	—	***(2.26)***	***(1.91)***	***(1.64)***	***(1.38)***	***(1.10)***	***(0.933)***	***(0.804)***	***(0.714)***	
Output Torque in•lbs	—	—	—	—	—	77165	77165	77165	77165	77165	77165	77165	77165	
(N•m)	—	—	—	—	—	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	4D18DA
Hollow Shaft OHL lbs	—	—	—	—	—	9485	9485	9485	9485	9485	9485	9485	9485	
(N)	—	—	—	—	—	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	
Solid Shaft OHL lbs	—	—	—	—	—	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	—	—	—	—	—	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	

Note: The motor Input Powers listed in **GRAY** are to overcome breakaway torque requirements in cold temperature or high inertia applications.
A torque limiting device is recommended to protect the unit or the driven machine.

60 Hz, 1750 RPM Frame Size Selection Tables



Double Reduction
Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions

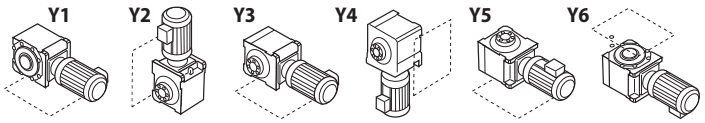
Dimensions on pages 2.168 - 2.177

Output RPM	0.59	0.50	0.40	0.34	0.27	0.24	0.20	0.16	0.14	0.11	0.10	0.08	0.07	Frame Size
Ratio	2944	3511	4365	5177	6472	7228	8880	10658	12184	15530	17966	21620	26492	
Input Power HP	**0.681**	**0.571**	0.536	0.536	0.536	0.536	0.268	0.268	0.268	0.268	0.268	0.268	0.268	4D16DB
(kW)	***(0.508)***	***(0.426)***	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	63270	63270	63270	61770	63270	63270	63270	61770	63270	61770	61770	61770	61770	
(N•m)	*(7150)*	*(7150)*	*(7150)*	*(6980)*	*(7150)*	*(7150)*	*(7150)*	*(6980)*	*(7150)*	*(6980)*	*(6980)*	*(6980)*	*(6980)*	
Hollow Shaft OHL lbs	14855	14855	14855	15260	14855	14855	14855	15260	14855	15260	15260	15260	15260	
(N)	*(66100)*	*(66100)*	*(66100)*	*(67900)*	*(66100)*	*(66100)*	*(66100)*	*(67900)*	*(66100)*	*(67900)*	*(67900)*	*(67900)*	*(67900)*	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	
Input Power HP	**0.681**	**0.571**	0.536	0.536	0.536	0.536	0.268	0.268	0.268	0.268	0.268	0.268	0.268	4D16DC
(kW)	***(0.508)***	***(0.426)***	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	63270	63270	63270	61770	63270	63270	63270	61770	63270	61770	61770	61770	61770	
(N•m)	*(7150)*	*(7150)*	*(7150)*	*(6980)*	*(7150)*	*(7150)*	*(7150)*	*(6980)*	*(7150)*	*(6980)*	*(6980)*	*(6980)*	*(6980)*	
Hollow Shaft OHL lbs	14855	14855	14855	15260	14855	14855	14855	15260	14855	15260	15260	15260	15260	
(N)	*(66100)*	*(66100)*	*(66100)*	*(67900)*	*(66100)*	*(66100)*	*(66100)*	*(67900)*	*(66100)*	*(67900)*	*(67900)*	*(67900)*	*(67900)*	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	
Input Power HP	**0.831**	**0.697**	**0.561**	0.536	0.536	0.536	0.536	0.536	0.268	0.268	0.268	0.268	0.268	4D17DA
(kW)	***(0.620)***	***(0.520)***	***(0.418)***	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	
Hollow Shaft OHL lbs	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	
(N)	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	
Input Power HP	**0.831**	**0.697**	**0.561**	0.536	0.536	0.536	0.536	0.536	0.268	0.268	0.268	0.268	0.268	4D17DB
(kW)	***(0.620)***	***(0.520)***	***(0.418)***	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	
Hollow Shaft OHL lbs	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	
(N)	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	
Input Power HP	**0.831**	**0.697**	**0.561**	0.536	0.536	0.536	0.536	0.536	0.268	0.268	0.268	0.268	0.268	4D17DC
(kW)	***(0.620)***	***(0.520)***	***(0.418)***	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	
Hollow Shaft OHL lbs	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	
(N)	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	
Input Power HP	1.01	1.01	1.01	1.01	1.01	1.01	0.536	0.536	0.536	0.536	0.536	0.536	0.536	4D18DA
(kW)	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	
Output Torque in•lbs	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	
Hollow Shaft OHL lbs	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	
(N)	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	

Note: The motor Input Powers listed in **GRAY** are to overcome breakaway torque requirements in cold temperature or high inertia applications.
A torque limiting device is recommended to protect the unit or the driven machine.

Frame Size Selection Tables 60 Hz, 1750 RPM

Double Reduction
Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions

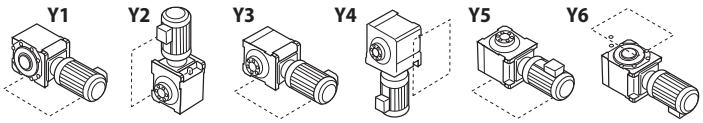


Dimensions on pages 2.168 - 2.177

Output RPM	4.81	4.13	3.49	3.03	2.56	2.16	1.83	1.57	1.33	1.06	0.89	0.77	0.68	Frame Size
Ratio	364	424	501	578	683	809	956	1117	1320	1656	1957	2272	2559	
Input Power HP	**6.73**	**5.78**	**4.89**	**4.24**	**3.59**	**3.03**	**2.56**	**2.20**	**1.85**	—	—	—	—	4D18DB
(kW)	***(5.02)***	***(4.31)***	***(3.65)***	***(3.16)***	***(2.68)***	***(2.26)***	***(1.91)***	***(1.64)***	***(1.38)***	—	—	—	—	
Output Torque in•lbs	77165	77165	77165	77165	77165	77165	77165	77165	77165	—	—	—	—	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	—	—	—	—	
Hollow Shaft OHL lbs	9485	9485	9485	9485	9485	9485	9485	9485	9485	—	—	—	—	
(N)	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	—	—	—	—	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	—	—	—	—	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	—	—	—	—	
Input Power HP	**2.04**	**2.04**	**2.04**	**2.04**	**2.04**	**2.04**	**2.04**	**2.04**	**2.04**	**1.81**	**1.54**	**1.32**	**1.17**	4E17DA
(kW)	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.35)***	***(1.15)***	***(0.987)***	***(0.876)***	
Output Torque in•lbs	23360	27075	32035	36990	43715	51770	61150	71680	84775	94690	94690	94690	94690	
(N•m)	*(2640)*	*(3060)*	*(3620)*	*(4180)*	*(4940)*	*(5850)*	*(6910)*	*(8100)*	*(9580)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	
Hollow Shaft OHL lbs	22705	22435	22185	21940	21580	21175	20705	20165	19510	18995	18995	18995	18995	
(N)	*(101000)*	*(99800)*	*(98700)*	*(97600)*	*(96000)*	*(94200)*	*(92100)*	*(89700)*	*(86800)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	
Solid Shaft OHL lbs	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	
(N)	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	
Input Power HP	**4.26**	**4.26**	**4.26**	**4.26**	**4.26**	**3.71**	**3.15**	**2.70**	**2.28**	**1.81**	**1.54**	**1.32**	**1.17**	4E17DB
(kW)	***(3.18)***	***(3.18)***	***(3.18)***	***(3.18)***	***(3.18)***	***(2.77)***	***(2.35)***	***(2.01)***	***(1.70)***	***(1.35)***	***(1.15)***	***(0.987)***	***(0.876)***	
Output Torque in•lbs	48935	56900	67255	77610	92035	94690	94690	94690	94690	94690	94690	94690	94690	
(N•m)	*(5530)*	*(6430)*	*(7600)*	*(8770)*	*(10400)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	
Hollow Shaft OHL lbs	21330	20925	20390	19870	19150	18995	18995	18995	18995	18995	18995	18995	18995	
(N)	*(94900)*	*(93100)*	*(90700)*	*(88400)*	*(85200)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	
Solid Shaft OHL lbs	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	
(N)	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	
Input Power HP	**8.26**	**7.09**	**6.01**	**5.20**	**4.40**	**3.71**	**3.15**	**2.70**	**2.28**	**1.81**	**1.54**	**1.32**	**1.17**	4E17DC
(kW)	***(6.16)***	***(5.29)***	***(4.48)***	***(3.88)***	***(3.28)***	***(2.77)***	***(2.35)***	***(2.01)***	***(1.70)***	***(1.35)***	***(1.15)***	***(0.987)***	***(0.876)***	
Output Torque in•lbs	94690	94690	94690	94690	94690	94690	94690	94690	94690	94690	94690	94690	94690	
(N•m)	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	
Hollow Shaft OHL lbs	18995	18995	18995	18995	18995	18995	18995	18995	18995	18995	18995	18995	18995	
(N)	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	
Solid Shaft OHL lbs	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	
(N)	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	
Input Power HP	—	—	—	—	—	**4.02**	**3.41**	**2.92**	**2.47**	**1.97**	**1.66**	**1.43**	**1.27**	4E18DA
(kW)	—	—	—	—	—	***(3.00)***	***(2.54)***	***(2.18)***	***(1.84)***	***(1.47)***	***(1.24)***	***(1.07)***	***(0.95)***	
Output Torque in•lbs	—	—	—	—	—	102655	102655	102655	102655	102655	102655	102655	102655	
(N•m)	—	—	—	—	—	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	
Hollow Shaft OHL lbs	—	—	—	—	—	16995	16995	16995	16995	16995	16995	16995	16995	
(N)	—	—	—	—	—	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	
Solid Shaft OHL lbs	—	—	—	—	—	21920	21920	21920	21920	21920	21920	21920	21920	
(N)	—	—	—	—	—	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	
Input Power HP	**8.94**	**7.70**	**6.50**	**5.65**	**4.77**	**4.02**	**3.41**	**2.92**	**2.47**	—	—	—	—	4E18DB
(kW)	***(6.67)***	***(5.74)***	***(4.85)***	***(4.21)***	***(3.56)***	***(3.00)***	***(2.54)***	***(2.18)***	***(1.84)***	—	—	—	—	
Output Torque in•lbs	102655	102655	102655	102655	102655	102655	102655	102655	102655	—	—	—	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	—	—	—	
Hollow Shaft OHL lbs	16995	16995	16995	16995	16995	16995	16995	16995	16995	—	—	—	—	
(N)	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	—	—	—	—	
Solid Shaft OHL lbs	21920	21920	21920	21920	21920	21920	21920	21920	21920	—	—	—	—	
(N)	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	—	—	—	—	

Note: The motor Input Powers listed in GRAY are to overcome breakaway torque requirements in cold temperature or high inertia applications.
A torque limiting device is recommended to protect the unit or the driven machine.

60 Hz, 1750 RPM Frame Size Selection Tables



Double Reduction
Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions

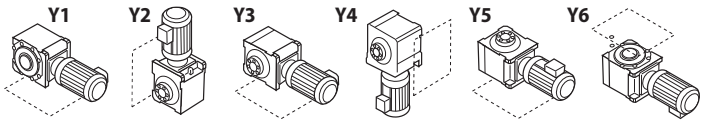
Dimensions on pages 2.168 - 2.177

Output RPM	0.59	0.50	0.40	0.34	0.27	0.24	0.20	0.16	0.14	0.11	0.10	0.08	0.07	Frame Size
Ratio	2944	3511	4365	5177	6472	7228	8880	10658	12184	15530	17966	21620	26492	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4D18DB
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**1.02**	**0.856**	**0.688**	**0.581**	0.536	0.536	0.536	0.536	0.268	0.268	0.268	0.268	0.268	4E17DA
(kW)	***(0.761)***	***(0.638)***	***(0.513)***	***(0.433)***	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	94690	94690	94690	94690	94690	94690	94690	94690	94690	94690	94690	94690	94690	
(N•m)	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	
Hollow Shaft OHL lbs	18995	18995	18995	18995	18995	18995	18995	18995	18995	18995	18995	18995	18995	
(N)	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	
Solid Shaft OHL lbs	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	
(N)	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	
Input Power HP	**1.02**	**0.856**	**0.688**	**0.581**	0.536	0.536	0.536	0.536	0.268	0.268	0.268	0.268	0.268	4E17DB
(kW)	***(0.761)***	***(0.638)***	***(0.513)***	***(0.433)***	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	94690	94690	94690	94690	94690	94690	94690	94690	94690	94690	94690	94690	94690	
(N•m)	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	
Hollow Shaft OHL lbs	18995	18995	18995	18995	18995	18995	18995	18995	18995	18995	18995	18995	18995	
(N)	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	
Solid Shaft OHL lbs	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	
(N)	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	
Input Power HP	**1.02**	**0.856**	**0.688**	**0.581**	0.536	0.536	0.536	0.536	0.268	0.268	0.268	0.268	0.268	4E17DC
(kW)	***(0.761)***	***(0.638)***	***(0.513)***	***(0.433)***	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	94690	94690	94690	94690	94690	94690	94690	94690	94690	94690	94690	94690	94690	
(N•m)	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	
Hollow Shaft OHL lbs	18995	18995	18995	18995	18995	18995	18995	18995	18995	18995	18995	18995	18995	
(N)	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	
Solid Shaft OHL lbs	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	
(N)	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	
Input Power HP	**1.11**	1.01	1.01	1.01	1.01	1.01	0.536	0.536	0.536	0.536	0.536	0.536	0.536	4E18DA
(kW)	***(0.825)***	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	
Output Torque in•lbs	102655	102655	102655	102655	102655	102655	102655	102655	102655	102655	102655	102655	102655	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	
Hollow Shaft OHL lbs	16995	16995	16995	16995	16995	16995	16995	16995	16995	16995	16995	16995	16995	
(N)	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	
Solid Shaft OHL lbs	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	
(N)	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4E18DB
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	

Note: The motor Input Powers listed in **GRAY** are to overcome breakaway torque requirements in cold temperature or high inertia applications.
A torque limiting device is recommended to protect the unit or the driven machine.

Frame Size Selection Tables 60 Hz, 1750 RPM

Double Reduction
Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions

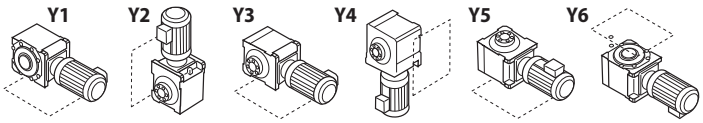


Dimensions on pages 2.168 - 2.177

Output RPM	4.81	4.13	3.49	3.03	2.56	2.16	1.83	1.57	1.33	1.06	0.89	0.77	0.68	Frame Size
Ratio	364	424	501	578	683	809	956	1117	1320	1656	1957	2272	2559	
Input Power HP	—	—	—	—	**4.77**	**4.02**	**3.41**	**2.92**	**2.47**	**1.97**	**1.66**	**1.43**	**1.27**	
(kW)	—	—	—	—	***(3.56)***	***(3.00)***	***(2.54)***	***(2.18)***	***(1.84)***	***(1.47)***	***(1.24)***	***(1.07)***	***(0.95)***	
Output Torque in•lbs	—	—	—	—	102655	102655	102655	102655	102655	102655	102655	102655	102655	
(N•m)	—	—	—	—	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	**4E19DA**
Hollow Shaft OHL lbs	—	—	—	—	16995	16995	16995	16995	16995	16995	16995	16995	16995	
(N)	—	—	—	—	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	
Solid Shaft OHL lbs	—	—	—	—	21920	21920	21920	21920	21920	21920	21920	21920	21920	
(N)	—	—	—	—	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	
Input Power HP	**8.94**	**7.70**	**6.50**	**5.65**	**4.77**	**4.02**	**3.41**	**2.92**	—	—	—	—	—	
(kW)	***(6.67)***	***(5.74)***	***(4.85)***	***(4.21)***	***(3.56)***	***(3.00)***	***(2.54)***	***(2.18)***	—	—	—	—	—	
Output Torque in•lbs	102655	102655	102655	102655	102655	102655	102655	102655	—	—	—	—	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	—	—	—	—	**4E19DB**
Hollow Shaft OHL lbs	16995	16995	16995	16995	16995	16995	16995	16995	—	—	—	—	—	
(N)	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	—	—	—	—	—	
Solid Shaft OHL lbs	21920	21920	21920	21920	21920	21920	21920	21920	—	—	—	—	—	
(N)	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	—	—	—	—	—	
Input Power HP	—	—	—	—	—	**4.26**	**4.26**	**4.26**	**3.62**	**2.88**	**2.44**	**2.11**	**1.86**	
(kW)	—	—	—	—	—	***(3.18)***	***(3.18)***	***(3.18)***	***(2.70)***	***(2.15)***	***(1.82)***	***(1.57)***	***(1.39)***	
Output Torque in•lbs	—	—	—	—	—	108850	128315	150440	150440	150440	150440	150440	150440	
(N•m)	—	—	—	—	—	*(12300)*	*(14500)*	*(17000)*	*(17000)*	*(17000)*	*(17000)*	*(17000)*	*(17000)*	**4F18DA**
Hollow Shaft OHL lbs	—	—	—	—	—	32145	32145	30570	30570	30570	30570	30570	30570	
(N)	—	—	—	—	—	*(143000)*	*(143000)*	*(136000)*	*(136000)*	*(136000)*	*(136000)*	*(136000)*	*(136000)*	
Solid Shaft OHL lbs	—	—	—	—	—	29530	29531	29532	29533	29534	29535	29536	29537	
(N)	—	—	—	—	—	*(131340)*	*(131350)*	*(131350)*	*(131360)*	*(131360)*	*(131370)*	*(131370)*	*(131380)*	
Input Power HP	**12.9**	**10.8**	**9.36**	**8.14**	**6.89**	**5.91**	**5.00**	**4.28**	**3.62**	—	—	—	—	
(kW)	***(9.60)***	***(8.09)***	***(6.98)***	***(6.07)***	***(5.14)***	***(4.41)***	***(3.73)***	***(3.19)***	***(2.70)***	—	—	—	—	
Output Torque in•lbs	147785	145130	147785	147785	147785	150440	150440	150440	150440	—	—	—	—	
(N•m)	*(16700)*	*(16400)*	*(16700)*	*(16700)*	*(16700)*	*(17000)*	*(17000)*	*(17000)*	*(17000)*	—	—	—	—	**4F18DB**
Hollow Shaft OHL lbs	31245	31695	31245	31020	31020	30570	30570	30570	30570	—	—	—	—	
(N)	*(139000)*	*(141000)*	*(139000)*	*(138000)*	*(138000)*	*(136000)*	*(136000)*	*(136000)*	*(136000)*	—	—	—	—	
Solid Shaft OHL lbs	29530	29531	29532	29533	29534	29535	29536	29537	29538	—	—	—	—	
(N)	*(131340)*	*(131350)*	*(131350)*	*(131360)*	*(131360)*	*(131370)*	*(131370)*	*(131380)*	*(131380)*	—	—	—	—	
Input Power HP	—	—	—	—	**7.16**	**6.05**	**5.11**	**4.37**	**3.70**	**2.95**	**2.49**	**2.15**	**1.90**	
(kW)	—	—	—	—	***(5.34)***	***(4.51)***	***(3.81)***	***(3.26)***	***(2.76)***	***(2.20)***	***(1.86)***	***(1.60)***	***(1.42)***	
Output Torque in•lbs	—	—	—	—	153980	153980	153980	153980	153980	153980	153980	153980	153980	
(N•m)	—	—	—	—	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	**4F19DA**
Hollow Shaft OHL lbs	—	—	—	—	29670	29670	29670	29670	29670	29670	29670	29670	29670	
(N)	—	—	—	—	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	
Solid Shaft OHL lbs	—	—	—	—	29530	29531	29532	29533	29534	29535	29536	29537	29538	
(N)	—	—	—	—	*(131340)*	*(131350)*	*(131350)*	*(131360)*	*(131360)*	*(131370)*	*(131370)*	*(131380)*	*(131380)*	
Input Power HP	**13.4**	**11.5**	**9.76**	**8.46**	**7.16**	**6.05**	**5.11**	**4.37**	—	—	—	—	—	
(kW)	***(10.0)***	***(8.60)***	***(7.28)***	***(6.31)***	***(5.34)***	***(4.51)***	***(3.81)***	***(3.26)***	—	—	—	—	—	
Output Torque in•lbs	153980	153980	153980	153980	153980	153980	153980	153980	—	—	—	—	—	
(N•m)	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	—	—	—	—	—	**4F19DB**
Hollow Shaft OHL lbs	29670	29670	29670	29670	29670	29670	29670	29670	—	—	—	—	—	
(N)	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	—	—	—	—	—	
Solid Shaft OHL lbs	29530	29531	29532	29533	29534	29535	29536	29537	—	—	—	—	—	
(N)	*(131340)*	*(131350)*	*(131350)*	*(131360)*	*(131360)*	*(131370)*	*(131370)*	*(131380)*	—	—	—	—	—	

Note: The motor Input Powers listed in **GRAY** are to overcome breakaway torque requirements in cold temperature or high inertia applications.
A torque limiting device is recommended to protect the unit or the driven machine.

60 Hz, 1750 RPM Frame Size Selection Tables



Double Reduction
Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions

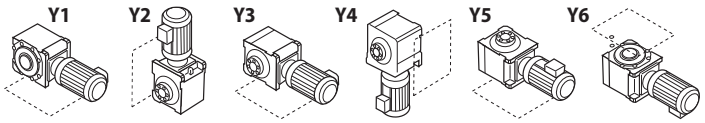
Dimensions on pages 2.168 - 2.177

Output RPM	0.59	0.50	0.40	0.34	0.27	0.24	0.20	0.16	0.14	0.11	0.10	0.08	0.07	Frame Size
Ratio	2944	3511	4365	5177	6472	7228	8880	10658	12184	15530	17966	21620	26492	
Input Power HP	**1.11**	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	
(kW)	***(0.825)***	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	
Output Torque in•lbs	102655	102655	102655	102655	102655	102655	102655	102655	102655	102655	102655	102655	102655	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	
Hollow Shaft OHL lbs	16995	16995	16995	16995	16995	16995	16995	16995	16995	16995	16995	16995	16995	4E19DA
(N)	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	
Solid Shaft OHL lbs	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	
(N)	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	4E19DB
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**1.62**	**1.35**	**1.09**	1.01	1.01	1.01	**0.538**	0.536	0.536	0.536	0.536	0.536	0.536	
(kW)	***(1.21)***	***(1.01)***	***(0.816)***	*(0.750)*	*(0.750)*	*(0.750)*	***(0.401)***	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	
Output Torque in•lbs	150440	150440	150440	150440	150440	150440	150440	150440	150440	150440	150440	150440	150440	
(N•m)	*(17000)*	*(17000)*	*(17000)*	*(17000)*	*(17000)*	*(17000)*	*(17000)*	*(17000)*	*(17000)*	*(17000)*	*(17000)*	*(17000)*	*(17000)*	
Hollow Shaft OHL lbs	30570	30570	30570	30570	30570	30570	30570	30570	30570	30570	30570	30570	30570	4F18DA
(N)	*(136000)*	*(136000)*	*(136000)*	*(136000)*	*(136000)*	*(136000)*	*(136000)*	*(136000)*	*(136000)*	*(136000)*	*(136000)*	*(136000)*	*(136000)*	
Solid Shaft OHL lbs	29538	29539	29540	29541	29542	29543	29544	29545	29546	29547	29548	29549	29550	
(N)	*(131380)*	*(131380)*	*(131390)*	*(131390)*	*(131400)*	*(131400)*	*(131410)*	*(131410)*	*(131420)*	*(131420)*	*(131420)*	*(131430)*	*(131430)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	4F18DB
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**1.66**	**1.39**	**1.12**	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	
(kW)	***(1.24)***	***(1.04)***	***(0.835)***	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	
Output Torque in•lbs	153980	153980	153980	153980	153980	153980	153980	153980	153980	153980	153980	153980	153980	
(N•m)	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	
Hollow Shaft OHL lbs	29670	29670	29670	29670	29670	29670	29670	29670	29670	29670	29670	29670	29670	4F19DA
(N)	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	
Solid Shaft OHL lbs	29539	29540	29541	29542	29543	29544	29545	29546	29547	29548	29549	29550	29551	
(N)	*(131380)*	*(131390)*	*(131390)*	*(131400)*	*(131400)*	*(131410)*	*(131410)*	*(131420)*	*(131420)*	*(131420)*	*(131430)*	*(131430)*	*(131440)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	4F19DB
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	

Note: The motor Input Powers listed in **GRAY** are to overcome breakaway torque requirements in cold temperature or high inertia applications.
A torque limiting device is recommended to protect the unit or the driven machine.

Frame Size Selection Tables 50 Hz, 1450 RPM

Double Reduction
Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions

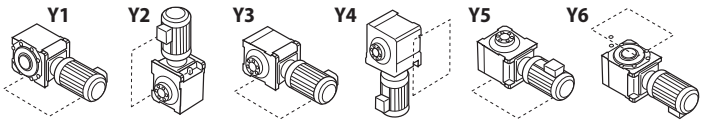


Dimensions on pages 2.168 - 2.177

Output RPM	3.98	3.42	2.89	2.51	2.12	1.79	1.52	1.30	1.10	0.88	0.74	0.64	0.57	Frame Size
Ratio	364	424	501	578	683	809	956	1117	1320	1656	1957	2272	2559	
Input Power HP	**0.546**	**0.546**	**0.475**	**0.412**	**0.349**	**0.294**	**0.248**	**0.213**	**0.180**	**0.143**	0.134	0.134	0.134	4A10DA
(kW)	***(0.407)***	***(0.407)***	***(0.354)***	***(0.307)***	***(0.260)***	***(0.219)***	***(0.185)***	***(0.159)***	***(0.134)***	***(0.107)***	*(0.100)*	*(0.100)*	*(0.100)*	
Output Torque in•lbs	7545	8785	9025	9025	9025	9025	9025	9025	9025	9025	9025	8935	9025	
(N•m)	*(853)*	*(993)*	*(1020)*	*(1020)*	*(1020)*	*(1020)*	*(1020)*	*(1020)*	*(1020)*	*(1020)*	*(1020)*	*(1010)*	*(1020)*	
Hollow Shaft OHL lbs	4920	4405	4270	4270	4270	4270	4270	4270	4270	4270	4270	4335	4270	
(N)	*(21900)*	*(19600)*	*(19000)*	*(19000)*	*(19000)*	*(19000)*	*(19000)*	*(19000)*	*(19000)*	*(19000)*	*(19000)*	*(19300)*	*(19000)*	
Solid Shaft OHL lbs	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	
(N)	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	
Input Power HP	**0.546**	**0.546**	**0.546**	**0.520**	**0.440**	**0.371**	**0.314**	**0.268**	**0.228**	**0.181**	**0.153**	0.134	0.134	4A12DA
(kW)	***(0.407)***	***(0.407)***	***(0.407)***	***(0.388)***	***(0.328)***	***(0.277)***	***(0.234)***	***(0.200)***	***(0.170)***	***(0.135)***	***(0.114)***	*(0.100)*	*(0.100)*	
Output Torque in•lbs	7545	8785	10350	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	
(N•m)	*(853)*	*(993)*	*(1170)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	
Hollow Shaft OHL lbs	4920	4405	3460	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	
(N)	*(21900)*	*(19600)*	*(15400)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	
Solid Shaft OHL lbs	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	
(N)	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	
Input Power HP	**0.825**	**0.709**	**0.599**	**0.520**	**0.440**	**0.371**	**0.314**	**0.268**	**0.228**	**0.181**	**0.153**	0.134	0.134	4A12DB
(kW)	***(0.615)***	***(0.529)***	***(0.447)***	***(0.388)***	***(0.328)***	***(0.277)***	***(0.234)***	***(0.200)***	***(0.170)***	***(0.135)***	***(0.114)***	*(0.100)*	*(0.100)*	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	
Hollow Shaft OHL lbs	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	
(N)	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	
Solid Shaft OHL lbs	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	
(N)	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	
Input Power HP	**0.546**	**0.546**	**0.546**	**0.520**	**0.440**	**0.371**	**0.314**	0.268	0.268	0.268	0.268	0.268	0.268	4A14DA
(kW)	***(0.407)***	***(0.407)***	***(0.407)***	***(0.388)***	***(0.328)***	***(0.277)***	***(0.234)***	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	7545	8785	10350	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	
(N•m)	*(853)*	*(993)*	*(1170)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	
Hollow Shaft OHL lbs	4920	4405	3460	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	
(N)	*(21900)*	*(19600)*	*(15400)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	
Solid Shaft OHL lbs	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	
(N)	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	
Input Power HP	**0.825**	**0.709**	**0.599**	**0.520**	**0.440**	**0.371**	**0.314**	0.268	0.268	0.268	0.268	0.268	0.268	4A14DB
(kW)	***(0.615)***	***(0.529)***	***(0.447)***	***(0.388)***	***(0.328)***	***(0.277)***	***(0.234)***	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	
Hollow Shaft OHL lbs	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	
(N)	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	
Solid Shaft OHL lbs	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	
(N)	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	
Input Power HP	**0.825**	**0.709**	**0.599**	**0.520**	**0.440**	**0.371**	**0.314**	0.268	0.268	0.268	0.268	0.268	0.268	4A14DC
(kW)	***(0.615)***	***(0.529)***	***(0.447)***	***(0.388)***	***(0.328)***	***(0.277)***	***(0.234)***	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	
Hollow Shaft OHL lbs	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	
(N)	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	
Solid Shaft OHL lbs	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	
(N)	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	

Note: The motor Input Powers listed in **GRAY** are to overcome breakaway torque requirements in cold temperature or high inertia applications.
A torque limiting device is recommended to protect the unit or the driven machine.

50 Hz, 1450 RPM Frame Size Selection Tables



Double Reduction
Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions

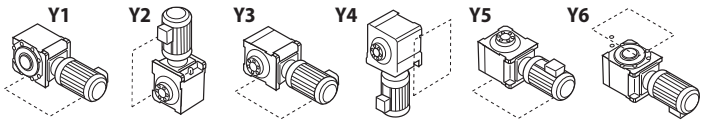
Dimensions on pages 2.168 - 2.177

Output RPM	0.49	0.41	0.33	0.28	0.22	0.20	0.16	0.14	0.12	0.09	0.08	0.07	0.05	Frame Size
Ratio	2944	3511	4365	5177	6472	7228	8880	10658	12184	15530	17966	21620	26492	
Input Power HP	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	—	—	
(kW)	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	—	—	
Output Torque in•lbs	9025	8935	9025	9025	9025	8935	8935	9025	8935	9025	9025	—	—	
(N•m)	*(1020)*	*(1010)*	*(1020)*	*(1020)*	*(1020)*	*(1010)*	*(1010)*	*(1020)*	*(1010)*	*(1020)*	*(1020)*	—	—	**4A10DA**
Hollow Shaft OHL lbs	4270	4335	4270	4270	4270	4335	4335	4270	4335	4270	4270	—	—	
(N)	*(19000)*	*(19300)*	*(19000)*	*(19000)*	*(19000)*	*(19300)*	*(19300)*	*(19000)*	*(19300)*	*(19000)*	*(19000)*	—	—	
Solid Shaft OHL lbs	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	—	—	
(N)	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	—	
Input Power HP	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	—	—	
(kW)	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	—		
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	—	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	—	**4A12DA**
Hollow Shaft OHL lbs	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	—	—	
(N)	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	—	—	
Solid Shaft OHL lbs	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	—	—	
(N)	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	—	
Input Power HP	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	
(kW)	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	**4A12DB**
Hollow Shaft OHL lbs	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	
(N)	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	
Solid Shaft OHL lbs	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	
(N)	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	
Input Power HP	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	—	—	
(kW)	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	—	—	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	—	—	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	—	—	**4A14DA**
Hollow Shaft OHL lbs	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	—	—	
(N)	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	—	—	
Solid Shaft OHL lbs	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	—	—	
(N)	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	—	—	
Input Power HP	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	
(kW)	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	**4A14DB**
Hollow Shaft OHL lbs	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	
(N)	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	
Solid Shaft OHL lbs	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	
(N)	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	
Input Power HP	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	
(kW)	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	11415	
(N•m)	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	*(1290)*	**4A14DC**
Hollow Shaft OHL lbs	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	2585	
(N)	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	*(11500)*	
Solid Shaft OHL lbs	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	4540	
(N)	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	*(20190)*	

Note: The motor Input Powers listed in **GRAY** are to overcome breakaway torque requirements in cold temperature or high inertia applications.
A torque limiting device is recommended to protect the unit or the driven machine.

Frame Size Selection Tables 50 Hz, 1450 RPM

Double Reduction
Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions

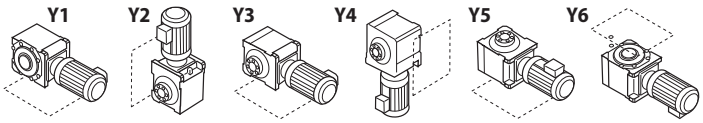


Dimensions on pages 2.168 - 2.177

Output RPM	3.98	3.42	2.89	2.51	2.12	1.79	1.52	1.30	1.10	0.88	0.74	0.64	0.57	Frame Size
Ratio	364	424	501	578	683	809	956	1117	1320	1656	1957	2272	2559	
Input Power HP	**0.546**	**0.546**	**0.546**	**0.546**	**0.546**	**0.546**	**0.522**	**0.447**	**0.378**	**0.302**	**0.255**	**0.220**	**0.194**	
(kW)	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.389)***	***(0.333)***	***(0.282)***	***(0.225)***	***(0.190)***	***(0.164)***	***(0.145)***	
Output Torque in•lbs	7545	8785	10350	11945	14155	16810	18935	18935	18935	18935	18935	18935	18935	
(N•m)	*(853)*	*(993)*	*(1170)*	*(1350)*	*(1600)*	*(1900)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	**4B12DA**
Hollow Shaft OHL lbs	9620	9460	9215	8945	8450	7730	6945	6945	6945	6945	6945	6945	6945	
(N)	*(42800)*	*(42100)*	*(41000)*	*(39800)*	*(37600)*	*(34400)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	
Input Power HP	**1.37**	**1.16**	**1.00**	**0.860**	**0.731**	**0.617**	**0.522**	**0.447**	**0.378**	**0.302**	**0.255**	**0.220**	**0.194**	
(kW)	***(1.02)***	***(0.867)***	***(0.743)***	***(0.644)***	***(0.545)***	***(0.460)***	***(0.389)***	***(0.333)***	***(0.282)***	***(0.225)***	***(0.190)***	***(0.164)***	***(0.145)***	
Output Torque in•lbs	18935	18760	18935	18935	18935	18935	18935	18935	18935	18935	18935	18935	18935	
(N•m)	*(2140)*	*(2120)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	**4B12DB**
Hollow Shaft OHL lbs	6945	7035	6945	6945	6945	6945	6945	6945	6945	6945	6945	6945	6945	
(N)	*(30900)*	*(31300)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	
Input Power HP	**0.546**	**0.546**	**0.546**	**0.546**	**0.546**	**0.546**	**0.546**	**0.535**	**0.453**	**0.361**	**0.306**	0.268	0.268	
(kW)	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.399)***	***(0.338)***	***(0.269)***	***(0.228)***	*(0.200)*	*(0.200)*	
Output Torque in•lbs	7545	8785	10350	11945	14155	16810	19820	22740	22740	22740	22740	22740	22740	
(N•m)	*(853)*	*(993)*	*(1170)*	*(1350)*	*(1600)*	*(1900)*	*(2240)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	**4B14DA**
Hollow Shaft OHL lbs	9620	9460	9215	8945	8450	7730	6585	5010	5010	5010	5010	5010	5010	
(N)	*(42800)*	*(42100)*	*(41000)*	*(39800)*	*(37600)*	*(34400)*	*(29300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	
Input Power HP	**1.65**	**1.41**	**1.19**	**1.04**	**0.880**	**0.740**	**0.626**	**0.535**	**0.453**	**0.361**	**0.306**	0.268	0.268	
(kW)	***(1.23)***	***(1.05)***	***(0.891)***	***(0.772)***	***(0.653)***	***(0.552)***	***(0.467)***	***(0.399)***	***(0.338)***	***(0.269)***	***(0.228)***	*(0.200)*	*(0.200)*	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	**4B14DB**
Hollow Shaft OHL lbs	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	
(N)	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	
Input Power HP	**1.65**	**1.41**	**1.19**	**1.04**	**0.880**	**0.740**	**0.626**	**0.535**	**0.453**	**0.361**	**0.306**	0.268	0.268	
(kW)	***(1.23)***	***(1.05)***	***(0.891)***	***(0.772)***	***(0.653)***	***(0.552)***	***(0.467)***	***(0.399)***	***(0.338)***	***(0.269)***	***(0.228)***	*(0.200)*	*(0.200)*	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	**4B14DC**
Hollow Shaft OHL lbs	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	
(N)	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	
Input Power HP	**1.65**	**1.41**	**1.19**	**1.04**	**0.880**	**0.740**	**0.626**	0.536	0.536	0.536	0.536	0.536	0.536	
(kW)	***(1.23)***	***(1.05)***	***(0.891)***	***(0.772)***	***(0.653)***	***(0.552)***	***(0.467)***	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	**4B16DA**
Hollow Shaft OHL lbs	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	
(N)	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	

Note: The motor Input Powers listed in **GRAY** are to overcome breakaway torque requirements in cold temperature or high inertia applications.
A torque limiting device is recommended to protect the unit or the driven machine.

50 Hz, 1450 RPM Frame Size Selection Tables



Double Reduction
Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions

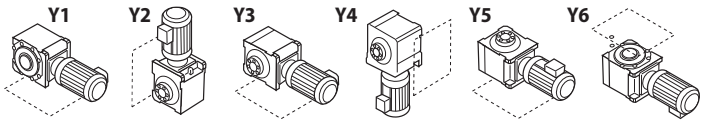
Dimensions on pages 2.168 - 2.177

Output RPM	0.49	0.41	0.33	0.28	0.22	0.20	0.16	0.14	0.12	0.09	0.08	0.07	0.05	Frame Size
Ratio	2944	3511	4365	5177	6472	7228	8880	10658	12184	15530	17966	21620	26492	
Input Power HP	**0.169**	**0.142**	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	—	—	4B12DA
(kW)	***(0.126)***	***(0.106)***	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	—	—	
Output Torque in•lbs	18935	18935	18935	18935	18935	18935	18935	18935	18935	18935	18935	—	—	
(N•m)	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	—	—	
Hollow Shaft OHL lbs	6945	6945	6945	6945	6945	6945	6945	6945	6945	6945	6945	—	—	
(N)	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	—	—	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	—	—	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	—	—	
Input Power HP	**0.169**	**0.142**	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	0.134	4B12DB
(kW)	***(0.126)***	***(0.106)***	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	*(0.100)*	
Output Torque in•lbs	18935	18935	18935	18935	18935	18935	18935	18935	18935	18935	18935	18935	18935	
(N•m)	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	*(2140)*	
Hollow Shaft OHL lbs	6945	6945	6945	6945	6945	6945	6945	6945	6945	6945	6945	6945	6945	
(N)	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	*(30900)*	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	
Input Power HP	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	—	—	4B14DA
(kW)	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	—	—	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	—	—	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	—	—	
Hollow Shaft OHL lbs	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	—	—	
(N)	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	—	—	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	—	—	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	—	—	
Input Power HP	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	4B14DB
(kW)	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	
Hollow Shaft OHL lbs	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	
(N)	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	
Input Power HP	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	4B14DC
(kW)	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	
Hollow Shaft OHL lbs	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	
(N)	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	
Input Power HP	0.536	0.536	0.536	0.536	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	4B16DA
(kW)	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	
Hollow Shaft OHL lbs	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	
(N)	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	

Note: The motor Input Powers listed in **GRAY** are to overcome breakaway torque requirements in cold temperature or high inertia applications.
A torque limiting device is recommended to protect the unit or the driven machine.

Frame Size Selection Tables 50 Hz, 1450 RPM

Double Reduction
Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions

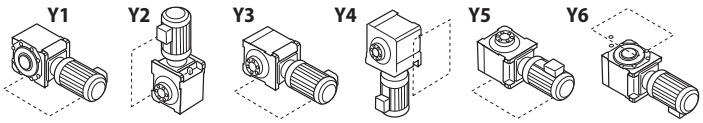


Dimensions on pages 2.168 - 2.177

Output RPM	3.98	3.42	2.89	2.51	2.12	1.79	1.52	1.30	1.10	0.88	0.74	0.64	0.57	Frame Size
Ratio	364	424	501	578	683	809	956	1117	1320	1656	1957	2272	2559	
Input Power HP	**1.65**	**1.41**	**1.19**	**1.04**	**0.880**	**0.740**	**0.626**	0.536	0.536	0.536	0.536	0.536	0.536	
(kW)	***(1.23)***	***(1.05)***	***(0.891)***	***(0.772)***	***(0.653)***	***(0.552)***	***(0.467)***	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	4B16DB
Hollow Shaft OHL lbs	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	
(N)	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	
Input Power HP	**1.65**	**1.41**	**1.19**	**1.04**	**0.880**	**0.740**	**0.626**	0.536	0.536	0.536	0.536	0.536	0.536	
(kW)	***(1.23)***	***(1.05)***	***(0.891)***	***(0.772)***	***(0.653)***	***(0.552)***	***(0.467)***	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	
Output Torque in•lbs	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	22740	
(N•m)	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	*(2570)*	4B16DC
Hollow Shaft OHL lbs	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	5010	
(N)	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	*(22300)*	
Solid Shaft OHL lbs	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	7120	
(N)	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	*(31660)*	
Input Power HP	**0.546**	**0.546**	**0.546**	**0.546**	**0.546**	**0.546**	**0.546**	**0.546**	**0.546**	**0.546**	**0.546**	**0.477**	**0.424**	
(kW)	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.407)***	***(0.356)***	***(0.316)***	
Output Torque in•lbs	7545	8785	10350	11945	14155	16810	19820	23185	27345	34335	40615	41235	41235	
(N•m)	*(853)*	*(993)*	*(1170)*	*(1350)*	*(1600)*	*(1900)*	*(2240)*	*(2620)*	*(3090)*	*(3880)*	*(4590)*	*(4660)*	*(4660)*	4C14DA
Hollow Shaft OHL lbs	15980	15915	15825	15735	15555	15305	14970	14520	13845	12315	10430	10180	10180	
(N)	*(71100)*	*(70800)*	*(70400)*	*(70000)*	*(69200)*	*(68100)*	*(66600)*	*(64600)*	*(61600)*	*(54800)*	*(46400)*	*(45300)*	*(45300)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	
Input Power HP	**2.04**	**2.04**	**2.04**	**1.86**	**1.57**	**1.31**	**1.11**	**0.970**	**0.822**	**0.656**	**0.554**	**0.477**	**0.424**	
(kW)	***(1.52)***	***(1.52)***	***(1.52)***	***(1.39)***	***(1.17)***	***(0.977)***	***(0.827)***	***(0.725)***	***(0.613)***	***(0.489)***	***(0.413)***	***(0.356)***	***(0.316)***	
Output Torque in•lbs	28230	32830	38670	40885	40885	40265	40265	41235	41235	41235	41235	41235	41235	
(N•m)	*(3190)*	*(3710)*	*(4370)*	*(4620)*	*(4620)*	*(4550)*	*(4550)*	*(4660)*	*(4660)*	*(4660)*	*(4660)*	*(4660)*	*(4660)*	4C14DB
Hollow Shaft OHL lbs	13690	12720	11080	10315	10315	10540	10540	10180	10180	10180	10180	10180	10180	
(N)	*(60900)*	*(56600)*	*(49300)*	*(45900)*	*(45900)*	*(46900)*	*(46900)*	*(45300)*	*(45300)*	*(45300)*	*(45300)*	*(45300)*	*(45300)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	
Input Power HP	**2.98**	**2.41**	**2.17**	**1.86**	**1.57**	**1.31**	**1.11**	**0.970**	**0.822**	**0.656**	**0.554**	**0.477**	**0.424**	
(kW)	***(2.22)***	***(1.80)***	***(1.62)***	***(1.39)***	***(1.17)***	***(0.977)***	***(0.827)***	***(0.725)***	***(0.613)***	***(0.489)***	***(0.413)***	***(0.356)***	***(0.316)***	
Output Torque in•lbs	41235	38935	41235	40885	40885	40265	40265	41235	41235	41235	41235	41235	41235	
(N•m)	*(4660)*	*(4400)*	*(4660)*	*(4620)*	*(4620)*	*(4550)*	*(4550)*	*(4660)*	*(4660)*	*(4660)*	*(4660)*	*(4660)*	*(4660)*	4C14DC
Hollow Shaft OHL lbs	10180	11015	10180	10315	10315	10540	10540	10180	10180	10180	10180	10180	10180	
(N)	*(45300)*	*(49000)*	*(45300)*	*(45900)*	*(45900)*	*(46900)*	*(46900)*	*(45300)*	*(45300)*	*(45300)*	*(45300)*	*(45300)*	*(45300)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	
Input Power HP	**2.04**	**2.04**	**2.04**	**2.04**	**1.76**	**1.48**	**1.25**	**1.07**	**0.910**	**0.723**	**0.612**	0.536	0.536	
(kW)	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.31)***	***(1.10)***	***(0.933)***	***(0.799)***	***(0.676)***	***(0.539)***	***(0.456)***	*(0.400)*	*(0.400)*	
Output Torque in•lbs	28230	32830	38670	44775	45485	45485	45485	45485	45485	45485	45485	45485	45485	
(N•m)	*(3190)*	*(3710)*	*(4370)*	*(5060)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	4C16DA
Hollow Shaft OHL lbs	13690	12720	11080	8790	8360	8360	8360	8360	8360	8360	8360	8360	8360	
(N)	*(60900)*	*(56600)*	*(49300)*	*(39100)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	

Note: The motor Input Powers listed in **GRAY** are to overcome breakaway torque requirements in cold temperature or high inertia applications.
A torque limiting device is recommended to protect the unit or the driven machine.

50 Hz, 1450 RPM Frame Size Selection Tables



Double Reduction
Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions

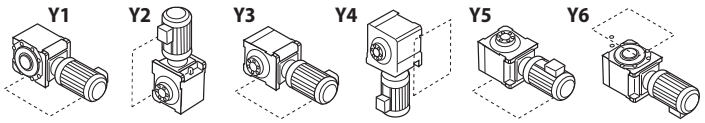
Dimensions on pages 2.168 - 2.177

Output RPM	0.49	0.41	0.33	0.28	0.22	0.20	0.16	0.14	0.12	0.09	0.08	0.07	0.05	Frame Size
Ratio	2944	3511	4365	5177	6472	7228	8880	10658	12184	15530	17966	21620	26492	
Input Power HP *(kW)*	0.536 *(0.400)*	0.536 *(0.400)*	0.536 *(0.400)*	0.536 *(0.400)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	4B16DB
Output Torque in•lbs *(N•m)*	22740 *(2570)*	22740 *(2570)*	22740 *(2570)*	22740 *(2570)*	22740 *(2570)*	22740 *(2570)*	22740 *(2570)*	22740 *(2570)*	22740 *(2570)*	22740 *(2570)*	22740 *(2570)*	22740 *(2570)*	22740 *(2570)*	
Hollow Shaft OHL lbs *(N)*	5010 *(22300)*	5010 *(22300)*	5010 *(22300)*	5010 *(22300)*	5010 *(22300)*	5010 *(22300)*	5010 *(22300)*	5010 *(22300)*	5010 *(22300)*	5010 *(22300)*	5010 *(22300)*	5010 *(22300)*	5010 *(22300)*	
Solid Shaft OHL lbs *(N)*	7120 *(31660)*	7120 *(31660)*	7120 *(31660)*	7120 *(31660)*	7120 *(31660)*	7120 *(31660)*	7120 *(31660)*	7120 *(31660)*	7120 *(31660)*	7120 *(31660)*	7120 *(31660)*	7120 *(31660)*	7120 *(31660)*	
Input Power HP *(kW)*	0.536 *(0.400)*	0.536 *(0.400)*	0.536 *(0.400)*	0.536 *(0.400)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	4B16DC
Output Torque in•lbs *(N•m)*	22740 *(2570)*	22740 *(2570)*	22740 *(2570)*	22740 *(2570)*	22740 *(2570)*	22740 *(2570)*	22740 *(2570)*	22740 *(2570)*	22740 *(2570)*	22740 *(2570)*	22740 *(2570)*	22740 *(2570)*	22740 *(2570)*	
Hollow Shaft OHL lbs *(N)*	5010 *(22300)*	5010 *(22300)*	5010 *(22300)*	5010 *(22300)*	5010 *(22300)*	5010 *(22300)*	5010 *(22300)*	5010 *(22300)*	5010 *(22300)*	5010 *(22300)*	5010 *(22300)*	5010 *(22300)*	5010 *(22300)*	
Solid Shaft OHL lbs *(N)*	7120 *(31660)*	7120 *(31660)*	7120 *(31660)*	7120 *(31660)*	7120 *(31660)*	7120 *(31660)*	7120 *(31660)*	7120 *(31660)*	7120 *(31660)*	7120 *(31660)*	7120 *(31660)*	7120 *(31660)*	7120 *(31660)*	
Input Power HP *(kW)*	**0.369** ***(0.275)***	**0.308** ***(0.230)***	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	— —	— —	4C14DA
Output Torque in•lbs *(N•m)*	41235 *(4660)*	41235 *(4660)*	41235 *(4660)*	37610 *(4250)*	41235 *(4660)*	41235 *(4660)*	41235 *(4660)*	37610 *(4250)*	41235 *(4660)*	37610 *(4250)*	37610 *(4250)*	— —	— —	
Hollow Shaft OHL lbs *(N)*	10180 *(45300)*	10180 *(45300)*	10180 *(45300)*	11420 *(50800)*	10180 *(45300)*	10180 *(45300)*	10180 *(45300)*	11420 *(50800)*	10180 *(45300)*	11420 *(50800)*	11420 *(50800)*	— —	— —	
Solid Shaft OHL lbs *(N)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	— —	— —	
Input Power HP *(kW)*	**0.369** ***(0.275)***	**0.308** ***(0.230)***	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	4C14DB
Output Torque in•lbs *(N•m)*	41235 *(4660)*	41235 *(4660)*	41235 *(4660)*	37610 *(4250)*	41235 *(4660)*	41235 *(4660)*	41235 *(4660)*	37610 *(4250)*	41235 *(4660)*	37610 *(4250)*	37610 *(4250)*	37610 *(4250)*	37610 *(4250)*	
Hollow Shaft OHL lbs *(N)*	10180 *(45300)*	10180 *(45300)*	10180 *(45300)*	11420 *(50800)*	10180 *(45300)*	10180 *(45300)*	10180 *(45300)*	11420 *(50800)*	10180 *(45300)*	11420 *(50800)*	11420 *(50800)*	11420 *(50800)*	11420 *(50800)*	
Solid Shaft OHL lbs *(N)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	
Input Power HP *(kW)*	0.369 *(0.275)*	0.308 *(0.23)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	4C14DC
Output Torque in•lbs *(N•m)*	41235 *(4660)*	41235 *(4660)*	41235 *(4660)*	37610 *(4250)*	41235 *(4660)*	41235 *(4660)*	41235 *(4660)*	37610 *(4250)*	41235 *(4660)*	37610 *(4250)*	37610 *(4250)*	37610 *(4250)*	37610 *(4250)*	
Hollow Shaft OHL lbs *(N)*	10180 *(45300)*	10180 *(45300)*	10180 *(45300)*	11420 *(50800)*	10180 *(45300)*	10180 *(45300)*	10180 *(45300)*	11420 *(50800)*	10180 *(45300)*	11420 *(50800)*	11420 *(50800)*	11420 *(50800)*	11420 *(50800)*	
Solid Shaft OHL lbs *(N)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	
Input Power HP *(kW)*	0.536 *(0.400)*	0.536 *(0.400)*	0.536 *(0.400)*	0.536 *(0.400)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	0.268 *(0.200)*	4C16DA
Output Torque in•lbs *(N•m)*	45485 *(5140)*	45485 *(5140)*	45485 *(5140)*	45485 *(5140)*	45485 *(5140)*	45485 *(5140)*	45485 *(5140)*	45485 *(5140)*	45485 *(5140)*	45485 *(5140)*	45485 *(5140)*	45485 *(5140)*	45485 *(5140)*	
Hollow Shaft OHL lbs *(N)*	8360 *(37200)*	8360 *(37200)*	8360 *(37200)*	8360 *(37200)*	8360 *(37200)*	8360 *(37200)*	8360 *(37200)*	8360 *(37200)*	8360 *(37200)*	8360 *(37200)*	8360 *(37200)*	8360 *(37200)*	8360 *(37200)*	
Solid Shaft OHL lbs *(N)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	12550 *(55820)*	

Note: The motor Input Powers listed in **GRAY** are to overcome breakaway torque requirements in cold temperature or high inertia applications.
A torque limiting device is recommended to protect the unit or the driven machine.

Frame Size Selection Tables 50 Hz, 1450 RPM

Double Reduction
Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions

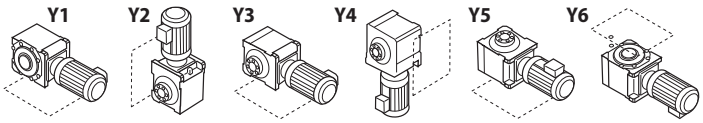


Dimensions on pages 2.168 - 2.177

Output RPM	3.98	3.42	2.89	2.51	2.12	1.79	1.52	1.30	1.10	0.88	0.74	0.64	0.57	Frame Size
Ratio	364	424	501	578	683	809	956	1117	1320	1656	1957	2272	2559	
Input Power HP	**3.29**	**2.83**	**2.39**	**2.07**	**1.76**	**1.48**	**1.25**	**1.07**	**0.910**	**0.723**	**0.612**	0.536	0.536	
(kW)	***(2.45)***	***(2.11)***	***(1.78)***	***(1.54)***	***(1.31)***	***(1.10)***	***(0.933)***	***(0.799)***	***(0.676)***	***(0.539)***	***(0.456)***	*(0.400)*	*(0.400)*	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	4C16DB
Hollow Shaft OHL lbs	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	
(N)	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	
Input Power HP	**3.29**	**2.83**	**2.39**	**2.07**	**1.76**	**1.48**	**1.25**	**1.07**	**0.910**	**0.723**	**0.612**	0.536	0.536	
(kW)	***(2.45)***	***(2.11)***	***(1.78)***	***(1.54)***	***(1.31)***	***(1.10)***	***(0.933)***	***(0.799)***	***(0.676)***	***(0.539)***	***(0.456)***	*(0.400)*	*(0.400)*	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	4C16DC
Hollow Shaft OHL lbs	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	
(N)	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	
Input Power HP	**2.04**	**2.04**	**2.04**	**2.04**	**1.76**	**1.48**	**1.25**	**1.07**	**0.910**	**0.723**	**0.612**	0.536	0.536	
(kW)	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.31)***	***(1.10)***	***(0.933)***	***(0.799)***	***(0.676)***	***(0.539)***	***(0.456)***	*(0.400)*	*(0.400)*	
Output Torque in•lbs	28230	32830	38670	44775	45485	45485	45485	45485	45485	45485	45485	45485	45485	
(N•m)	*(3190)*	*(3710)*	*(4370)*	*(5060)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	4C17DA
Hollow Shaft OHL lbs	13690	12720	11080	8790	8360	8360	8360	8360	8360	8360	8360	8360	8360	
(N)	*(60900)*	*(56600)*	*(49300)*	*(39100)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	
Input Power HP	**3.29**	**2.83**	**2.39**	**2.07**	**1.76**	**1.48**	**1.25**	**1.07**	**0.910**	**0.723**	**0.612**	0.536	0.536	
(kW)	***(2.45)***	***(2.11)***	***(1.78)***	***(1.54)***	***(1.31)***	***(1.10)***	***(0.933)***	***(0.799)***	***(0.676)***	***(0.539)***	***(0.456)***	*(0.400)*	*(0.400)*	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	4C17DB
Hollow Shaft OHL lbs	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	
(N)	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	
Input Power HP	**3.29**	**2.83**	**2.39**	**2.07**	**1.76**	**1.48**	**1.25**	**1.07**	**0.910**	**0.723**	**0.612**	0.536	0.536	
(kW)	***(2.45)***	***(2.11)***	***(1.78)***	***(1.54)***	***(1.31)***	***(1.10)***	***(0.933)***	***(0.799)***	***(0.676)***	***(0.539)***	***(0.456)***	*(0.400)*	*(0.400)*	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	4C17DC
Hollow Shaft OHL lbs	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	
(N)	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	
Input Power HP	**2.04**	**2.04**	**2.04**	**2.04**	**2.04**	**2.04**	**1.74**	**1.49**	**1.26**	**1.00**	**0.850**	**0.732**	**0.650**	
(kW)	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.30)***	***(1.11)***	***(0.940)***	***(0.749)***	***(0.634)***	***(0.546)***	***(0.485)***	
Output Torque in•lbs	28230	32830	38670	44775	52740	62475	63270	63270	63270	63270	63270	63270	63270	
(N•m)	*(3190)*	*(3710)*	*(4370)*	*(5060)*	*(5960)*	*(7060)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	4D16DA
Hollow Shaft OHL lbs	20880	20435	19715	18860	17400	15080	14855	14855	14855	14855	14855	14855	14855	
(N)	*(92900)*	*(90900)*	*(87700)*	*(83900)*	*(77400)*	*(67100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	

Note: The motor Input Powers listed in **GRAY** are to overcome breakaway torque requirements in cold temperature or high inertia applications.
A torque limiting device is recommended to protect the unit or the driven machine.

50 Hz, 1450 RPM Frame Size Selection Tables



Double Reduction
Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions

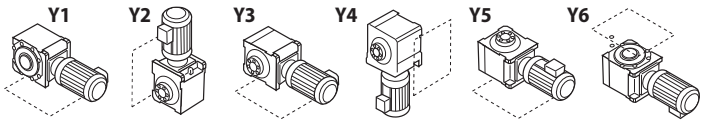
Dimensions on pages 2.168 - 2.177

Output RPM	0.49	0.41	0.33	0.28	0.22	0.20	0.16	0.14	0.12	0.09	0.08	0.07	0.05	Frame Size
Ratio	2944	3511	4365	5177	6472	7228	8880	10658	12184	15530	17966	21620	26492	
Input Power HP	0.536	0.536	0.536	0.536	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	4C16DB
(kW)	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	
Hollow Shaft OHL lbs	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	
(N)	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	
Input Power HP	0.536	0.536	0.536	0.536	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	4C16DC
(kW)	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	
Hollow Shaft OHL lbs	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	
(N)	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	
Input Power HP	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.268	0.268	0.268	0.268	0.268	0.268	4C17DA
(kW)	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	
Hollow Shaft OHL lbs	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	
(N)	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	
Input Power HP	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.268	0.268	0.268	0.268	0.268	0.268	4C17DB
(kW)	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	
Hollow Shaft OHL lbs	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	
(N)	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	
Input Power HP	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.268	0.268	0.268	0.268	0.268	0.268	4C17DC
(kW)	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	45485	
(N•m)	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	*(5140)*	
Hollow Shaft OHL lbs	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	8360	
(N)	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	*(37200)*	
Solid Shaft OHL lbs	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	12550	
(N)	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	*(55820)*	
Input Power HP	**0.565**	0.536	0.536	0.536	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	4D16DA
(kW)	***(0.421)***	*(0.400)*	*(0.400)*	*(0.400)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	63270	63270	63270	61770	63270	63270	63270	61770	63270	61770	61770	61770	61770	
(N•m)	*(7150)*	*(7150)*	*(7150)*	*(6980)*	*(7150)*	*(7150)*	*(7150)*	*(6980)*	*(7150)*	*(6980)*	*(6980)*	*(6980)*	*(6980)*	
Hollow Shaft OHL lbs	14855	14855	14855	15260	14855	14855	14855	15260	14855	15260	15260	15260	15260	
(N)	*(66100)*	*(66100)*	*(66100)*	*(67900)*	*(66100)*	*(66100)*	*(66100)*	*(67900)*	*(66100)*	*(67900)*	*(67900)*	*(67900)*	*(67900)*	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	

Note: The motor Input Powers listed in **GRAY** are to overcome breakaway torque requirements in cold temperature or high inertia applications.
A torque limiting device is recommended to protect the unit or the driven machine.

Frame Size Selection Tables 50 Hz, 1450 RPM

Double Reduction
Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions

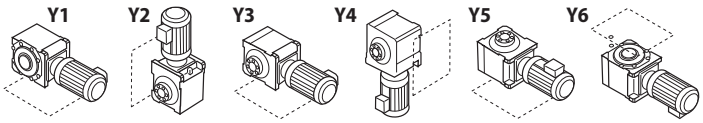


Dimensions on pages 2.168 - 2.177

Output RPM	3.98	3.42	2.89	2.51	2.12	1.79	1.52	1.30	1.10	0.88	0.74	0.64	0.57	Frame Size
Ratio	364	424	501	578	683	809	956	1117	1320	1656	1957	2272	2559	
Input Power HP	**4.26**	**3.93**	**3.33**	**2.88**	**2.44**	**2.05**	**1.74**	**1.49**	**1.26**	**1.00**	**0.850**	**0.732**	**0.650**	4D16DB
(kW)	***(3.18)***	***(2.93)***	***(2.48)***	***(2.15)***	***(1.82)***	***(1.53)***	***(1.30)***	***(1.11)***	***(0.940)***	***(0.749)***	***(0.634)***	***(0.546)***	***(0.485)***	
Output Torque in•lbs	59025	63270	63270	63270	63270	63270	63270	63270	63270	63270	63270	63270	63270	
(N•m)	*(6670)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	
Hollow Shaft OHL lbs	15980	14855	14855	14855	14855	14855	14855	14855	14855	14855	14855	14855	14855	
(N)	*(71100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	
Input Power HP	**4.57**	**3.93**	**3.33**	**2.88**	**2.44**	**2.05**	**1.74**	**1.49**	**1.26**	**1.00**	**0.850**	**0.732**	**0.650**	4D16DC
(kW)	***(3.41)***	***(2.93)***	***(2.48)***	***(2.15)***	***(1.82)***	***(1.53)***	***(1.30)***	***(1.11)***	***(0.940)***	***(0.749)***	***(0.634)***	***(0.546)***	***(0.485)***	
Output Torque in•lbs	63270	63270	63270	63270	63270	63270	63270	63270	63270	63270	63270	63270	63270	
(N•m)	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	*(7150)*	
Hollow Shaft OHL lbs	14855	14855	14855	14855	14855	14855	14855	14855	14855	14855	14855	14855	14855	
(N)	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	*(66100)*	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	
Input Power HP	**2.04**	**2.04**	**2.04**	**2.04**	**2.04**	**2.04**	**2.04**	**1.82**	**1.54**	**1.23**	**1.04**	**0.890**	**0.793**	4D17DA
(kW)	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.36)***	***(1.15)***	***(0.914)***	***(0.773)***	***(0.666)***	***(0.591)***	
Output Torque in•lbs	28230	32830	38670	44775	52740	62475	73805	77165	77165	77165	77165	77165	77165	
(N•m)	*(3190)*	*(3710)*	*(4370)*	*(5060)*	*(5960)*	*(7060)*	*(8340)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	
Hollow Shaft OHL lbs	20880	20435	19715	18860	17400	15080	11125	9485	9485	9485	9485	9485	9485	
(N)	*(92900)*	*(90900)*	*(87700)*	*(83900)*	*(77400)*	*(67100)*	*(49500)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	
Input Power HP	**4.26**	**4.26**	**4.05**	**3.51**	**2.98**	**2.51**	**2.12**	**1.82**	**1.54**	**1.23**	**1.04**	**0.890**	**0.793**	4D17DB
(kW)	***(3.18)***	***(3.18)***	***(3.02)***	***(2.62)***	***(2.22)***	***(1.87)***	***(1.58)***	***(1.36)***	***(1.15)***	***(0.914)***	***(0.773)***	***(0.666)***	***(0.591)***	
Output Torque in•lbs	59025	68670	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	
(N•m)	*(6670)*	*(7760)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	
Hollow Shaft OHL lbs	15980	13150	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	
(N)	*(71100)*	*(58500)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	
Input Power HP	**5.58**	**4.79**	**4.05**	**3.51**	**2.98**	**2.51**	**2.12**	**1.82**	**1.54**	**1.23**	**1.04**	**0.890**	**0.793**	4D17DC
(kW)	***(4.16)***	***(3.57)***	***(3.02)***	***(2.62)***	***(2.22)***	***(1.87)***	***(1.58)***	***(1.36)***	***(1.15)***	***(0.914)***	***(0.773)***	***(0.666)***	***(0.591)***	
Output Torque in•lbs	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	
Hollow Shaft OHL lbs	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	
(N)	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	
Input Power HP	**—**	**—**	**—**	**—**	**—**	**2.51**	**2.12**	**1.82**	**1.54**	**1.23**	**1.04**	**1.01**	**1.01**	4D18DA
(kW)	**—**	**—**	**—**	**—**	**—**	***(1.87)***	***(1.58)***	***(1.36)***	***(1.15)***	***(0.914)***	***(0.773)***	***(0.750)***	***(0.750)***	
Output Torque in•lbs	—	—	—	—	—	77165	77165	77165	77165	77165	77165	77165	77165	
(N•m)	—	—	—	—	—	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	
Hollow Shaft OHL lbs	—	—	—	—	—	9485	9485	9485	9485	9485	9485	9485	9485	
(N)	—	—	—	—	—	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	
Solid Shaft OHL lbs	—	—	—	—	—	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	—	—	—	—	—	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	

Note: The motor Input Powers listed in **GRAY** are to overcome breakaway torque requirements in cold temperature or high inertia applications.
A torque limiting device is recommended to protect the unit or the driven machine.

50 Hz, 1450 RPM Frame Size Selection Tables



Double Reduction
Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions

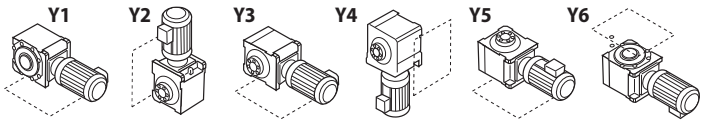
Dimensions on pages 2.168 - 2.177

Output RPM	0.49	0.41	0.33	0.28	0.22	0.20	0.16	0.14	0.12	0.09	0.08	0.07	0.05	Frame Size
Ratio	2944	3511	4365	5177	6472	7228	8880	10658	12184	15530	17966	21620	26492	
Input Power HP	**0.565**	0.536	0.536	0.536	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	4D16DB
(kW)	***(0.421)***	*(0.400)*	*(0.400)*	*(0.400)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	63270	63270	63270	61770	63270	63270	63270	61770	63270	61770	61770	61770	61770	
(N•m)	*(7150)*	*(7150)*	*(7150)*	*(6980)*	*(7150)*	*(7150)*	*(7150)*	*(6980)*	*(7150)*	*(6980)*	*(6980)*	*(6980)*	*(6980)*	
Hollow Shaft OHL lbs	14855	14855	14855	15260	14855	14855	14855	15260	14855	15260	15260	15260	15260	
(N)	*(66100)*	*(66100)*	*(66100)*	*(67900)*	*(66100)*	*(66100)*	*(66100)*	*(67900)*	*(66100)*	*(67900)*	*(67900)*	*(67900)*	*(67900)*	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	
Input Power HP	**0.565**	0.536	0.536	0.536	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	0.268	4D16DC
(kW)	***(0.421)***	*(0.400)*	*(0.400)*	*(0.400)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	63270	63270	63270	61770	63270	63270	63270	61770	63270	61770	61770	61770	61770	
(N•m)	*(7150)*	*(7150)*	*(7150)*	*(6980)*	*(7150)*	*(7150)*	*(7150)*	*(6980)*	*(7150)*	*(6980)*	*(6980)*	*(6980)*	*(6980)*	
Hollow Shaft OHL lbs	14855	14855	14855	15260	14855	14855	14855	15260	14855	15260	15260	15260	15260	
(N)	*(66100)*	*(66100)*	*(66100)*	*(67900)*	*(66100)*	*(66100)*	*(66100)*	*(67900)*	*(66100)*	*(67900)*	*(67900)*	*(67900)*	*(67900)*	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	
Input Power HP	**0.689**	**0.578**	0.536	0.536	0.536	0.536	0.536	0.268	0.268	0.268	0.268	0.268	0.268	4D17DA
(kW)	***(0.514)***	***(0.431)***	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	
Hollow Shaft OHL lbs	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	
(N)	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	
Input Power HP	**0.689**	**0.578**	0.536	0.536	0.536	0.536	0.536	0.268	0.268	0.268	0.268	0.268	0.268	4D17DB
(kW)	***(0.514)***	***(0.431)***	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	
Hollow Shaft OHL lbs	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	
(N)	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	
Input Power HP	**0.689**	**0.578**	0.536	0.536	0.536	0.536	0.536	0.268	0.268	0.268	0.268	0.268	0.268	4D17DC
(kW)	***(0.514)***	***(0.431)***	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	
Hollow Shaft OHL lbs	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	
(N)	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	
Input Power HP	1.01	1.01	1.01	1.01	1.01	0.536	0.536	0.536	0.536	0.536	0.536	0.536	0.536	4D18DA
(kW)	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	
Output Torque in•lbs	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	77165	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	
Hollow Shaft OHL lbs	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	9485	
(N)	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	16580	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	

Note: The motor Input Powers listed in **GRAY** are to overcome breakaway torque requirements in cold temperature or high inertia applications.
A torque limiting device is recommended to protect the unit or the driven machine.

Frame Size Selection Tables 50 Hz, 1450 RPM

Double Reduction
Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions

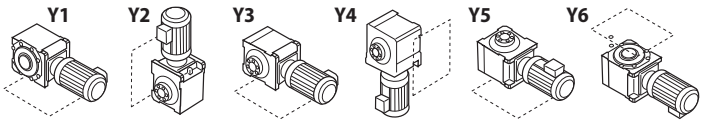


Dimensions on pages 2.168 - 2.177

Output RPM	3.98	3.42	2.89	2.51	2.12	1.79	1.52	1.30	1.10	0.88	0.74	0.64	0.57	Frame Size
Ratio	364	424	501	578	683	809	956	1117	1320	1656	1957	2272	2559	
Input Power HP	**5.58**	**4.79**	**4.05**	**3.51**	**2.98**	**2.51**	**2.12**	**1.82**	**1.54**	—	—	—	—	
(kW)	***(4.16)***	***(3.57)***	***(3.02)***	***(2.62)***	***(2.22)***	***(1.87)***	***(1.58)***	***(1.36)***	***(1.15)***	—	—	—	—	
Output Torque in•lbs	77165	77165	77165	77165	77165	77165	77165	77165	77165	—	—	—	—	
(N•m)	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	*(8720)*	—	—	—	—	4D18DB
Hollow Shaft OHL lbs	9485	9485	9485	9485	9485	9485	9485	9485	9485	—	—	—	—	
(N)	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	*(42200)*	—	—	—	—	
Solid Shaft OHL lbs	16580	16580	16580	16580	16580	16580	16580	16580	16580	—	—	—	—	
(N)	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	*(73740)*	—	—	—	—	
Input Power HP	**2.04**	**2.04**	**2.04**	**2.04**	**2.04**	**2.04**	**2.04**	**2.04**	**1.89**	**1.50**	**1.27**	**1.10**	**0.970**	
(kW)	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.52)***	***(1.41)***	***(1.12)***	***(0.949)***	***(0.817)***	***(0.726)***	
Output Torque in•lbs	28230	32830	38670	44775	52740	62475	73805	86545	94690	94690	94690	94690	94690	
(N•m)	*(3190)*	*(3710)*	*(4370)*	*(5060)*	*(5960)*	*(7060)*	*(8340)*	*(9780)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	4E17DA
Hollow Shaft OHL lbs	22365	22140	21850	21535	21130	20635	20050	19420	18995	18995	18995	18995	18995	
(N)	*(99500)*	*(98500)*	*(97200)*	*(95800)*	*(94000)*	*(91800)*	*(89200)*	*(86400)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	
Solid Shaft OHL lbs	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	
(N)	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	
Input Power HP	**4.26**	**4.26**	**4.26**	**4.26**	**3.65**	**3.08**	**2.60**	**2.23**	**1.89**	**1.50**	**1.27**	**1.10**	**0.970**	
(kW)	***(3.18)***	***(3.18)***	***(3.18)***	***(3.18)***	***(2.72)***	***(2.30)***	***(1.94)***	***(1.66)***	***(1.41)***	***(1.12)***	***(0.949)***	***(0.817)***	***(0.726)***	
Output Torque in•lbs	59025	68670	81150	93805	94690	94690	94690	94690	94690	94690	94690	94690	94690	
(N•m)	*(6670)*	*(7760)*	*(9170)*	*(10600)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	4E17DB
Hollow Shaft OHL lbs	20815	20320	19690	19060	18995	18995	18995	18995	18995	18995	18995	18995	18995	
(N)	*(92600)*	*(90400)*	*(87600)*	*(84800)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	
Solid Shaft OHL lbs	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	
(N)	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	
Input Power HP	**6.84**	**5.87**	**4.98**	**4.32**	**3.65**	**3.08**	**2.60**	**2.23**	**1.89**	**1.50**	**1.27**	**1.10**	**0.970**	
(kW)	***(5.10)***	***(4.38)***	***(3.71)***	***(3.22)***	***(2.72)***	***(2.30)***	***(1.94)***	***(1.66)***	***(1.41)***	***(1.12)***	***(0.949)***	***(0.817)***	***(0.726)***	
Output Torque in•lbs	94690	94690	94690	94690	94690	94690	94690	94690	94690	94690	94690	94690	94690	
(N•m)	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	4E17DC
Hollow Shaft OHL lbs	18995	18995	18995	18995	18995	18995	18995	18995	18995	18995	18995	18995	18995	
(N)	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	
Solid Shaft OHL lbs	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	
(N)	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	
Input Power HP	—	—	—	—	—	**3.34**	**2.83**	**2.41**	**2.05**	**1.64**	**1.38**	**1.19**	**1.06**	
(kW)	—	—	—	—	—	***(2.49)***	***(2.11)***	***(1.80)***	***(1.53)***	***(1.22)***	***(1.03)***	***(0.886)***	***(0.787)***	
Output Torque in•lbs	—	—	—	—	—	102655	102655	102655	102655	102655	102655	102655	102655	
(N•m)	—	—	—	—	—	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	4E18DA
Hollow Shaft OHL lbs	—	—	—	—	—	16995	16995	16995	16995	16995	16995	16995	16995	
(N)	—	—	—	—	—	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	
Solid Shaft OHL lbs	—	—	—	—	—	21920	21920	21920	21920	21920	21920	21920	21920	
(N)	—	—	—	—	—	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	
Input Power HP	**7.42**	**6.37**	**5.39**	**4.68**	**3.96**	**3.34**	**2.83**	**2.41**	**2.05**	—	—	—	—	
(kW)	***(5.53)***	***(4.75)***	***(4.02)***	***(3.49)***	***(2.95)***	***(2.49)***	***(2.11)***	***(1.80)***	***(1.53)***	—	—	—	—	
Output Torque in•lbs	102655	102655	102655	102655	102655	102655	102655	102655	102655	—	—	—	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	—	—	—	4E18DB
Hollow Shaft OHL lbs	16995	16995	16995	16995	16995	16995	16995	16995	16995	—	—	—	—	
(N)	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	—	—	—	—	
Solid Shaft OHL lbs	21920	21920	21920	21920	21920	21920	21920	21920	21920	—	—	—	—	
(N)	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	—	—	—	—	

Note: The motor Input Powers listed in **GRAY** are to overcome breakaway torque requirements in cold temperature or high inertia applications.
A torque limiting device is recommended to protect the unit or the driven machine.

50 Hz, 1450 RPM Frame Size Selection Tables



Double Reduction
Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions

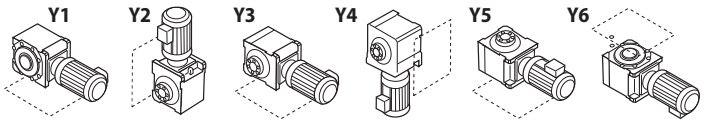
Dimensions on pages 2.168 - 2.177

Output RPM	0.49	0.41	0.33	0.28	0.22	0.20	0.16	0.14	0.12	0.09	0.08	0.07	0.05	Frame Size
Ratio	2944	3511	4365	5177	6472	7228	8880	10658	12184	15530	17966	21620	26492	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4D18DB
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**0.850**	**0.709**	**0.570**	0.536	0.536	0.536	0.536	0.268	0.268	0.268	0.268	0.268	0.268	4E17DA
(kW)	***(0.631)***	***(0.529)***	***(0.425)***	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	94690	94690	94690	94690	94690	94690	94690	94690	94690	94690	94690	94690	94690	
(N•m)	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	
Hollow Shaft OHL lbs	18995	18995	18995	18995	18995	18995	18995	18995	18995	18995	18995	18995	18995	
(N)	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	
Solid Shaft OHL lbs	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	
(N)	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	
Input Power HP	**0.850**	**0.709**	**0.570**	0.536	0.536	0.536	0.536	0.268	0.268	0.268	0.268	0.268	0.268	4E17DB
(kW)	***(0.631)***	***(0.529)***	***(0.425)***	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	94690	94690	94690	94690	94690	94690	94690	94690	94690	94690	94690	94690	94690	
(N•m)	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	
Hollow Shaft OHL lbs	18995	18995	18995	18995	18995	18995	18995	18995	18995	18995	18995	18995	18995	
(N)	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	
Solid Shaft OHL lbs	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	
(N)	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	
Input Power HP	**0.850**	**0.709**	**0.570**	0.536	0.536	0.536	0.536	0.268	0.268	0.268	0.268	0.268	0.268	4E17DC
(kW)	***(0.631)***	***(0.529)***	***(0.425)***	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	*(0.200)*	
Output Torque in•lbs	94690	94690	94690	94690	94690	94690	94690	94690	94690	94690	94690	94690	94690	
(N•m)	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	*(10700)*	
Hollow Shaft OHL lbs	18995	18995	18995	18995	18995	18995	18995	18995	18995	18995	18995	18995	18995	
(N)	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	*(84500)*	
Solid Shaft OHL lbs	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	
(N)	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	
Input Power HP	1.01	1.01	1.01	1.01	1.01	0.540	0.536	0.536	0.536	0.536	0.536	0.536	0.536	4E18DA
(kW)	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	
Output Torque in•lbs	102655	102655	102655	102655	102655	102655	102655	102655	102655	102655	102655	102655	102655	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	
Hollow Shaft OHL lbs	16995	16995	16995	16995	16995	16995	16995	16995	16995	16995	16995	16995	16995	
(N)	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	
Solid Shaft OHL lbs	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	
(N)	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4E18DB
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	

Note: The motor Input Powers listed in **GRAY** are to overcome breakaway torque requirements in cold temperature or high inertia applications.
A torque limiting device is recommended to protect the unit or the driven machine.

Frame Size Selection Tables 50 Hz, 1450 RPM

Double Reduction
Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions

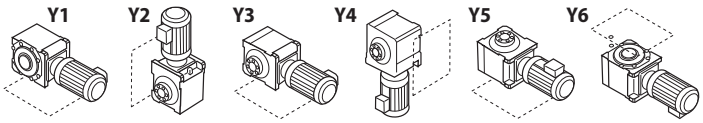


Dimensions on pages 2.168 - 2.177

Output RPM	3.98	3.42	2.89	2.51	2.12	1.79	1.52	1.30	1.10	0.88	0.74	0.64	0.57	Frame Size
Ratio	**364**	**424**	**501**	**578**	**683**	**809**	**956**	**1117**	**1320**	**1656**	**1957**	**2272**	**2559**	
Input Power HP	—	—	—	—	**3.96**	**3.34**	**2.83**	**2.41**	**2.05**	**1.64**	**1.38**	**1.19**	**1.06**	
(kW)	—	—	—	—	***(2.95)***	***(2.49)***	***(2.11)***	***(1.80)***	***(1.53)***	***(1.22)***	***(1.03)***	***(0.886)***	***(0.787)***	
Output Torque in•lbs	—	—	—	—	102655	102655	102655	102655	102655	102655	102655	102655	102655	
(N•m)	—	—	—	—	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	**4E19DA**
Hollow Shaft OHL lbs	—	—	—	—	16995	16995	16995	16995	16995	16995	16995	16995	16995	
(N)	—	—	—	—	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	
Solid Shaft OHL lbs	—	—	—	—	21920	21920	21920	21920	21920	21920	21920	21920	21920	
(N)	—	—	—	—	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	
Input Power HP	**7.42**	**6.37**	**5.39**	**4.68**	**3.96**	**3.34**	**2.83**	—	—	—	—	—	—	
(kW)	***(5.53)***	***(4.75)***	***(4.02)***	***(3.49)***	***(2.95)***	***(2.49)***	***(2.11)***	—	—	—	—	—	—	
Output Torque in•lbs	102655	102655	102655	102655	102655	102655	102655	—	—	—	—	—	—	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	—	—	—	—	—	—	**4E19DB**
Hollow Shaft OHL lbs	16995	16995	16995	16995	16995	16995	16995	—	—	—	—	—	—	
(N)	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	—	—	—	—	—	—	
Solid Shaft OHL lbs	21920	21920	21920	21920	21920	21920	21920	—	—	—	—	—	—	
(N)	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	—	—	—	—	—	—	
Input Power HP	—	—	—	—	—	**4.26**	**4.14**	**3.54**	**3.00**	**2.39**	**2.02**	**1.74**	**1.54**	
(kW)	—	—	—	—	—	***(3.18)***	***(3.09)***	***(2.64)***	***(2.24)***	***(1.78)***	***(1.51)***	***(1.30)***	***(1.15)***	
Output Torque in•lbs	—	—	—	—	—	130970	150440	150440	150440	150440	150440	150440	150440	
(N•m)	—	—	—	—	—	*(14800)*	*(17000)*	*(17000)*	*(17000)*	*(17000)*	*(17000)*	*(17000)*	*(17000)*	**4F18DA**
Hollow Shaft OHL lbs	—	—	—	—	—	32145	30570	30570	30570	30570	30570	30570	30570	
(N)	—	—	—	—	—	*(143000)*	*(136000)*	*(136000)*	*(136000)*	*(136000)*	*(136000)*	*(136000)*	*(136000)*	
Solid Shaft OHL lbs	—	—	—	—	—	29530	29530	29530	29530	29530	29530	29530	29530	
(N)	—	—	—	—	—	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	
Input Power HP	**10.7**	**8.98**	**7.75**	**6.75**	**5.71**	**4.89**	**4.14**	**3.54**	**3.00**	—	—	—	—	
(kW)	***(7.95)***	***(6.70)***	***(5.78)***	***(5.03)***	***(4.26)***	***(3.65)***	***(3.09)***	***(2.64)***	***(2.24)***	—	—	—	—	
Output Torque in•lbs	147785	145130	147785	147785	147785	150440	150440	150440	150440	—	—	—	—	
(N•m)	*(16700)*	*(16400)*	*(16700)*	*(16700)*	*(16700)*	*(17000)*	*(17000)*	*(17000)*	*(17000)*	—	—	—	—	**4F18DB**
Hollow Shaft OHL lbs	31245	31695	31245	31020	31020	30570	30570	30570	30570	—	—	—	—	
(N)	*(139000)*	*(141000)*	*(139000)*	*(138000)*	*(138000)*	*(136000)*	*(136000)*	*(136000)*	*(136000)*	—	—	—	—	
Solid Shaft OHL lbs	29530	29530	29530	29530	29530	29530	29530	29530	29530	—	—	—	—	
(N)	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	—	—	—	—	
Input Power HP	—	—	—	—	**5.93**	**5.00**	**4.24**	**3.62**	**3.07**	**2.44**	**2.07**	**1.78**	**1.58**	
(kW)	—	—	—	—	***(4.42)***	***(3.73)***	***(3.16)***	***(2.70)***	***(2.29)***	***(1.82)***	***(1.54)***	***(1.33)***	***(1.18)***	
Output Torque in•lbs	—	—	—	—	153980	153980	153980	153980	153980	153980	153980	153980	153980	
(N•m)	—	—	—	—	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	**4F19DA**
Hollow Shaft OHL lbs	—	—	—	—	29670	29670	29670	29670	29670	29670	29670	29670	29670	
(N)	—	—	—	—	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	
Solid Shaft OHL lbs	—	—	—	—	29530	29530	29530	29530	29530	29530	29530	29530	29530	
(N)	—	—	—	—	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	
Input Power HP	**11.1**	**9.56**	**8.09**	**7.01**	**5.93**	**5.00**	**4.24**	—	—	—	—	—	—	
(kW)	***(8.29)***	***(7.13)***	***(6.03)***	***(5.23)***	***(4.42)***	***(3.73)***	***(3.16)***	—	—	—	—	—	—	
Output Torque in•lbs	153980	153980	153980	153980	153980	153980	153980	—	—	—	—	—	—	
(N•m)	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	—	—	—	—	—	—	**4F19DB**
Hollow Shaft OHL lbs	29670	29670	29670	29670	29670	29670	29670	—	—	—	—	—	—	
(N)	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	—	—	—	—	—	—	
Solid Shaft OHL lbs	29530	29530	29530	29530	29530	29530	29530	—	—	—	—	—	—	
(N)	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	—	—	—	—	—	—	

Note: The motor Input Powers listed in **GRAY** are to overcome breakaway torque requirements in cold temperature or high inertia applications.
A torque limiting device is recommended to protect the unit or the driven machine.

50 Hz, 1450 RPM Frame Size Selection Tables



Double Reduction
Y1, Y2, Y3, Y4, Y5, Y6 Mounting Positions

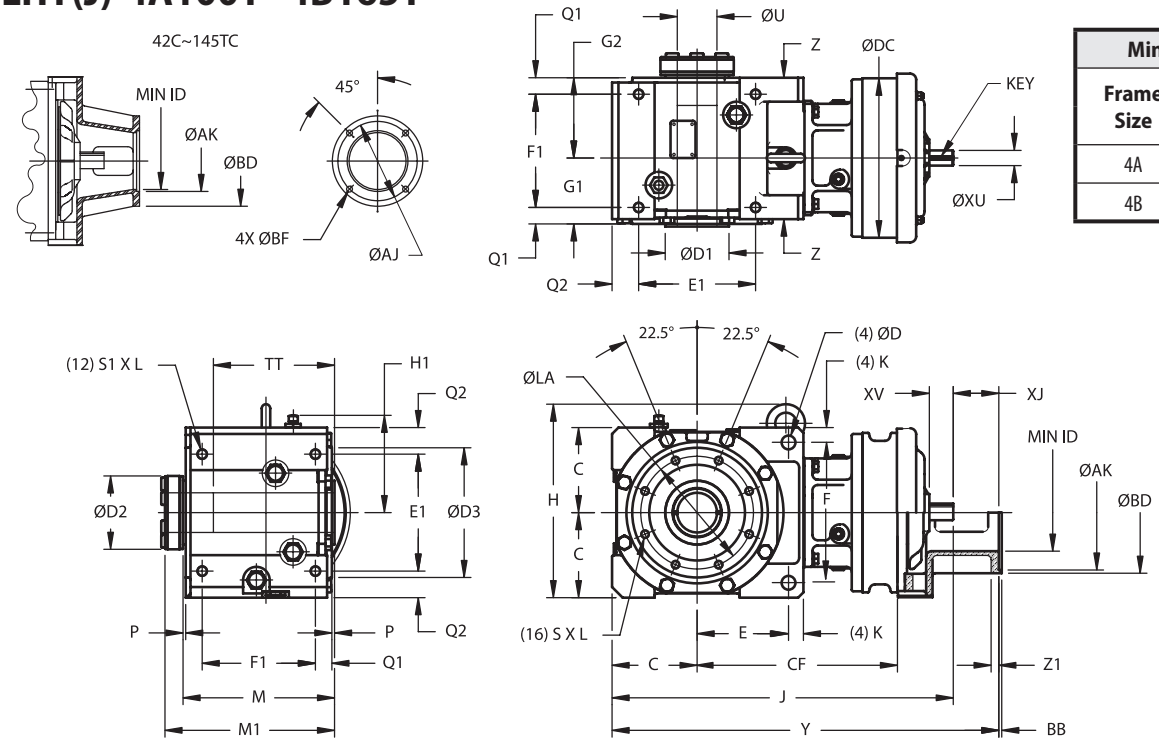
Dimensions on pages 2.168 - 2.177

Output RPM	0.49	0.41	0.33	0.28	0.22	0.20	0.16	0.14	0.12	0.09	0.08	0.07	0.05	Frame Size
Ratio	**2944**	**3511**	**4365**	**5177**	**6472**	**7228**	**8880**	**10658**	**12184**	**15530**	**17966**	**21620**	**26492**	
Input Power HP	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	4E19DA
(kW)	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	
Output Torque in•lbs	102655	102655	102655	102655	102655	102655	102655	102655	102655	102655	102655	102655	102655	
(N•m)	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	*(11600)*	
Hollow Shaft OHL lbs	16995	16995	16995	16995	16995	16995	16995	16995	16995	16995	16995	16995	16995	
(N)	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	*(75600)*	
Solid Shaft OHL lbs	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	21920	
(N)	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	*(97500)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4E19DB
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**1.34**	**1.13**	1.01	1.01	1.01	**0.547**	0.536	0.536	0.536	0.536	0.536	0.536	0.536	4F18DA
(kW)	***(1.00)***	***(0.841)***	*(0.750)*	*(0.750)*	*(0.750)*	***(0.408)***	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	*(0.400)*	
Output Torque in•lbs	150440	150440	150440	150440	150440	150440	150440	150440	150440	150440	150440	150440	150440	
(N•m)	*(17000)*	*(17000)*	*(17000)*	*(17000)*	*(17000)*	*(17000)*	*(17000)*	*(17000)*	*(17000)*	*(17000)*	*(17000)*	*(17000)*	*(17000)*	
Hollow Shaft OHL lbs	30570	30570	30570	30570	30570	30570	30570	30570	30570	30570	30570	30570	30570	
(N)	*(136000)*	*(136000)*	*(136000)*	*(136000)*	*(136000)*	*(136000)*	*(136000)*	*(136000)*	*(136000)*	*(136000)*	*(136000)*	*(136000)*	*(136000)*	
Solid Shaft OHL lbs	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	
(N)	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4F18DB
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Input Power HP	**1.38**	**1.15**	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	4F19DA
(kW)	***(1.03)***	***(0.860)***	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	*(0.750)*	
Output Torque in•lbs	153980	153980	153980	153980	153980	153980	153980	153980	153980	153980	153980	153980	153980	
(N•m)	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	*(17400)*	
Hollow Shaft OHL lbs	29670	29670	29670	29670	29670	29670	29670	29670	29670	29670	29670	29670	29670	
(N)	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	*(132000)*	
Solid Shaft OHL lbs	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	29530	
(N)	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	*(131340)*	
Input Power HP	—	—	—	—	—	—	—	—	—	—	—	—	—	4F19DB
(kW)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Output Torque in•lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N•m)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Hollow Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	
Solid Shaft OHL lbs	—	—	—	—	—	—	—	—	—	—	—	—	—	
(N)	—	—	—	—	—	—	—	—	—	—	—	—	—	

Note: The motor Input Powers listed in **GRAY** are to overcome breakaway torque requirements in cold temperature or high inertia applications.
A torque limiting device is recommended to protect the unit or the driven machine.

Dimensions

Single Reduction
LHY(J)-4A100Y~4B165Y



Minimim Engagement		
Frame Size	TT	
	inch	*(mm)*
4A	8.19	*(208)*
4B	9.53	*(242)*

All dimensions are in inches (mm).
For units ordered in the Y2 mounting configuration, please refer to page 2.166 for external lubricant piping dimensions.

Model	C	E	F	K	Z	ØD	E1	F1	Q1	Q2	S1 x L	M
4A100, 4A105 4A110, 4A115 4A120, 4A125 4A140, 4A145	4.33 *(110)*	4.49 *(114)*	7.24 *(184)*	0.71 *(18)*	1.38 *(35)*	0.71 *(18)*	5.91 *(150)*	6.30 *(160)*	0.91 *(23)*	1.38 *(35)*	M12 x 0.79 *(M12 x 20)*	8.50 *(216)*
4B120, 4B125 4B140, 4B145 4B160, 4B165	5.12 *(130)*	5.59 *(142)*	8.43 *(214)*	0.91 *(23)*	1.57 *(40)*	0.87 *(22)*	7.48 *(190)*	7.68 *(195)*	1.06 *(27)*	1.38 *(35)*	M16 x 1.02 *(M16 x 26)*	10.2 *(259)*

											ØU	
Model	**P**	**G1**	**G2**	**H**	**H1**	**ØLA**	**ØD3**	**S x L**	**M1**	**ØD1**	**ØD2**	**Std & Max**	**Min**
4A100, 4A105 4A110, 4A115 4A120, 4A125 4A140, 4A145	0.20 *(5)*	3.78 *(96)*	4.33 *(110)*	10.9 *(276)*	5.16 *(131)*	6.10 *(155)*	6.89 *(175)*	M10 x 0.67 *(M10 x 17)*	9.84 *(250)*	3.35 *(85)*	4.09 *(104)*	2-3/16 *(55.563)*	1-11/16 *(42.863)*
4B120, 4B125 4B140, 4B145 4B160, 4B165	0.20 *(5)*	4.80 *(122)*	5.00 *(127)*	12.1 *(308)*	5.94 *(151)*	6.89 *(175)*	7.83 *(199)*	M12x0.79 *(M12 x 20)*	11.5 *(293)*	3.94 *(100)*	4.49 *(114)*	2-7/16 *(61.913)*	1-15/16 *(49.213)*

Dimensions shown are for reference only and are subject to change without notice, unless certified.
Certified prints are available after receipt of an order; consult factory.

Single Reduction LHY(J)-4A100Y~4B165Y Dimensions

All dimensions are in inches *(mm)*.

With C-Face Adapter						
Model	**NEMA C-Face**	**Y**	**Z1**	**Min. ID**	**XJ**	**Weight lb *(kg)***
4A100, 4A105	48C	17.87 *(454)*	0.47 *(12)*	2.44 *(62)*	2.16 *(55)*	111 *(50)*
	56C-145TC	18.33 *(466)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	113 *(51)*
	182TC-184TC	19.16 *(487)*	0.47 *(12)*	5.43 *(138)*	3.45 *(88)*	117 *(53)*
4A110, 4A115	56C	18.60 *(472)*	0.47 *(12)*	3.93 *(100)*	2.62 *(67)*	126 *(57)*
	143TC-145TC	18.60 *(472)*	0.47 *(12)*	3.93 *(100)*	2.62 *(67)*	126 *(57)*
	182TC-184TC	19.40 *(493)*	0.47 *(12)*	3.93 *(100)*	3.44 *(87)*	131 *(59)*
4A120, 4A125	143TC-145TC	19.40 *(493)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	133 *(60)*
	182TC-184TC	20.14 *(512)*	0.47 *(12)*	5.43 *(138)*	3.37 *(86)*	137 *(62)*
	213TC-215TC	21.14 *(537)*	1.47 *(37)*	5.43 *(138)*	4.37 *(111)*	147 *(67)*
4A140, 4A145	182TC-184TC	21.33 *(542)*	0.47 *(12)*	5.43 *(138)*	3.37 *(86)*	155 *(70)*
	213TC-215TC	21.95 *(558)*	1.10 *(28)*	5.43 *(138)*	4.00 *(102)*	161 *(73)*
	254TC-256TC	22.88 *(581)*	0.60 *(15.2)*	5.08 *(129)*	4.93 *(125)*	163 *(74)*
4B120, 4B125	56C-145TC	21.64 *(550)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	197 *(89)*
	182TC-184TC	22.39 *(569)*	0.47 *(12)*	5.43 *(138)*	3.37 *(86)*	201 *(91)*
	213TC-215TC	23.39 *(594)*	1.47 *(37)*	5.43 *(138)*	4.37 *(111)*	211 *(96)*
4B140, 4B145	143TC-145TC	22.63 *(575)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	217 *(98)*
	182TC-184TC	23.37 *(594)*	0.47 *(12)*	5.43 *(138)*	3.37 *(86)*	221 *(100)*
	213TC-215TC	24.0 *(610)*	1.1 *(28)*	5.43 *(138)*	4 *(102)*	227 *(103)*
	254TC-256TC	24.93 *(633)*	0.60 *(15.2)*	5.08 *(129)*	4.93 *(125)*	230 *(104)*
4B160, 4B165	182TC-184TC	25.46 *(647)*	0.57 *(14)*	5.71 *(145)*	3.37 *(86)*	304 *(138)*
	213TC-215TC	26.09 *(663)*	1.20 *(30)*	5.71 *(145)*	4.00 *(102)*	310 *(141)*
	254TC-256TC	26.84 *(682)*	0.60 *(15.2)*	5.71 *(145)*	4.75 *(121)*	306 *(139)*
	284TC-286TC	27.52 *(699)*	0.57 *(14)*	7.09 *(180)*	5.44 *(138)*	300 *(136)*
	324TC-326TC	28.59 *(726)*	0.57 *(14)*	7.87 *(200)*	6.50 *(165)*	311 *(141)*

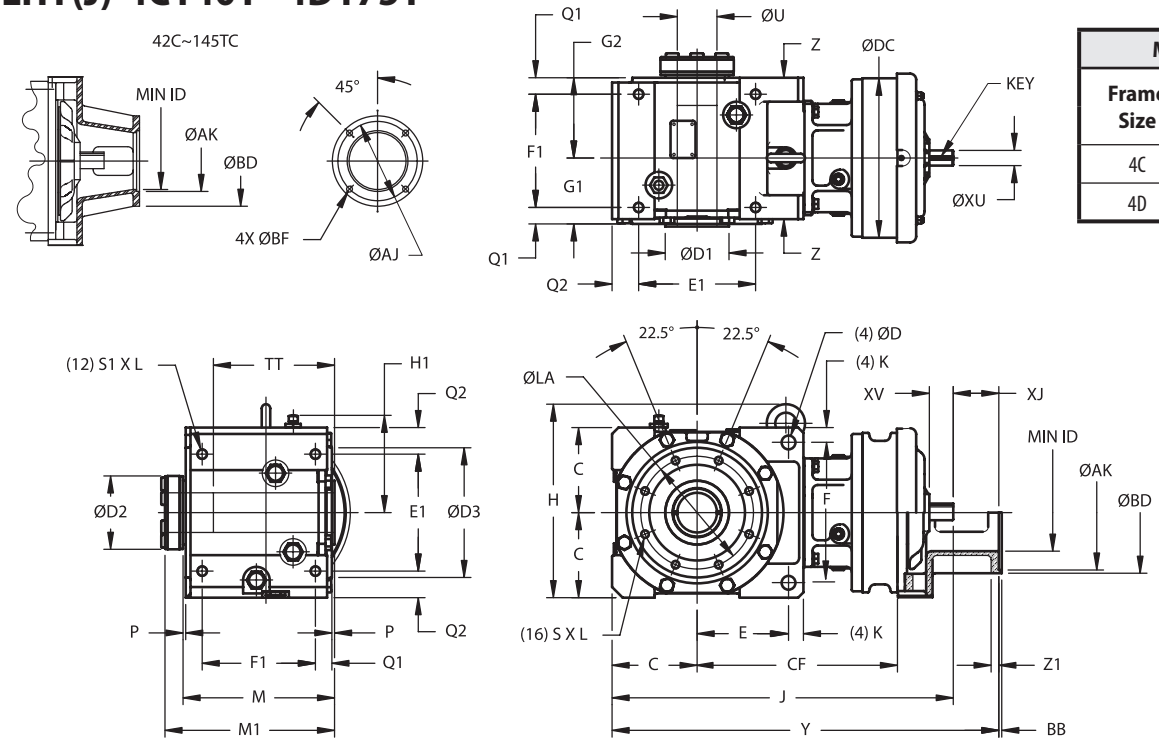
Free Shaft Input							
Model	**ØXU**	**XV**	**Key**	**CF**	**ØDC**	**J**	**Weight lb *(kg)***
4A100, 4A105	0.625 *(15.875)*	0.98 *(25)*	3/16 x 3/16 x 0.75 *(4.76 x 4.76 x 19)*	9.33 *(237)*	5.91 *(150)*	15.71 *(399)*	106 *(48)*
4A110, 4A115	0.625 *(15.875)*	0.98 *(25)*	3/16 x 3/16 x 0.75 *(4.76 x 4.76 x 19)*	9.76 *(248)*	6.38 *(162)*	15.98 *(406)*	119 *(54)*
4A120, 4A125	0.750 *(19.050)*	1.38 *(35)*	3/16 x 3/16 x 1.02 *(4.76 x 4.76 x 26)*	9.57 *(243)*	8.03 *(204)*	16.77 *(426)*	123 *(56)*
4A140, 4A145	0.875 *(22.225)*	1.57 *(40)*	3/16 x 3/16 x 1.38 *(4.76 x 4.76 x 33)*	10.43 *(265)*	9.06 *(230)*	17.95 *(456)*	139 *(63)*
4B120, 4B125	0.750 *(19.050)*	1.38 *(35)*	3/16 x 3/16 x 1.02 *(4.76 x 4.76 x 26)*	11.02 *(280)*	8.03 *(204)*	19.02 *(483)*	187 *(85)*
4B140, 4B145	0.875 *(22.225)*	1.57 *(40)*	3/16 x 3/16 x 1.38 *(4.76 x 4.76 x 33)*	11.69 *(297)*	9.06 *(230)*	20.00 *(508)*	205 *(93)*
4B160, 4B165	1.125 *(28.575)*	1.77 *(45)*	1/4 x 1/4 x 1.77 *(6.35 x 6.35 x 45)*	12.83 *(326)*	11.81 *(300)*	22.09 *(561)*	258 *(117)*

NEMA C-Face Adapter	ØAJ	ØAK	ØBD	BB	ØBF
42C-48C	3.75 *(95)*	3 *(76)*	4.33 *(110)*	— —	0.28 *(7)*
56C-145TC	5.87 *(149)*	4.5 *(114)*	6.69 *(170)*	— —	0.43 *(11)*
182TC-256TC	7.25 *(184)*	8.50 *(216)*	8.98 *(228)*	0.22 *(6)*	0.55 *(14)*
284TC-286TC	9.02 *(229)*	10.5 *(267)*	11.1 *(282)*	0.22 *(6)*	0.55 *(14)*
324TC-326TC	11.0 *(279)*	12.5 *(318)*	14.17 *(360)*	0.22 *(6)*	0.71 *(18)*

Dimensions shown are for reference only and are subject to change without notice, unless certified. Certified prints are available after receipt of an order; consult factory.

Dimensions

Single Reduction
LHY(J)-4C140Y~4D175Y



Min. Engagement		
Frame Size	TT	
	inch	*(mm)*
4C	10.98	*(279)*
4D	12.83	*(326)*

All dimensions are in inches (*mm).*
For units ordered in the Y2 mounting configuration, please refer to page 2.166 for external lubricant piping dimensions.

Model	C	E	F	K	Z	ØD	E1	F1	Q1	Q2	S1 x L	M
4C140, 4C145 4C160, 4C165 4C170, 4C175	6.30 *(160)*	6.77 *(172)*	10.4 *(264)*	1.10 *(28)*	1.77 *(45)*	1.02 *(26)*	8.66 *(220)*	8.39 *(213)*	1.22 *(31)*	1.97 *(50)*	M20 x 1.30 *(M20 x 33)*	11.2 *(285)*
4D160, 4D165 4D170, 4D175	7.48 *(190)*	7.60 *(193)*	12.2 *(310)*	1.38 *(35)*	2.17 *(55)*	1.30 *(33)*	9.84 *(250)*	10.0 *(254)*	1.42 *(36)*	2.56 *(65)*	M24 x 1.57 *(M24 x 40)*	13.4 *(340*

											ØU	
Model	**P**	**G1**	**G2**	**H**	**H1**	**ØLA**	**ØD3**	**S x L**	**M1**	**ØD1**	**ØD2**	**Std & Max**	**Min**
4C140, 4C145 4C160, 4C165 4C170, 4C175	0.20 *(5)*	4.88 *(124)*	5.94 *(151)*	14.3 *(364)*	7.20 *(183)*	8.35 *(212)*	9.61 *(244)*	M16 x 1.02 *(M16 x 26)*	12.8 *(326)*	4.72 *(120)*	5.43 *(138)*	2-15/16 *(74.613)*	2-3/16 *(55.563)*
4D160, 4D165 4D170, 4D175	0.28 *(7)*	5.83 *(148)*	7.01 *(178)*	16.7 *(424)*	8.39 *(213)*	10.0 *(255)*	11.6 *(295)*	M20 x 1.30 *(M20 x 33)*	15.0 *(381)*	5.51 *(140)*	5.98 *(152)*	3-7/16 *(87.313)*	2-7/16 *(61.913)*

Dimensions shown are for reference only and are subject to change without notice, unless certified.
Certified prints are available after receipt of an order; consult factory.

Single Reduction LHY(J)-4C140Y~4D175Y Dimensions

All dimensions are in inches *(mm)*.

With C-Face Adapter						
Model	**NEMA C-Face**	**Y**	**Z1**	**Min. ID**	**XJ**	**Weight lb *(kg)***
4C140, 4C145	143TC-145TC	26.13 *(664)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	321 *(146)*
	182TC-184TC	26.88 *(683)*	0.47 *(12)*	5.43 *(138)*	3.37 *(86)*	325 *(147)*
	213TC-215TC	27.50 *(699)*	1.1 *(28)*	5.43 *(138)*	4 *(102)*	331 *(150)*
	254TC-256TC	28.43 *(722)*	0.60 *(15.2)*	5.08 *(129)*	4.93 *(125)*	333 *(151)*
4C160, 4C165	143TC-145TC	27.90 *(709)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	401 *(182)*
	182TC-184TC	28.65 *(728)*	0.57 *(14)*	5.71 *(145)*	3.37 *(86)*	405 *(184)*
	213TC-215TC	29.28 *(744)*	1.20 *(30)*	5.71 *(145)*	4.00 *(102)*	412 *(187)*
	254TC-256TC	30.03 *(763)*	0.60 *(15.2)*	5.71 *(145)*	4.75 *(121)*	408 *(185)*
	284TC-286TC	30.71 *(780)*	0.57 *(14)*	7.09 *(180)*	5.44 *(138)*	402 *(182)*
	324TC-326TC	31.78 *(807)*	0.57 *(14)*	7.87 *(200)*	6.50 *(165)*	412 *(187)*
4C170, 4C175	182TC-184TC	30.07 *(764)*	0.57 *(14)*	5.71 *(145)*	3.38 *(86)*	448 *(203)*
	213TC-215TC	30.70 *(780)*	1.20 *(30)*	5.71 *(145)*	4.00 *(102)*	454 *(206)*
	254TC-256TC	31.44 *(799)*	0.60 *(15.2)*	5.71 *(145)*	4.75 *(121)*	450 *(204)*
	284TC-286TC	32.13 *(816)*	0.57 *(14)*	7.87 *(200)*	5.44 *(138)*	461 *(209)*
	324TC-326TC	32.70 *(831)*	0.57 *(14)*	7.87 *(200)*	6.00 *(152)*	456 *(207)*
4D160, 4D165	143TC-145TC	31.92 *(811)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	549 *(249)*
	182TC-184TC	32.67 *(830)*	0.57 *(14)*	5.71 *(145)*	3.37 *(86)*	553 *(251)*
	213TC-215TC	33.29 *(846)*	1.20 *(30)*	5.71 *(145)*	4.00 *(102)*	559 *(254)*
	254TC-256TC	34.04 *(865)*	0.60 *(15.2)*	5.71 *(145)*	4.75 *(121)*	556 *(252)*
	284TC-286TC	34.73 *(882)*	0.57 *(14)*	7.09 *(180)*	5.44 *(138)*	549 *(249)*
	324TC-326TC	35.79 *(909)*	0.57 *(14)*	7.87 *(200)*	6.50 *(165)*	560 *(254)*
4D170, 4D175	182TC-184TC	33.22 *(844)*	0.57 *(14)*	5.71 *(145)*	3.38 *(86)*	587 *(266)*
	213TC-215TC	33.85 *(860)*	1.20 *(30)*	5.71 *(145)*	4.00 *(102)*	593 *(269)*
	254TC-256TC	34.59 *(879)*	0.60 *(15.2)*	5.71 *(145)*	4.75 *(121)*	589 *(267)*
	284TC-286TC	35.28 *(896)*	0.57 *(14)*	7.87 *(200)*	5.44 *(138)*	600 *(272)*
	324TC-326TC	35.85 *(911)*	0.57 *(14)*	7.87 *(200)*	6.00 *(152)*	594 *(269)*

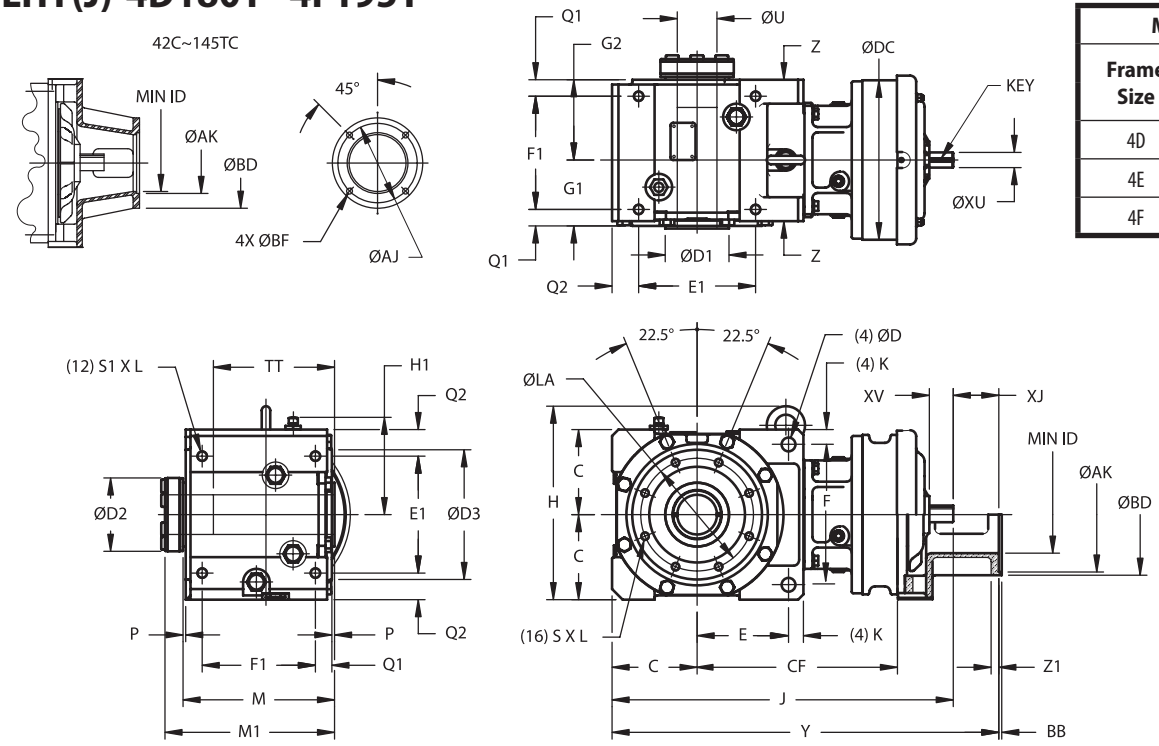
Free Shaft Input							
Model	**ØXU**	**XV**	**Key**	**CF**	**ØDC**	**J**	**Weight lb *(kg)***
4C140, 4C145	0.875 *(22.225)*	1.57 *(40)*	3/16 x 3/16 x 1.38 *(4.76 x 4.76 x 33)*	14.02 *(356)*	9.06 *(230)*	23.50 *597)*	309 *(140)*
4C160, 4C165	1.125 *(28.575)*	1.77 *(45)*	1/4 x 1/4 x 1.77 *(6.35 x 6.35 x 45)*	14.84 *(377)*	11.81 *(300)*	25.28 *(642)*	359 *(163)*
4C170, 4C175	1.375 *(34.925)*	2.17 *(55)*	5/16 x 5/16 x 2.16 *(7.94 x 7.94 x 55)*	15.47 *(393)*	13.39 *(340)*	26.69 *(678)*	410 *(186)*
4D160, 4D165	1.125 *(28.575)*	1.77 *(45)*	1/4 x 1/4 x 1.77 *(6.35 x 6.35 x 45)*	17.68 *(449)*	11.81 *(300)*	29.29 *(744)*	507 *(230)*
4D170, 4D175	1.375 *(34.925)*	2.17 *(55)*	5/16 x 5/16 x 2.16 *(7.94 x 7.94 x 55)*	17.44 *(443)*	13.39 *(340)*	29.84 *(758)*	549 *(249)*

NEMA C-Face Adapter	ØAJ	ØAK	ØBD	BB	ØBF
42C-48C	3.75 *(95)*	3.00 *(76)*	4.33 *(110)*	— —	0.28 *(7)*
56C-145TC	5.87 *(149)*	4.50 *(114)*	6.69 *(170)*	— —	0.43 *(11)*
182TC-256TC	7.25 *(184)*	8.50 *(216)*	8.98 *(228)*	0.22 *(6)*	0.55 *(14)*
284TC-286TC	9.00 *(229)*	10.5 *(267)*	11.1 *(282)*	0.22 *(6)*	0.55 *(14)*
324TC-326TC	11.0 *(279)*	12.5 *(318)*	14.17 *(360)*	0.22 *(6)*	0.71 *(18)*

Dimensions shown are for reference only and are subject to change without notice, unless certified. Certified prints are available after receipt of an order; consult factory.

Dimensions

Single Reduction
LHY(J)-4D180Y~4F195Y



Min. Engagement		
Frame Size	TT	
	inch	*(mm)*
4D	12.83	*(326)*
4E	14.13	*(359)*
4F	16.22	*(412)*

All dimensions are in inches *(mm)*.
For units ordered in the Y2 mounting configuration, please refer to page 2.166 for external lubricant piping dimensions.

Model	C	E	F	K	Z	ØD	E1	F1	Q1	Q2	S1 x L	M
4D180, 4D185	7.48 *(190)*	7.60 *(193)*	12.22 *(310)*	1.38 *(35)*	2.17 *(55)*	1.30 *(33)*	9.84 *(250)*	10.0 *(254)*	1.42 *(36)*	2.56 *(65)*	M24 x 1.57 *(M24 x 40)*	13.4 *(340)*
4E170, 4E175 4E180, 4E185 4E190, 4E195	8.46 *(215)*	9.06 *(230)*	14.2 *(360)*	1.38 *(35)*	2.17 *(55)*	1.30 *(33)*	11.8 *(300)*	11.1 *(283)*	1.50 *(38)*	2.56 *(65)*	M24 x 1.57 *(M24 x 40)*	14.7 *(373)*
4F180, 4F185 4F190, 4F195	9.45 *(240)*	9.92 *(252)*	15.8 *(400)*	1.77 *(45)*	2.76 *(70)*	1.54 *(39)*	13.4 *(340)*	12.6 *(320)*	1.99 *(51)*	2.76 *(70)*	M30 x 1.97 *(M30 x 50)*	17.1 *(435)*

											ØU	
Model	**P**	**G1**	**G2**	**H**	**H1**	**ØLA**	**ØD3**	**S x L**	**M1**	**ØD1**	**ØD2**	**Std & Max**	**Min**
4D180, 4D185	0.28 *(7)*	5.83 *(148)*	7.01 *(178)*	16.7 *(424)*	8.39 *(213)*	10.0 *(255)*	11.6 *(295)*	M20 x 1.30 *(M20 x 33)*	15.0 *(381)*	5.51 *(140)*	5.98 *(152)*	3-7/16 *(87.313)*	2-7/16 *(61.913)*
4E170, 4E175 4E180, 4E185 4E190, 4E195	0.28 *(7)*	6.14 *(156)*	7.99 *(203)*	19.6 *(498)*	9.37 *(238)*	11.0 *(280)*	12.6 *(320)*	M20 x 1.38 *(M20 x 35)*	16.3 *(414)*	6.30 *(160)*	6.69 *(170)*	3-15/16 *(100.013)*	2-15/16 *(74.613)*
4F180, 4F185 4F190, 4F195	0.28 *(7)*	9.37 *(238)*	7.20 *(183)*	23.2 *(590)*	10.8 *(273)*	12.6 *(320)*	14.6 *(370)*	M24 x 1.57 *(M24 x 40)*	19.2 *(486)*	7.09 *(180)*	8.15 *(207)*	4-15/16 *(125.413)*	3-15/16 *(100.013)*

Dimensions shown are for reference only and are subject to change without notice, unless certified. Certified prints are available after receipt of an order; consult factory.

Single Reduction LHY(J)-4D180Y~4F195Y Dimensions

All dimensions are in inches *(mm)*.

With C-Face Adapter						
Model	**NEMA C-Face**	**Y**	**Z1**	**Min. ID**	**XJ**	**Weight lb *(kg)***
4D180, 4D185	182TC-184TC	33.97 *(863)*	0.57 *(14)*	5.71 *(145)*	3.50 *(89)*	554 *(251)*
	213TC-215TC	34.47 *(876)*	1.07 *(27)*	5.71 *(145)*	4.00 *(102)*	554 *(251)*
	254TC-256TC	35.22 *(895)*	0.60 *(15.2)*	5.71 *(145)*	4.75 *(121)*	568 *(257)*
	284TC-286TC	35.91 *(912)*	0.57 *(14)*	7.87 *(200)*	5.44 *(138)*	562 *(255)*
	324TC-326TC	36.97 *(939)*	0.57 *(14)*	7.87 *(200)*	6.50 *(165)*	566 *(257)*
4E170, 4E175	182TC-184TC	35.19 *(894)*	0.57 *(14)*	5.71 *(145)*	3.38 *(86)*	750 *(340)*
	213TC-215TC	35.81 *(910)*	1.20 *(30)*	5.71 *(145)*	4.00 *(102)*	756 *(343)*
	254TC-256TC	36.56 *(929)*	0.60 *(15.2)*	5.71 *(145)*	4.75 *(121)*	752 *(341)*
	284TC-286TC	37.25 *(946)*	0.57 *(14)*	7.87 *(200)*	5.44 *(138)*	763 *(346)*
	324TC-326TC	37.81 *(960)*	0.57 *(14)*	7.87 *(200)*	6.00 *(152)*	758 *(344)*
4E180, 4E185	182TC-184TC	35.94 *(913)*	0.57 *(14)*	5.71 *(145)*	3.50 *(89)*	715 *(324)*
	213TC-215TC	36.44 *(926)*	1.07 *(27)*	5.71 *(145)*	4.00 *(102)*	721 *(327)*
	254TC-256TC	37.19 *(945)*	0.60 *(15.2)*	5.71 *(145)*	4.75 *(121)*	729 *(331)*
	284TC-286TC	37.88 *(962)*	0.57 *(14)*	7.87 *(200)*	5.44 *(138)*	724 *(328)*
	324TC-326TC	38.94 *(989)*	0.57 *(14)*	7.87 *(200)*	6.50 *(165)*	728 *(330)*
4E190, 4E195	213TC-215TC	37.99 *(965)*	1.07 *(27)*	5.71 *(145)*	4.00 *(102)*	798 *(362)*
	254TC-256TC	38.61 *(981)*	0.60 *(15.2)*	5.71 *(145)*	4.75 *(121)*	806 *(366)*
	284TC-286TC	39.30 *(998)*	0.57 *(14)*	7.87 *(200)*	5.44 *(138)*	801 *(363)*
	324TC-326TC	40.36 *(1025)*	0.57 *(14)*	7.87 *(200)*	6.50 *(165)*	805 *(365)*
4F180, 4F185	182TC-184TC	39.44 *(1002)*	0.57 *(14)*	5.71 *(145)*	3.50 *(89)*	910 *(413)*
	213TC-215TC	39.94 *(1014)*	1.07 *(27)*	5.71 *(145)*	4.00 *(102)*	916 *(415)*
	254TC-256TC	40.70 *(1034)*	0.60 *(15.2)*	5.71 *(145)*	4.75 *(121)*	924 *(419)*
	284TC-286TC	41.38 *(1051)*	0.57 *(14)*	7.87 *(200)*	5.44 *(138)*	919 *(417)*
	324TC-326TC	42.44 *(1078)*	0.57 *(14)*	7.87 *(200)*	6.50 *(165)*	923 *(419)*
4F190, 4F195	213TC-215TC	41.41 *(1052)*	1.07 *(27)*	5.71 *(145)*	4.00 *(102)*	987 *(448)*
	254TC-256TC	42.03 *(1068)*	0.60 *(15.2)*	5.71 *(145)*	4.75 *(121)*	995 *(451)*
	284TC-286TC	42.72 *(1085)*	0.57 *(14)*	7.87 *(200)*	5.44 *(138)*	990 *(449)*
	324TC-326TC	43.78 *(1112)*	0.57 *(14)*	7.87 *(200)*	6.50 *(165)*	994 *(451)*

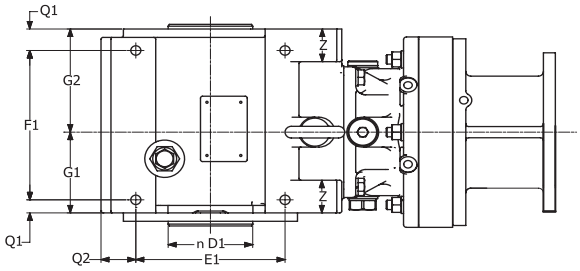
Free Shaft Input							
Model	**ØXU**	**XV**	**Key**	**CF**	**ØDC**	**J**	**Weight lb *(kg)***
4D180, 4D185	1.500 *(38.100)*	2.56 *(65)*	3/8 x 3/8 x 2.56 *(9.53 x 9.53 x 65)*	17.56 *(446)*	14.57 *(370)*	30.47 *(774)*	506 *(229)*
4E170, 4E175	1.375 *(34.925)*	2.17 *(55)*	5/16 x 5/16 x 2.16 *(7.94 x 7.94 x 55)*	18.43 *(468)*	13.39 *(340)*	31.81 *(808)*	712 *(323)*
4E180, 4E185	1.5 *(38.100)*	2.56 *(65)*	3/8 x 3/8 x 2.56 *(9.53 x 9.53 x 65)*	18.54 *(471)*	14.57 *(370)*	32.44 *(824)*	667 *(302)*
4E190, 4E195	1.75 *(44.450)*	2.76 *(70)*	3/8 x 3/8 x 2.76 *(9.53 x 9.53 x 70)*	19.29 *(490)*	16.93 *(430)*	33.86 *(860)*	728 *(330)*
4F180, 4F185	1.5 *(38.100)*	2.56 *(65)*	3/8 x 3/8 x 2.56 *(9.53 x 9.53 x 65)*	21.06 *(535)*	14.57 *(370)*	35.94 *(913)*	862 *(391)*
4F190, 4F195	1.75 *(44.450)*	2.76 *(70)*	3/8 x 3/8 x 2.76 *(9.53 x 9.53 x 70)*	21.73 *(552)*	16.93 *(430)*	37.28 *(947)*	917 *(416)*

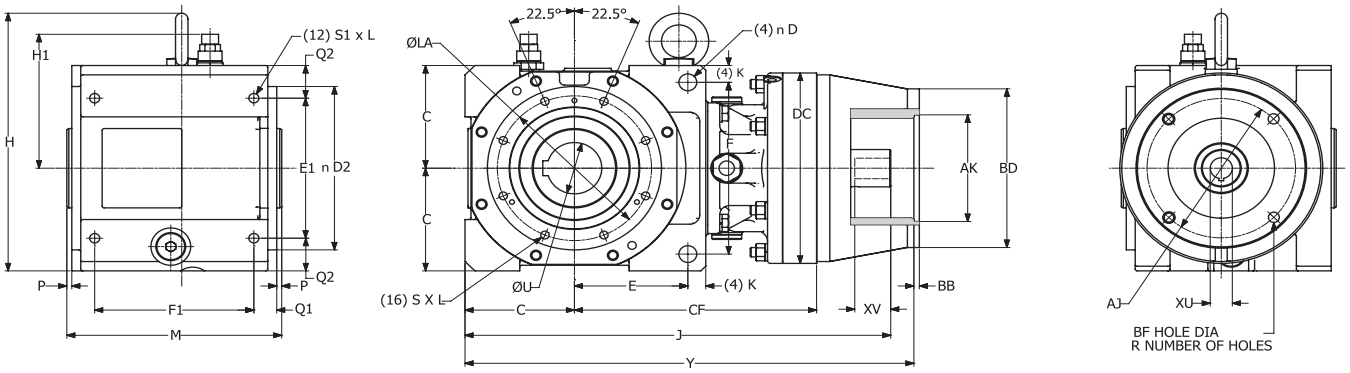
NEMA C-Face Adapter	ØAJ	ØAK	ØBD	BB	ØBF
42C-48C	3.75 *(95)*	3 *(76)*	4.33 *(110)*	— —	0.28 *(7)*
56C-145TC	5.87 *(149)*	4.5 *(114)*	6.69 *(170)*	— —	0.43 *(11)*
182TC-256TC	7.25 *(184)*	8.50 *(216)*	8.98 *(228)*	0.22 *(6)*	0.55 *(14)*
284TC-286TC	9 *(229)*	10.5 *(267)*	11.1 *(282)*	0.22 *(6)*	0.55 *(14)*
324TC-326TC	11 *(279)*	12.5 *(318)*	14.17 *(360)*	0.22 *(6)*	0.71 *(18)*

Dimensions shown are for reference only and are subject to change without notice, unless certified. Certified prints are available after receipt of an order; consult factory.

Dimensions

Quill Dimensions
4A100 ~ 4B165





All dimensions are in inches *(mm)*.
For units ordered in the Y2 mounting configuration, please refer to page 2.166 for external lubricant piping dimensions.

Model	C	E	F	K	Z	ØD	E1	F1	Q1	Q2	S1 x L
4A100, 4A105 4A110, 4A115 4A120, 4A125 4A140, 4A145	4.33 *(110)*	4.49 *(114)*	7.24 *(184)*	0.71 *(18)*	1.38 *(35)*	0.71 *(18)*	5.91 *(150)*	6.3 *(160)*	0.91 *(23)*	1.38 *(35)*	M12 x 0.79 *(M12 x 20)*
4B120, 4B125 4B140, 4B145 4B160, 4B165	5.12 *(130)*	5.59 *(142)*	8.43 *(214)*	0.91 *(23)*	1.58 *(40)*	0.87 *(22)*	7.48 *(190)*	7.68 *(195)*	1.06 *(27)*	1.38 *(35)*	M16 x 1.02 *(M16 x 26)*

Model	ØDC	M	P	G1	G2	H	H1	ØLA	ØD1	S x L	ØD2
4A100 4A105	5.91 *(150)*	8.5 *(216)*	0.20 *(5)*	3.78 *(96)*	4.33 *(110)*	10.9 *(276)*	5.16 *(131)*	6.10 *(155)*	3.35 *(85)*	M10 x 0.67 *(M10 x 17)*	6.89 *(175)*
4A110 4A115	6.38 *(162)*										
4A120 4A125	8.03 *(204)*										
4A140 4A145	9.06 *(230)*										
4B120 4B125	8.03 *(204)*	10.2 *(259)*	0.20 *(5)*	4.80 *(122)*	5.00 *(127)*	12.1 *(308)*	5.94 *(151)*	6.89 *(175)*	3.94 *(100)*	M12 x 0.79 *(M12 x 20)*	7.83 *(199)*
4B140 4B145	9.06 *(230)*										
4B160 4B165	11.81 *(300)*										

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Certified prints are available after receipt of an order; consult factory.

Quill Dimensions 4A100~4B165 Dimensions

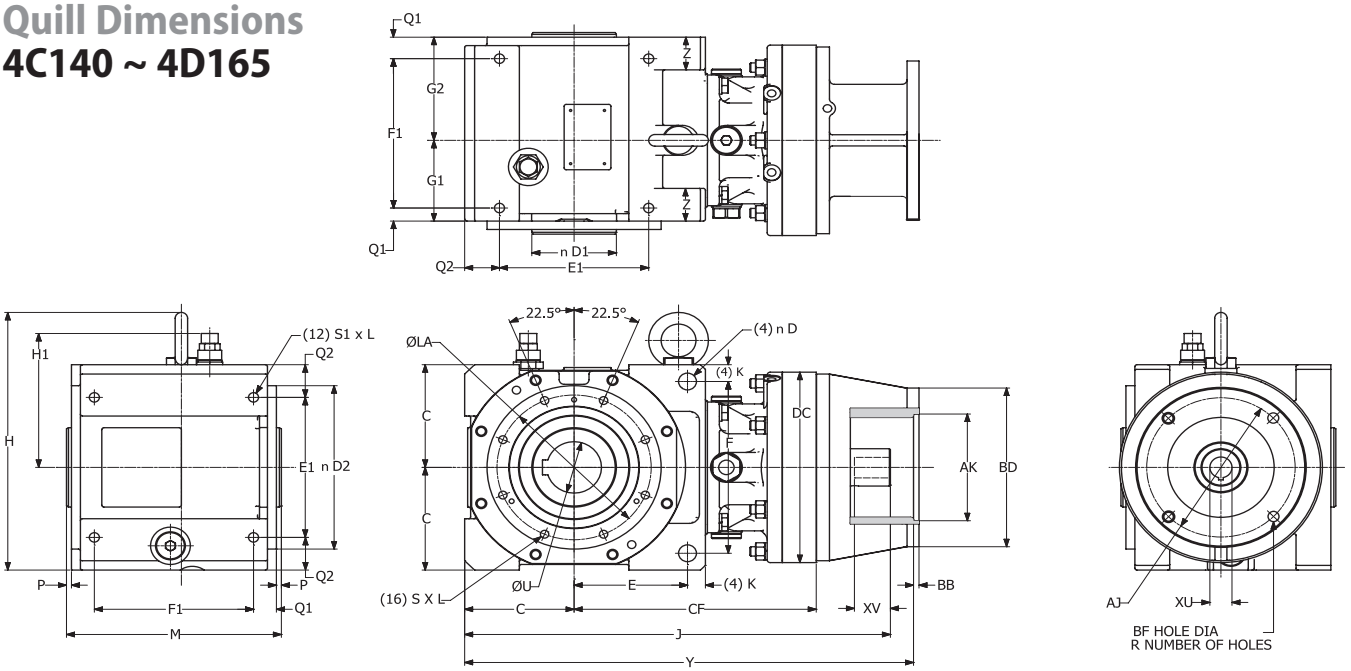
All dimensions are in inches *(mm)*.

Model	Motor Frame	AJ	AK	BD	BB	BF	R	Y	CL	Z	High Speed Shaft			J	Weight lb *(kg)*
											XU	XV	Keyway		
4A100, 4A105	56C	5.88 *(149)*	4.50 *(114)*	6.69 *(170)*	0.20 *(5)*	0.43 *(11)*	4	16.61 *(422)*	3.15 *(80)*	0.47 *(12)*	0.625 *(15.875)*	+0.0014 / 0.0007 *(+0.034 / 0.016)*	1.18 *(30)*	3/16 x 3/32 *(4.75 x 2.38)*	15.74 *(400)*	110 *(50)*
	143TC-145TC	5.88 *(149)*	4.50 *(114)*	6.69 *(170)*	0.20 *(5)*	0.43 *(11)*	4	16.61 *(422)*	3.15 *(80)*	0.47 *(12)*	0.875 *(22.225)*	+0.0016 / 0.0008 *(+0.041 / 0.020)*	1.65 *(42)*	3/16 x 3/32 *(4.75 x 2.38)*	16.09 *(409)*	110 *(50)*
4A110, 4A115	56C	5.88 *(149)*	4.50 *(114)*	6.69 *(170)*	0.20 *(5)*	0.43 *(11)*	4	17.16 *(436)*	3.27 *(83)*	0.47 *(12)*	0.625 *(15.875)*	+0.0014 / 0.0007 *(+0.034 / 0.016)*	1.18 *(30)*	3/16 x 3/32 *(4.75 x 2.38)*	16.72 *(425)*	124 *(56)*
	143TC-145TC	5.88 *(149)*	4.50 *(114)*	6.69 *(170)*	0.20 *(5)*	0.43 *(11)*	4	17.16 *(436)*	3.27 *(83)*	0.47 *(12)*	0.875 *(22.225)*	+0.0016 / 0.0008 *(+0.041 / 0.020)*	1.65 *(42)*	3/16 x 3/32 *(4.75 x 2.38)*	16.66 *(423)*	124 *(56)*
	182TC-184TC	7.25 *(184)*	8.50 *(216)*	8.98 *(228)*	0.22 *(6)*	0.59 *(15)*	4	17.89 *(454)*	4.02 *(102)*	0.69 *(18)*	1.125 *(28.575)*	+0.0016 / 0.0008 *(+0.041 / 0.020)*	1.89 *(48.1)*	1/4 x 1/8 *(6.35 x 3.175)*	16.8 *(427)*	130 *(59)*
4A120, 4A125	56C	5.88 *(149)*	4.50 *(114)*	6.69 *(170)*	0.22 *(6)*	0.43 *(11)*	4	17.66 *(449)*	3.98 *(101)*	0.47 *(12)*	0.625 *(15.875)*	+0.0014 / 0.0007 *(+0.034 / 0.016)*	1.18 *(30)*	3/16 x 3/32 *(4.75 x 2.38)*	16.81 *(427)*	131 *(59)*
	143TC-145TC	5.88 *(149)*	4.50 *(114)*	6.69 *(170)*	0.22 *(6)*	0.43 *(11)*	4	17.66 *(449)*	3.98 *(101)*	0.47 *(12)*	0.875 *(22.225)*	+0.0016/+0.0008 *(+0.041/+0.020)*	1.50 *(38.1)*	3/16 x 3/32 *(4.75 x 2.38)*	17.01 *(432)*	131 *(59)*
	182TC-184TC	7.25 *(184)*	8.50 *(216)*	8.98 *(228)*	0.22 *(6)*	0.55 *(14)*	4	18.80 *(478)*	5.12 *(130)*	0.67 *(17)*	1.125 *(28.575)*	+0.0016/+0.0008 *(+0.041/+0.020)*	2.48 *(63)*	1/4 x 1/8 *(6.35 x 3.175)*	18.41 *(468)*	134 *(61)*
	213TC-215TC	7.25 *(184)*	8.50 *(216)*	8.98 *(228)*	0.22 *(6)*	0.55 *(14)*	4	18.80 *(478)*	5.12 *(130)*	0.67 *(17)*	1.375 *(34.925)*	+0.0020/+0.0010 *(+0.051/+0.025*	2.64 *(67.1)*	5/16 x 5/32 *(7.938 x 3.969)*	17.76 *(451)*	134 *(61)*
4A140, 4A145	143TC-145TC	5.88 *(149)*	4.50 *(114)*	6.69 *(170)*	0.20 *(5)*	0.43 *(11)*	4	18.62 *(473)*	4.06 *(103)*	0.47 *(12)*	0.875 *(22.225)*	+0.0016 / 0.0008 *(+0.041 / 0.020)*	1.61 *(40.9)*	3/16 x 3/32 *(4.75 x2.38)*	18.26 *(464)*	152 *(69)*
	182TC-184TC	7.25 *(184)*	8.50 *(216)*	9.00 *(229)*	0.22 *(6)*	0.55 *(14)*	4	20.50 *(521)*	5.96 *(151)*	0.67 *(17)*	1.125 *(28.575)*	+0.0016/+0.0008 *(+0.041/+0.020)*	1.91 *(48.6)*	1/4 x 1/8 *(6.35 x 3.175)*	19.48 *(495)*	160 *(73)*
	213TC-215TC	7.25 *(184)*	8.50 *(216)*	9.00 *(229)*	0.22 *(6)*	0.55 *(14)*	4	20.50 *(521)*	5.96 *(151)*	0.67 *(17)*	1.375 *(34.925)*	+0.0020/+0.0010 *(+0.051/+0.025)*	2.68 *(68.1)*	5/16 x 5/32 *(7.938 x 3.969)*	19.14 *(486)*	159 *(72)*
	254TC-256TC	7.25 *(184)*	8.50 *(216)*	9.00 *(229)*	0.22 *(6)*	0.55 *(14)*	4	20.50 *(521)*	5.96 *(151)*	0.67 *(17)*	1.625 *(41.275)*	+0.0020/+0.0010 *(+0.051/+0.025)*	2.99 *(76)*	3/8 x 3/8 *(9.525 x 9.525)*	19.46 *(494)*	160 *(73)*
4B120, 4B125	56C	5.88 *(149)*	4.50 *(114)*	6.69 *(170)*	0.22 *(6)*	0.43 *(11)*	4	19.90 *(505)*	3.98 *(101)*	0.47 *(12)*	0.625 *(15.875)*	+0.0014 / 0.0007 *(+0.034 / 0.016)*	1.18 *(30)*	3/16 x 3/32 *(4.75 x 2.38)*	19.05 *(484)*	195 *(88)*
	143TC-145TC	5.88 *(149)*	4.50 *(114)*	6.69 *(170)*	0.22 *(6)*	0.43 *(11)*	4	19.90 *(505)*	3.98 *(101)*	0.47 *(12)*	0.875 *(22.225)*	+0.0016/+0.0008 *(+0.041/+0.020)*	1.50 *(38.1)*	3/16 x 3/32 *(4.75 x 2.38)*	19.24 *(489)*	195 *(88)*
	182TC-184TC	7.25 *(184)*	8.50 *(216)*	8.98 *(228)*	0.22 *(6)*	0.55 *(14)*	4	21.04 *(534)*	5.12 *(130)*	0.67 *(17)*	1.125 *(28.575)*	+0.0016/+0.0008 *(+0.041/+0.020)*	2.48 *(63)*	1/4 x 1/8 *(6.35 x 3.175)*	20.64 *(524)*	198 *(437)*
	213TC-215TC	7.25 *(184)*	8.50 *(216)*	8.98 *(228)*	0.22 *(6)*	0.55 *(14)*	4	21.04 *(534)*	5.12 *(130)*	0.67 *(17)*	1.375 *(34.925)*	+0.0020/+0.0010 *(+0.051/+0.025)*	2.64 *(67.1)*	5/16 x 5/32 *(7.938 x 3.969)*	19.99 *(508)*	198 *(90)*
4B140, 4B145	143TC-145TC	5.88 *(149)*	4.50 *(114)*	6.69 *(170)*	0.20 *(5)*	0.43 *(11)*	4	20.67 *(525)*	4.06 *(103)*	0.47 *(12)*	0.875 *(22.225)*	+0.0016 / 0.0008 *(+0.041 / 0.020)*	1.61 *(40.9)*	3/16 x 3/32 *(4.75 x 2.38)*	20.33 *(516)*	218 *(99)*
	182TC-184TC	7.25 *(184)*	8.50 *(216)*	9.00 *(229)*	0.22 *(6)*	0.55 *(14)*	4	22.55 *(573)*	5.96 *(151)*	0.67 *(17)*	1.125 *(28.575)*	+0.0016/+0.0008 *(+0.041/+0.020*	1.91 *(48.6)*	1/4 x 1/8 *(6.35 x 3.175)*	21.55 *(547)*	226 *(498)*
	213TC-215TC	7.25 *(184)*	8.50 *(216)*	9.00 *(229)*	0.22 *(6)*	0.55 *(14)*	4	22.55 *(573)*	5.96 *(151)*	0.67 *(17)*	1.375 *(34.925)*	+0.0020/+0.0010 *(+0.051/+0.025)*	2.68 *(68.1)*	5/16 x 5/32 *(7.938 x 3.969)*	21.21 *(539)*	225 *(496)*
	254TC-256TC	7.25 *(184)*	8.50 *(216)*	9.00 *(229)*	0.22 *(6)*	0.55 *(14)*	4	22.55 *(573)*	5.96 *(151)*	0.67 *(17)*	1.625 *(41.275)*	+0.0020/+0.0010 *(+0.051/+0.025)*	2.99 *(76)*	3/8 x 3/8 *(9.525 x 9.525)*	21.53 *(547)*	226 *(102)*
4B160, 4B165	182TC-184TC	7.25 *(184)*	8.5 *(216)*	8.98 *(228)*	0.22 *(6)*	0.55 *(14)*	4	22.99 *(584)*	5.26 *(134)*	0.79 *(20)*	1.125 *(28.575)*	+0.0016/+0.0008 *(+0.041/+0.020)*	2.01	1/4 x 1/8 *(6.35 x 3.175)*	22.07 *(561)*	264 *(120)*
	213TC-215TC	7.25 *(184)*	8.5 *(216)*	8.98 *(228)*	0.22 *(6)*	0.55 *(14)*	4	22.99 *(584)*	5.26 *(134)*	0.79 *(20)*	1.375 *(34.925)*	+0.0020/+0.0010 *(+0.051/+0.025)*	2.48 *(63)*	5/16 x 5/32 *(7.938 x 3.969)*	22.07 *(561)*	267 *(121)*
	254TC-256TC	7.25 *(184)*	8.5 *(216)*	8.98 *(228)*	0.22 *(6)*	0.55 *(14)*	4	22.99 *(584)*	5.26 *(134)*	0.79 *(20)*	1.625 *(41.275)*	+0.0020/+0.0010 *(+0.051/+0.025)*	3.11 *(79)*	3/8 x 3/8 *(9.525 x 9.525)*	22.07 *(561)*	266 *(121)*

Dimensions shown are for reference only and are subject to change without notice, unless certified. Certified prints are available after receipt of an order; consult factory.

Dimensions

Quill Dimensions
4C140 ~ 4D165



All dimensions are in inches *(mm)*.

For units ordered in the Y2 mounting configuration, please refer to page 2.166 for external lubricant piping dimensions.

Model	C	E	F	K	Z	ØD	E1	F1	Q1	Q2	S1 x L
4C140, 4C145 **4C160, 4C165**	6.30 *(160)*	6.77 *(172)*	10.4 *(264)*	1.10 *(28)*	1.77 *(45)*	1.02 *(26)*	8.66 *(220)*	8.39 *(213)*	1.22 *(31)*	1.97 *(50)*	M20 x 1.30 *(M20 x 33)*
4D160, 4D165	7.48 *(190)*	7.60 *(193)*	12.2 *(310)*	1.38 *(35)*	2.17 *(55)*	1.30 *(33)*	9.84 *(250)*	10.0 *(254)*	1.42 *(36)*	2.56 *(65)*	M24 x 1.57 *(M24 x 40)*

Model	ØDC	M	P	G1	G2	H	H1	ØLA	ØD1	S x L	ØD2
4C140 **4C145**	9.06 *(230)*	11.2 *(285)*	0.20 *(5)*	4.88 *(124)*	5.94 *(151)*	14.3 *(364)*	7.20 *(183)*	8.35 *(212)*	4.72 *(120)*	M16 x 1.02 *(M16 x 26)*	9.61 *(244)*
4C160 **4C165**	11.81 *(300)*										
4D160 **4D165**	11.81 *(300)*	13.4 *(340)*	0.28 *(7)*	5.83 *(148)*	7.01 *(178)*	16.7 *(424)*	8.39 *(213)*	10.0 *(255)*	5.51 *(140)*	M20 x 1.30 *(M20 x 33)*	11.6 *(295)*

Dimensions shown are for reference only and are subject to change without notice, unless certified.
Certified prints are available after receipt of an order; consult factory.

Quill Dimensions 4C140~4D165 Dimensions

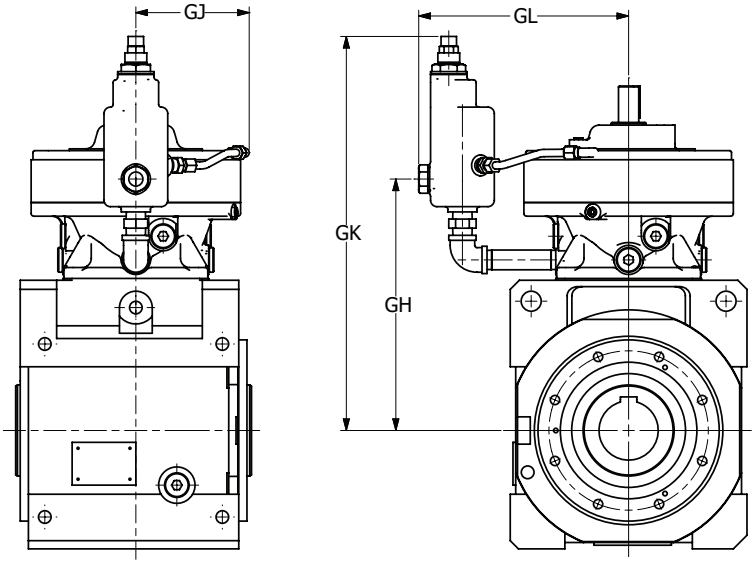
All dimensions are in inches *(mm)*.

Model	Motor Frame	AJ	AK	BD	BB	BF	R	Y	CL	Z	High Speed Shaft				J	Weight lb *(kg)*
											XU		XV	Keyway		
4C140, 4C145	143TC-145TC	5.88 *(149)*	4.50 *(114)*	6.69 *(170)*	0.20 *(5)*	0.43 *(11)*	4	24.18 *(614)*	4.06 *(103)*	0.47 *(12)*	0.875 *(22.225)*	+0.0016 / 0.0008 *(+0.041 / 0.020)*	1.61 *(40.9)*	3/16 x 3/32 *(4.75 x 2.38)*	23.8 *(605)*	322 *(146)*
	182TC-184TC	7.25 *(184)*	8.50 *(216)*	9.00 *(229)*	0.22 *(6)*	0.55 *(14)*	4	26.06 *(662)*	5.96 *(151)*	0.67 *(17)*	1.125 *(28.575)*	+0.0016/+0.0008 *(+0.041/+0.020)*	1.91 *(48.6)*	1/4 x 1/8 *(6.35 x 3.175)*	25.02 *(636)*	330 *(150)*
	213TC-215TC	7.25 *(184)*	8.50 *(216)*	9.00 *(229)*	0.22 *(6)*	0.55 *(14)*	4	26.06 *(662)*	5.96 *(151)*	0.67 *(17)*	1.375 *(34.925)*	+0.0020/+0.0010 *(+0.051/+0.025)*	2.68 *(68.1)*	5/16 x 5/32 *(7.938 x 3.969)*	24.69 *(627)*	329 *(149)*
	254TC-256TC	7.25 *(184)*	8.50 *(216)*	9.00 *(229)*	0.22 *(6)*	0.55 *(14)*	4	26.06 *(662)*	5.96 *(151)*	0.67 *(17)*	1.625 *(41.275)*	+0.0020/+0.0010 *(+0.051/+0.025)*	2.99 *(76)*	3/8 x 3/8 *(9.525 x 9.525)*	25 *(635)*	330 *(150)*
4C160, 4C165	182TC-184TC	7.25 *(184)*	8.50 *(216)*	8.98 *(228)*	0.22 *(6)*	0.55 *(14)*	4	26.18 *(665)*	5.26 *(134)*	0.79 *(20)*	1.125 *(28.575)*	+0.0016/+0.0008 *(+0.041/+0.020)*	2.01 *(51.1)*	1/4 x 1/8 *(6.35 x 3.175)*	25.25 *(641)*	365 *(166)*
	213TC-215TC	7.25 *(184)*	8.50 *(216)*	8.98 *(228)*	0.22 *(6)*	0.55 *(14)*	4	26.18 *(665)*	5.26 *(134)*	0.79 *(20)*	1.375 *(34.925)*	+0.0020/+0.0010 *(+0.051/+0.025)*	2.48 *(63)*	5/16 x 5/32 *(7.938 x 3.969)*	25.25 *(641)*	368 *(167)*
	254TC-256TC	7.25 *(184)*	8.50 *(216)*	8.98 *(228)*	0.22 *(6)*	0.55 *(14)*	4	26.18 *(665)*	5.26 *(134)*	0.79 *(20)*	1.625 *(41.275)*	+0.0020/+0.0010 *(+0.051/+0.025)*	3.11 *(79)*	3/8 x 3/8 *(9.525 x 9.525)*	25.25 *(641)*	367 *(166)*
4D160, 4D165	182TC-184TC	7.25 *(184)*	8.50 *(216)*	8.98 *(228)*	0.22 *(6)*	0.55 *(14)*	4	30.20 *(767)*	5.26 *(134)*	0.79 *(20)*	1.125 *(28.575)*	+0.0016/+0.0008 *(+0.041/+0.020)*	2.01 *(51.1)*	1/4 x 1/8 *(6.35 x 3.175)*	29.28 *(744)*	513 *(233)*
	213TC-215TC	7.25 *(184)*	8.50 *(216)*	8.98 *(228)*	0.22 *(6)*	0.55 *(14)*	4	30.20 *(767)*	5.26 *(134)*	0.79 *(20)*	1.375 *(34.925)*	+0.0020/+0.0010 *(+0.051/+0.025)*	2.48 *(63)*	5/16 x 5/32 *(7.938 x 3.969)*	29.28 *(744)*	516 *(234)*
	254TC-256TC	7.25 *(184)*	8.50 *(216)*	8.98 *(228)*	0.22 *(6)*	0.55 *(14)*	4	30.20 *(767)*	5.26 *(134)*	0.79 *(20)*	1.625 *(41.275)*	+0.0020/+0.0010 *(+0.051/+0.025)*	3.11 *(79)*	3/8 x 3/8 *(9.525 x 9.525)*	29.28 *(744)*	515 *(234)*

Dimensions shown are for reference only and are subject to change without notice, unless certified.
Certified prints are available after receipt of an order; consult factory.

Dimensions

Single Reduction, External Lubricant Piping
LHY(J)-4A100 ~ 4F195



All dimensions are in inches *(mm)*.

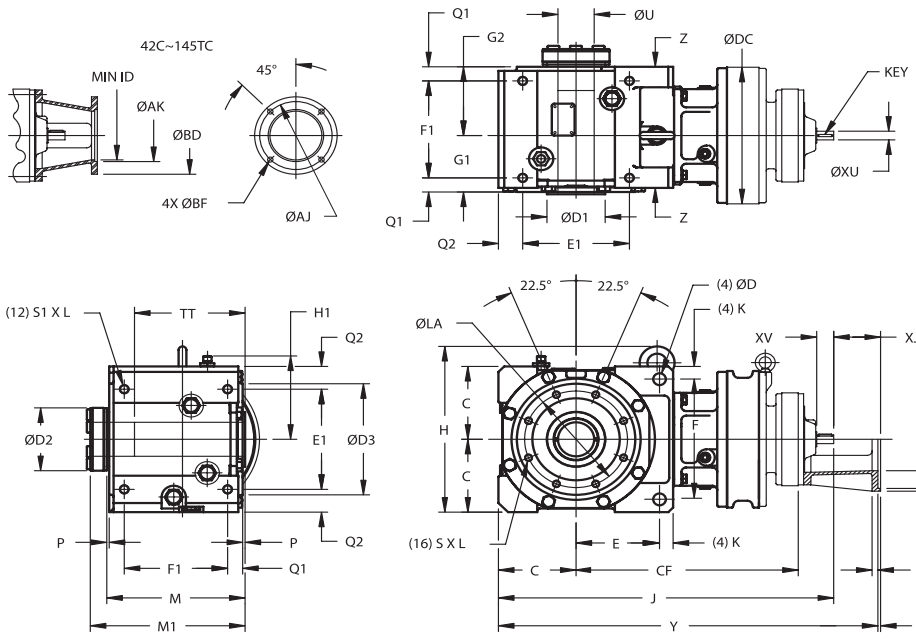
Frame Size	GJ	GL	GH	GK
4A100	3.86	5.98	8.66	13.3
4A105	*(98)*	*(152)*	*(220)*	*(339)*
4A110	4.02	6.85	8.98	13.7
4A115	*(102)*	*(174)*	*(228)*	*(347)*
4A120	6.38	7.99	8.90	14.3
4A125	*(162)*	*(203)*	*(226)*	*(364)*
4A140	6.46	9.09	9.61	15.8
4A145	*(164)*	*(231)*	*(244)*	*(401)*
4B120	6.38	7.99	10.4	15.8
4B125	*(162)*	*(203)*	*(263)*	*(401)*
4B140	6.46	9.09	10.9	17.0
4B145	*(164)*	*(231)*	*(276)*	*(433)*
4B160	7.09	10.3	11.5	17.7
4B165	*(180)*	*(261)*	*(293)*	*(450)*
4C140	6.46	9.09	13.1	19.3
4C145	*(164)*	*(231)*	*(334)*	*(491)*
4C160	7.09	10.3	13.5	19.7
4C165	*(180)*	*(261)*	*(344)*	*(501)*
4C170	7.95	11.4	14.1	22.2
4C175	*(202)*	*(289)*	*(358)*	*(565)*
4D160	7.09	10.3	16.4	22.6
4D165	*(180)*	*(261)*	*(416)*	*(573)*
4D170	7.95	11.4	16.1	24.2
4D175	*(202)*	*(289)*	*(408)*	*(615)*
4D180	9.06	12.4	16.2	27.0
4D185	*(230)*	*(314)*	*(411)*	*(687)*
4E170	7.95	11.4	17.0	25.2
4E175	*(202)*	*(289)*	*(433)*	*(640)*
4E180	9.06	12.4	17.2	27.7
4E185	*(230)*	*(314)*	*(436)*	*(703)*
4E190	10.2	14.0	17.7	28.2
4E195	*(260)*	*(355)*	*(450)*	*(717)*
4F180	9.06	12.4	19.6	30.2
4F185	*(230)*	*(314)*	*(499)*	*(766)*
4F190	10.2	14.0	20.2	30.7
4F195	*(260)*	*(355)*	*(512)*	*(779)*

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Dimensions

Double Reduction
LHY(J)-4A10DAY ~ 4B14DCY



Min. Engagement		
Frame Size	TT	
	inch	*(mm)*
4A	8.19	*(208)*
4B	9.53	*(242)*

All dimensions are in inches *(mm)*.
For units ordered in the Y2 mounting configuration, please refer to page 2.176 for external lubricant piping dimensions.

Model	C	E	F	K	Z	ØD	E1	F1	Q1	Q2	S1 x L	M
4A10DA, 4A12DA, 4A12DB, 4A14DA, 4A14DB, 4A14DC	4.33 *(110)*	4.49 *(114)*	7.24 *(184)*	0.71 *(18)*	1.38 *(35)*	0.71 *(18)*	5.91 *(150)*	6.30 *(160)*	0.91 *(23)*	1.38 *(35)*	M12 x 0.79 *(M12 x 20)*	8.50 *(216)*
4B12DA, 4B12DB 4B14DA, 4B14DB, 4B14DC	5.12 *(130)*	5.59 *(142)*	8.43 *(214)*	0.91 *(23)*	1.58 *(40)*	0.87 *(22)*	7.48 *(190)*	7.68 *(195)*	1.06 *(27)*	1.38 *(35)*	M16 x 1.02 *(M16 x 26)*	10.2 *(259)*

												ØU	
Model	**P**	**G1**	**G2**	**H**	**H1**	**ØLA**	**ØD3**	**S x L**	**M1**	**ØD1**	**ØD2**	**Std & Max**	**Min**
4A10DA, 4A12DA, 4A12DB, 4A14DA, 4A14DB, 4A14DC	0.20 *(5)*	3.78 *(96)*	4.33 *(110)*	10.9 *(276)*	5.16 *(131)*	6.10 *(155)*	6.89 *(175)*	M10 x 0.67 *(M10 x 17)*	9.84 *(250)*	3.35 *(85)*	4.09 *(104)*	2-3/16 *(55.563)*	1-11/16 *(42.863)*
4B12DA, 4B12DB 4B14DA, 4B14DB 4B14DC	0.20 *(5)*	4.80 *(122)*	5.00 *(127)*	12.1 *(308)*	5.94 *(151)*	6.89 *(175)*	7.83 *(199)*	M12 x 0.79 *(M12 x 20)*	11.5 *(293)*	3.94 *(100)*	4.49 *(114)*	2-7/16 *(61.913)*	1-15/16 *(49.213)*

Dimensions shown are for reference only and are subject to change without notice, unless certified.
Certified prints are available after receipt of an order; consult factory.

Double Reduction LHY(J)-4A10DAY~4B14DCY Dimensions

All dimensions are in inches *(mm)*.

With C-Face Adapter						
Model	**NEMA C-Face**	**Y**	**Z1**	**Min. ID**	**XJ**	**Weight lb *(kg)***
4A10DA	42C	19.4 *(493)*	0.47 *(12)*	2.44 *(62)*	1.78 *(45)*	113 *(51)*
	48C	19.8 *(503)*	0.47 *(12)*	2.44 *(62)*	2.16 *(55)*	113 *(51)*
	56C	20.2 *(513)*	0.47 *(12)*	3.15 *(80)*	2.56 *(65)*	116 *(53)*
4A12DA	42C	19.9 *(505)*	0.47 *(12)*	2.44 *(62)*	1.78 *(45)*	131 *(59)*
	48C	20.3 *(515)*	0.47 *(12)*	2.44 *(62)*	2.16 *(55)*	131 *(59)*
	56C	20.7 *(525)*	0.47 *(12)*	3.15 *(80)*	2.56 *(65)*	133 *(60)*
4A12DB	48C	21.0 *(534)*	0.47 *(12)*	2.44 *(62)*	2.16 *(55)*	139 *(63)*
	56C-145TC	21.5 *(546)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	142 *(64)*
4A14DA	48C	21.1 *(536)*	0.47 *(12)*	2.44 *(62)*	2.16 *(55)*	129 *(59)*
	56C	21.5 *(547)*	0.47 *(12)*	3.15 *(80)*	2.56 *(65)*	131 *(59)*
4A14DB	48C	21.8 *(552)*	0.47 *(12)*	2.44 *(62)*	2.16 *(55)*	147 *(67)*
	56C-145TC	22.2 *(564)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	149 *(68)*
4A14DC	143TC-145TC	22.5 *(570)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	154 *(70)*
	182TC-184TC	23.3 *(591)*	0.47 *(12)*	5.43 *(138)*	3.45 *(88)*	158 *(72)*
4B12DA	42C	22.1 *(562)*	0.47 *(12)*	2.44 *(62)*	1.78 *(45)*	195 *(88)*
	48C	22.5 *(572)*	0.47 *(12)*	2.44 *(62)*	2.16 *(55)*	195 *(88)*
	56C	22.9 *(582)*	0.47 *(12)*	3.15 *(80)*	2.56 *(65)*	197 *(89)*
4B12DB	48C	23.3 *(591)*	0.47 *(12)*	2.44 *(62)*	2.16 *(55)*	203 *(92)*
	56C-145TC	23.7 *(603)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	206 *(93)*
4B14DA	48C	23.2 *(589)*	0.47 *(12)*	2.44 *(62)*	2.16 *(55)*	202 *(92)*
	56C	23.6 *(599)*	0.47 *(12)*	3.15 *(80)*	2.56 *(65)*	204 *(93)*
4B14DB	48C	23.8 *(605)*	0.47 *(12)*	2.44 *(62)*	2.16 *(55)*	212 *(96)*
	56C-145TC	24.3 *(617)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	215 *(98)*
4B14DC	143TC-145TC	24.5 *(623)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	220 *(100)*
	182TC-184TC	25.3 *(644)*	0.47 *(12)*	5.43 *(138)*	3.45 *(88)*	224 *(102)*

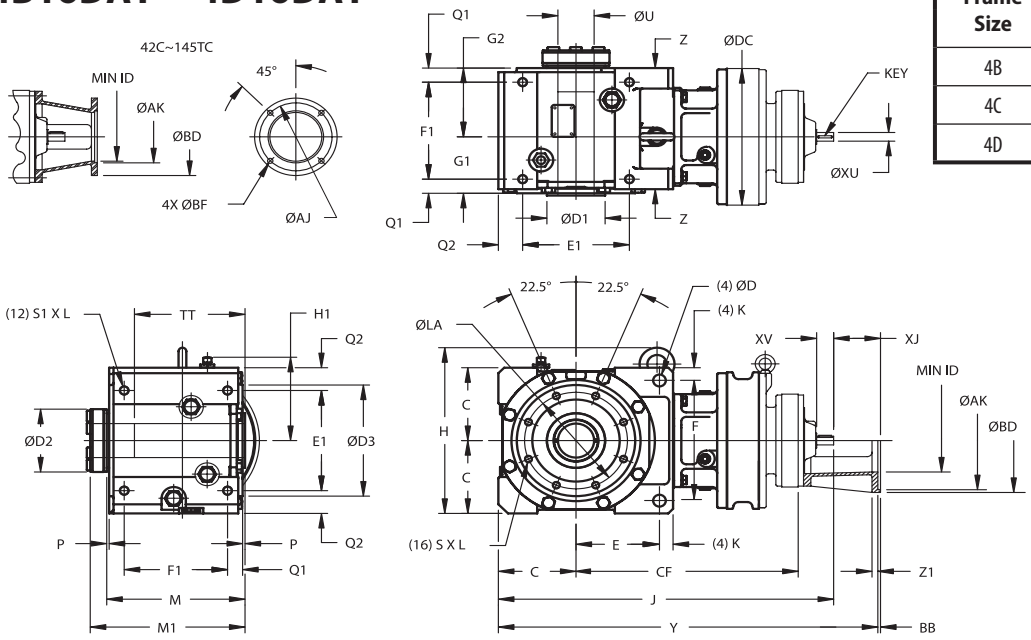
Free Shaft Input							
Model	**ØXU**	**XV**	**Key**	**CF**	**ØDC**	**J**	**Weight lb *(kg)***
4A10DA	0.500 *(12.7)*	0.98 *(24.9)*	1/8 x 1/8 x 0.71 *(3.175 x 3.175 x 18)*	11.22 *(285)*	5.91 *(150)*	17.64 *(448)*	110 *(50)*
4A12DA	0.500 *(12.7)*	0.98 *(24.9)*	1/8 x 1/8 x 0.71 *(3.175 x 3.175 x 18)*	11.69 *(297)*	8.03 *(204)*	18.11 *(460)*	128 *(58)*
4A12DB	0.625 *(15.9)*	0.98 *(24.9)*	3/16 x 3/16 x 0.75 *(4.762 x 4.762 x 19.05)*	12.17 *(309)*	8.03 *(204)*	18.86 *(479)*	135 *(61)*
4A14DA	0.500 *(12.7)*	0.98 *(24.9)*	1/8 x 1/8 x 0.71 *(3.175 x 3.175 x 18)*	12.50 *(319)*	9.06 *(230)*	18.98 *(482)*	137 *(62)*
4A14DB	0.625 *(15.9*	0.98 *(24.9)*	3/16 x 3/16 x 0.75 *(4.762 x 4.762 x 19.05)*	12.90 *(328)*	9.06 *(230)*	19.61 *(498)*	139 *(63)*
4A14DC	0.625 *(15.9*	0.98 *(24.9)*	3/16 x 3/16 x 0.75 *(4.762 x 4.762 x 19.05)*	13.45 *(342)*	9.06 *(230)*	19.84 *(504)*	143 *(65)*
4B12DA	0.500 *(12.7)*	0.98 *(24.9)*	1/8 x 1/8 x 0.71 *(3.175 x 3.175 x 18)*	13.15 *(334)*	8.03 *(204)*	20.35 *(517)*	192 *(87.1)*
4B12DB	0.625 *(15.9)*	0.98 *(24.9)*	3/16 x 3/16 x 0.75 *(4.762 x 4.762 x 19.05)*	13.62 *(346)*	8.03 *(204)*	21.10 *(536)*	198 *(90)*
4B14DA	0.500 *(12.7)*	0.98 *(24.9)*	1/8 x 1/8 x 0.71 *(3.175 x 3.175 x 18)*	13.82 *(351)*	9.06 *(230)*	21.02 *(534)*	198 *(90)*
4B14DB	0.625 *(15.9)*	0.98 *(24.9)*	3/16 x 3/16 x 0.75 *(4.762 x 4.762 x 19.05)*	14.17 *(360)*	9.06 *(230)*	21.65 *(550)*	207 *(94)*
4B14DC	0.625 *(15.9)*	0.98 *(24.9)*	3/16 x 3/16 x 0.75 *(4.762 x 4.762 x 19.05)*	14.72 *(374)*	9.06 *(230)*	21.89 *(556)*	209 *(95)*

NEMA C-Face Adapter	ØAJ	ØAK	ØBD	BB	ØBF
42C-48C	3.75 *(95)*	3 *(76)*	4.33 *(110)*	— —	0.28 *(7)*
56C-145TC	5.87 *(149)*	4.5 *(114)*	6.69 *(170)*	— —	0.43 *(11)*
182TC-256TC	7.25 *(184)*	8.5 *(216)*	8.98 *(228)*	0.22 *(6)*	0.55 *(14)*
284TC-286TC	9 *(229)*	10.5 *(267)*	11.1 *(282)*	0.22 *(6)*	0.55 *(14)*
324TC-326TC	11 *(279)*	12.5 *(318)*	14.17 *(360)*	0.22 *(6)*	0.71 *(18)*

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Dimensions

Double Reduction
LHY(J)-4B16DAY ~ 4D16DAY



Min. Engagement		
Frame Size	TT	
	inch	*(mm)*
4B	9.53	*(242)*
4C	10.98	*(279)*
4D	12.83	*(326)*

All dimensions are in inches *(mm)*.
For units ordered in the Y2 mounting configuration, please refer to page 2.176 for external lubricant piping dimensions.

Model	C	E	F	K	Z	ØD	E1	F1	Q1	Q2	S1 x L	M
4B16DA, 4B16DB, 4B16DC	5.12 *(130)*	5.59 *(142)*	8.43 *(214)*	0.91 *(23)*	1.58 *(40)*	0.87 *(22)*	7.48 *(190)*	7.68 *(195)*	1.06 *(27)*	1.38 *(35)*	M16 x 1.02 *(M16 x 26)*	10.2 *(259)*
4C14DA, 4C14DB, 4C14DC, 4C16DA, 4C16DB, 4C16DC, 4C17DA, 4C17DB, 4C17DC	6.30 *(160)*	6.77 *(172)*	10.4 *(264)*	1.10 *(28)*	1.77 *(45)*	1.02 *(26)*	8.66 *(220)*	8.39 *(213)*	1.22 *(31)*	1.97 *(50)*	M20 x 1.30 *(M20 x 33)*	11.2 *(285)*
4D16DA	7.48 *(190)*	7.60 *(193)*	12.2 *(310)*	1.38 *(35)*	2.17 *(55)*	1.30 *(33)*	9.84 *(250)*	10.0 *(254)*	1.42 *(36)*	2.56 *(65)*	M24 x 1.57 *(M24 x 40)*	13.4 *(340)*

											ØU	
Model	**P**	**G1**	**G2**	**H**	**H1**	**ØLA**	**ØD3**	**S x L**	**M1**	**ØD1**	**ØD2**	**Std & Max**	**Min**
4B16DA, 4B16DB, 4B16DC	0.20 *(5)*	4.80 *(122)*	5.00 *(127)*	12.1 *(308)*	5.94 *(151)*	6.89 *(175)*	7.83 *(199)*	M12 x 0.79 *(M12 x 20)*	11.5 *(293)*	3.94 *(100)*	4.49 *(114)*	2-7/16 *(61.913)*	1-15/16 *(49.213)*
4C14DA, 4C14DB, 4C14DC, 4C16DA, 4C16DB, 4C16DC, 4C17DA, 4C17DB, 4C17DC	0.20 *(5)*	4.88 *(124)*	5.94 *(151)*	14.3 *(364)*	7.20 *(183)*	8.35 *(212)*	9.61 *(244)*	M16 x 1.02 *(M16 x 26)*	12.8 *(326)*	4.72 *(120)*	5.43 *(138)*	2-15/16 *(71.613)*	2-3/16 *(55.563)*
4D16DA	0.28 *(7)*	5.83 *(148)*	7.01 *(178)*	16.7 *(424)*	8.39 *(213)*	10.0 *(255)*	11.6 *(295)*	M20 x 1.30 *(M20 x 33)*	15.0 *(381)*	5.51 *(140)*	5.98 *(152)*	3-7/16 *(87.313)*	2-7/16 *(61.913)*

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Certified prints are available after receipt of an order; consult factory.

Double Reduction LHY(J)-4D16DAY~4B16DAY Dimensions

All dimensions are in inches *(mm)*.

With C-Face Adapter						
Model	**NEMA C-Face**	**Y**	**Z1**	**Min. ID**	**XJ**	**Weight lb *(kg)***
4B16DA	56C-145TC	25.0 *(636)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	272 *(123)*
4B16DB	143TC-145TC	25.2 *(642)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	277 *(126)*
	182TC-184TC	26.1 *(663)*	0.47 *(12)*	5.43 *(138)*	3.45 *(88)*	283 *(128)*
4B16DC	182TC-184TC	26.5 *(673)*	0.47 *(12)*	5.43 *(138)*	3.37 *(86)*	282 *(128)*
	213TC-215TC	27.5 *(698)*	1.47 *(37)*	5.43 *(138)*	4.37 *(111)*	284 *(129)*
4C14DA	48C	26.7 *(678)*	0.47 *(12)*	2.44 *(62)*	2.16 *(55)*	305 *(138)*
	56C	27.1 *(688)*	0.47 *(12)*	3.15 *(80)*	2.56 *(65)*	308 *(140)*
4C14DB	48C	27.3 *(694)*	0.47 *(12)*	2.44 *(62)*	2.16 *(55)*	316 *(143)*
	56C-145TC	27.8 *(706)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	318 *(144)*
4C14DC	143TC-145TC	28.0 *(712)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	320 *(145)*
	182TC-184TC	28.8 *(733)*	0.47 *(12)*	5.43 *(138)*	3.45 *(88)*	324 *(147)*
4C16DA	56C-145TC	28.7 *(729)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	369 *(167)*
4C16DB	56C-145TC	28.9 *(735)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	374 *(170)*
	182TC-184TC	29.7 *(755)*	0.47 *(12)*	5.43 *(138)*	3.45 *(88)*	380 *(172)*
4C16DC	182TC-184TC	29.7 *(754)*	0.47 *(12)*	5.43 *(138)*	3.37 *(86)*	379 *(172)*
	213TC-215TC	30.7 *(779)*	1.47 *(37)*	5.43 *(138)*	4.37 *(111)*	381 *(173)*
4C17DA	56C-145TC	29.4 *(746)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	394 *(179)*
4C17DB	143TC-145TC	29.6 *(751)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	398 *(180)*
	182TC-184TC	30.4 *(773)*	0.47 *(12)*	5.43 *(138)*	3.45 *(88)*	402 *(182)*
4C17DC	182TC-184TC	31.3 *(796)*	0.47 *(12)*	5.43 *(138)*	3.37 *(86)*	415 *(188)*
	213TC-215TC	32.3 *(821)*	1.47 *(37)*	5.43 *(138)*	4.37 *(111)*	425 *(193)*
4D16DA	48C	32.2 *(819)*	0.47 *(12)*	2.44 *(62)*	2.16 *(55)*	514 *(233)*
	56C-145TC	32.7 *(831)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	517 *(234)*

Free Shaft Input							
Model	**ØXU**	**XV**	**Key**	**CF**	**ØDC**	**J**	**Weight lb *(kg)***
4B16DA	0.625 *(15.9)*	0.98 *(24.9)*	3/16 x 3/1 6x 0.75 *(4.762 x 4.762 x 19.05)*	15.39 *(391)*	11.81 *(300)*	22.87 *(581)*	260 *(118)*
4B16DB	0.625 *(15.9)*	0.98 *(24.9)*	3/16 x 3/16 x 0.75 *(4.762 x 4.762 x 19.05)*	15.94 *(405)*	11.81 *(300)*	23.11 *(587)*	265 *(120)*
4B16DC	0.750 *(19.1)*	1.38 *(35.1)*	3/16 x 3/16 x 1.02 *(4.762 x 4.762 x 26)*	15.94 *(405)*	11.81 *(300)*	24.09 *(612)*	276 *(125)*
4C14DA	0.500 *(12.7)*	0.98 *(24.9)*	1/8 x 1/8 x 0.71 *(3.175 x 3.175 x 18)*	16.14 *(410)*	9.06 *(230)*	24.53 *(623)*	302 *(137)*
4C14DB	0.625 *(15.9)*	0.98 *(24.9)*	3/16 x 3/16 x 0.75 *(4.762 x 4.762 x 19.05)*	16.50 *(419)*	9.06 *(230)*	25.16 *(639)*	311 *(141)*
4C14DC	0.625 *(15.9)*	0.98 *(24.9)*	3/16 x 3/16 x 0.75 *(4.762 x 4.762 x 19.05)*	17.05 *(433)*	9.06 *(230)*	25.39 *(645)*	313 *(142)*
4C16DA	0.625 *(15.9)*	0.98 *(24.9)*	3/16 x 3/16 x 0.75 *(4.762 x 4.762 x 19.05)*	17.40 *(442)*	11.81 *(300)*	26.06 *(662)*	362 *(164)*
4C16DB	0.625 *(15.9)*	0.98 *(24.9)*	3/16 x 3/16 x 0.75 *(4.762 x 4.762 x 19.05)*	17.95 *(456)*	11.81 *(300)*	26.29 *(668)*	367 *(166)*
4C16DC	0.750 *(19.1)*	1.38 *(35.1)*	3/16 x 3/16 x 1.02 *(4.762 x 4.762 x 26)*	17.95 *(456)*	11.81 *(300)*	27.28 *(693)*	397 *(180)*
4C17DA	0.625 *(15.9)*	0.98 *(24.9)*	3/16 x 3/16 x 0.75 *(4.762 x 4.762 x 19.05)*	18.07 *(459)*	13.39 *(340)*	26.73 *(679)*	401 *(182)*
4C17DB	0.625 *(15.9)*	0.98 *(24.9)*	3/16 x 3/16 x 0.75 *(4.762 x 4.762 x 19.05)*	18.62 *(473)*	13.39 *(340)*	26.97 *(685)*	406 *(184)*
4C17DC	0.750 *(19.1)*	1.38 *(35.1)*	3/16 x 3/16 x 1.02 *(4.762 x 4.762 x 26)*	18.78 *(477)*	13.39 *(340)*	27.95 *(710)*	417 *(189)*
4D16DA	0.625 *(15.9)*	0.98 *(24.9)*	3/16 x 3/16 x 0.75 *(4.762 x 4.762 x 19.05)*	20.24 *(514)*	11.81 *(300)*	30.08 *(764)*	509 *(231)*

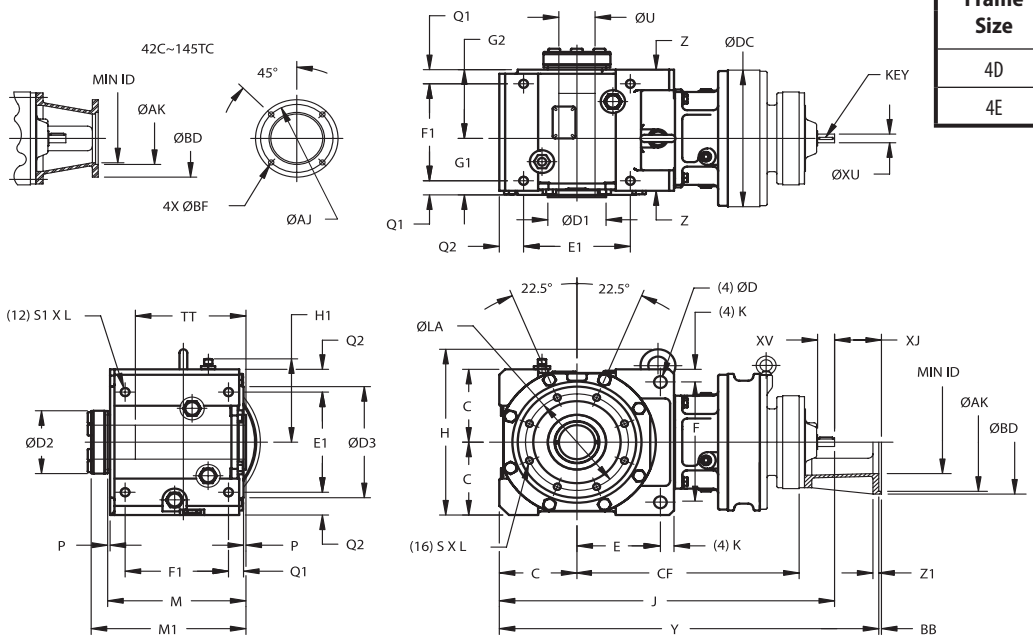
NEMA C-Face Adapter	ØAJ	ØAK	ØBD	BB	ØBF
42C-48C	3.75 *(95)*	3 *(76)*	4.33 *(110)*	— —	0.28 *(7)*
56C-145TC	5.87 *(149)*	4.5 *(114)*	6.69 *(170)*	— —	0.43 *(11)*
182TC-256TC	7.25 *(184)*	8.5 *(216)*	8.98 *(228)*	0.22 *(6)*	0.55 *(14)*
284TC-286TC	9 *(229)*	10.5 *(267)*	11.1 *(282)*	0.22 *(6)*	0.55 *(14)*
324TC-326TC	11 *(279)*	12.5 *(318)*	14.17 *(360)*	0.22 *(6)*	0.71 *(18)*

Dimensions shown are for reference only and are subject to change without notice, unless certified. Certified prints are available after receipt of an order; consult factory.

Dimensions

Double Reduction
LHY(J)-4D16DBY ~ 4E18DAY

Min. Engagement		
Frame Size	TT	
	inch	*(mm)*
4D	12.83	*(326)*
4E	14.13	*(359)*



All dimensions are in inches *(mm)*.
For units ordered in the Y2 mounting configuration, please refer to page 2.176 for external lubricant piping dimensions.

Model	C	E	F	K	Z	ØD	E1	F1	Q1	Q2	S1 x L	M
4D16DB, 4D16DC, 4D17DA, 4D17DB, 4D17DC,4D18DA, 4D18DB	7.48 *(190)*	7.60 *(193)*	12.2 *(310)*	1.38 *(35)*	2.17 *(55)*	1.30 *(33)*	9.84 *(250)*	10.0 *(254)*	1.42 *(36)*	2.56 *(65)*	M24 x 1.57 *(M24 x 40)*	13.4 *(340)*
4E17DA, 4E17DB, 4E17DC, 4E18DA	8.46 *(215)*	9.06 *(230)*	14.2 *(360)*	1.38 *(35)*	2.17 *(55)*	1.30 *(33)*	11.8 *(300)*	11.1 *(283)*	1.50 *(38)*	2.56 *(65)*	M24 x 1.57 *(M24 x 40)*	14.7 *(373)*

											ØU	
Model	**P**	**G1**	**G2**	**H**	**H1**	**ØLA**	**ØD3**	**S x L**	**M1**	**ØD1**	**ØD2**	**Std & Max**	**Min**
4D16DB, 4D16DC, 4D17DA, 4D17DB, 4D17DC, 4D18DA, 4D18DB	0.28 *(7)*	5.83 *(148)*	7.01 *(178)*	16.7 *(424)*	8.39 *(213)*	10.0 *(255)*	11.6 *(295)*	M20 x 1.30 *(M20 x 33)*	15.0 *(381)*	5.51 *(140)*	5.98 *(152)*	3-7/16 *(87.313)*	2-7/16 *(61.913)*
4E17DA, 4E17DB, 4E17DC, 4E18DA	0.28 *(7)*	6.14 *(156)*	7.99 *(203)*	19.6 *(498)*	9.37 *(238)*	11.0 *(280)*	12.6 *(320)*	M20 x 1.38 *(M20 x 35)*	16.3 *(414)*	6.30 *(160)*	6.69 *(170)*	3-15/16 *(100.013)*	2-15/16 *(74.613)*

Dimensions shown are for reference only and are subject to change without notice, unless certified.
Certified prints are available after receipt of an order; consult factory.

Double Reduction LHY(J)-4D16DBY~4E18DAY Dimensions

All dimensions are in inches *(mm)*.

With C-Face Adapter						
Model	**NEMA C-Face**	**Y**	**Z1**	**Min. ID**	**XJ**	**Weight lb *(kg)***
4D16DB	143TC-145TC	32.9 *(837)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	521 *(236)*
	182TC-184TC	33.8 *(858)*	0.47 *(12)*	5.43 *(138)*	3.45 *(88)*	525 *(238)*
4D16DC	182TC-184TC	34.2 *(868)*	0.47 *(12)*	5.43 *(138)*	3.37 *(86)*	542 *(246)*
	213TC-215TC	35.2 *(893)*	1.47 *(37)*	5.43 *(138)*	4.37 *(111)*	544 *(247)*
4D17DA	56C-145TC	32.5 *(826)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	548 *(249)*
4D17DB	143TC-145TC	32.7 *(832)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	552 *(250)*
	182TC-184TC	33.6 *(853)*	0.47 *(12)*	5.43 *(138)*	3.45 *(88)*	556 *(252)*
4D17DC	182TC-184TC	34.5 *(876)*	0.47 *(12)*	5.43 *(138)*	3.37 *(86)*	569 *(258)*
	213TC-215TC	35.5 *(901)*	1.47 *(37)*	5.43 *(138)*	4.37 *(111)*	579 *(263)*
4D18DA	143TC-145TC	35.62 *(905)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	643 *(292)*
	182TC-184TC	36.36 *(924)*	0.47 *(12)*	5.43 *(138)*	3.45 *(88)*	646 *(293)*
4D18DB	56C-145TC	37.59 *(955)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	666 *(302)*
	182TC-184TC	38.33 *(974)*	0.47 *(12)*	5.43 *(138)*	3.37 *(86)*	670 *(304)*
	213TC-215TC	38.96 *(990)*	1.47 *(37)*	5.43 *(138)*	4.37 *(111)*	675 *(306)*
4E17DA	48C	34.0 *(864)*	0.47 *(12)*	2.44 *(62)*	2.16 *(55)*	708 *(321)*
	56C-145TC	34.5 *(876)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	711 *(322)*
4E17DB	143TC-145TC	34.7 *(882)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	715 *(324)*
	182TC-184TC	35.5 *(903)*	0.47 *(12)*	5.43 *(138)*	3.45 *(88)*	719 *(326)*
4E17DC	182TC-184TC	36.4 *(926)*	0.47 *(12)*	5.43 *(138)*	3.37 *(86)*	732 *(332)*
	213TC-215TC	37.4 *(951)*	1.47 *(37)*	5.43 *(138)*	4.37 *(111)*	743 *(337)*
4E18DA	143TC-145TC	37.6 *(955)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	808 *(366)*
	182TC-184TC	38.33 *(974)*	0.47 *(12)*	5.43 *(138)*	3.45 *(88)*	812 *(368)*

Free Shaft Input							
Model	**ØXU**	**XV**	**Key**	**CF**	**ØDC**	**J**	**Weight lb *(kg)***
4D16DB	0.625 *(15.9)*	0.98 *(24.9)*	3/16 x 3/16 x 0.75 *(4.762 x 4.762 x 19.05)*	20.79 *(528)*	11.81 *(300)*	30.31 *(770)*	514 *(233)*
4D16DC	0.750 *(19.1)*	1.38 *(35.1)*	3/16 x 3/16 x 1.02 *(4.762 x 4.762 x 26)*	20.87 *(530)*	11.81 *(300)*	31.22 *(793)*	529 *(240)*
4D17DA	0.625 *(15.9)*	0.98 *(24.9)*	3/16 x 3/16 x 0.75 *(4.762 x 4.762 x 19.05)*	20.04 *(509)*	13.39 *(340)*	29.88 *(759)*	540 *(245)*
4D17DB	0.625 *(15.9)*	0.98 *(24.9)*	3/16 x 3/16 x 0.75 *(4.762 x 4.762 x 19.05)*	20.59 *(523)*	13.39 *(340)*	30.12 *(765)*	545 *(247)*
4D17DC	0.750 *(19.1)*	1.38 *(35.1)*	3/16 x 3/16 x 1.02 *(4.762 x 4.762 x 26)*	20.75 *(527)*	13.39 *(340)*	31.10 *(790)*	556 *(252)*
4D18DA	0.625 *(15.9)*	0.98 *(24.9)*	3/16 x 3/16 x 0.75 *(4.762 x 4.762 x 19.05)*	20.08 *(510)*	14.57 *(370)*	32.99 *(838)*	635 *(288)*
4D18DB	0.875 *(22.2)*	1.57 *(39.9)*	3/16 x 3/16 x 1.38 *(4.762 x 4.762 x 35.05)*	22.08 *(561)*	14.57 *(370)*	34.96 *(888)*	659 *(299)*
4E17DA	0.625 *(15.9)*	0.98 *(24.9)*	3/16 x 3/16 x 0.75 *(4.762 x 4.762 x 19.05)*	21.02 *(534)*	13.39 *(340)*	31.85 *(809)*	703 *(319)*
4E17DB	0.625 *(15.9)*	0.98 *(24.9)*	3/16 x 3/16 x 0.75 *(4.762 x 4.762 x 19.05)*	21.57 *(548)*	13.39 *(340)*	32.09 *(815)*	708 *(321)*
4E17DC	0.750 *(19.1)*	1.38 *(35.1)*	3/16 x 3/16 x 1.02 *(4.762 x 4.762 x 26)*	21.73 *552)*	13.39 *(340)*	33.07 *(840)*	719 *(326)*
4E18DA	0.625 *(15.9)*	0.98 *(24.9)*	3/16 x 3/16 x 0.75 *(4.762 x 4.762 x 19.05)*	24.45 *(621)*	14.57 *(370)*	34.96 *(888)*	800 *(363)*

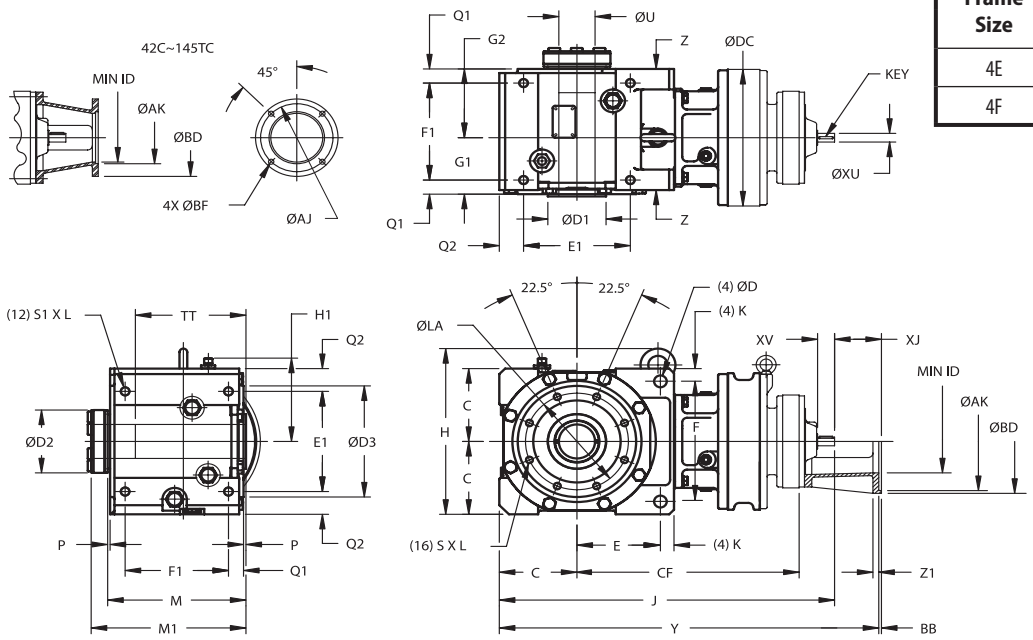
NEMA C-Face Adapter	ØAJ	ØAK	ØBD	BB	ØBF
42C-48C	3.75 *(95)*	3 *(76)*	4.33 *(110)*	— —	0.28 *(7)*
56C-145TC	5.87 *(149)*	4.5 *(114)*	6.69 *(170)*	— —	0.43 *(11)*
182TC-256TC	7.25 *(184)*	8.5 *(216)*	8.98 *(228)*	0.22 *(6)*	0.55 *(14)*
284TC-286TC	9 *(229)*	10.5 *(267)*	11.1 *(282)*	0.22 *(6)*	0.55 *(14)*
324TC-326TC	11 *(279)*	12.5 *(318)*	14.17 *(360)*	0.22 *(6)*	0.71 *(18)*

Dimensions shown are for reference only and are subject to change without notice, unless certified. Certified prints are available after receipt of an order; consult factory.

Dimensions

Double Reduction
LHY(J)-4E18DBY ~ 4F19DBY

Min. Engagement		
Frame Size	TT	
	inch	*(mm)*
4E	14.13	*(359)*
4F	16.22	*(412)*



All dimensions are in inches *(mm)*.
For units ordered in the Y2 mounting configuration, please refer to page 2.176 for external lubricant piping dimensions.

Model	C	E	F	K	Z	ØD	E1	F1	Q1	Q2	S1 x L	M
4E18DB, 4E19DA, 4E19DB	8.46 *(215)*	9.06 *(230)*	14.2 *(360)*	1.38 *(35)*	2.17 *(55)*	1.30 *(33)*	11.8 *(300)*	11.1 *(283)*	1.50 *(38)*	2.56 *(65)*	M24 x 1.57 *(M24 x 40)*	14.7 *(373)*
4F18DA, 4F18DB 4F19DA, 4F19DB	9.45 *(240)*	9.92 *(252)*	15.8 *(400)*	1.77 *(45)*	2.76 *(70)*	1.54 *(39)*	13.4 *(340)*	12.6 *(320)*	1.99 *(51)*	2.76 *(70)*	M30 x 1.97 *(M30 x 50)*	17.1 *(435)*

											ØU	
Model	**P**	**G1**	**G2**	**H**	**H1**	**ØLA**	**ØD3**	**S x L**	**M1**	**ØD1**	**ØD2**	**Std & Max**	**Min**
4E18DB, 4E19DA, 4E19DB	0.28 *(7)*	6.14 *(156)*	7.99 *(203)*	19.6 *(498)*	9.37 *(238)*	11.0 *(280)*	12.6 *(320)*	M20 x 1.38 *(M20 x 35)*	16.3 *(414)*	6.30 *(160)*	6.69 *(170)*	3-15/16 *(100.013)*	2-15/16 *(74.613)*
4F18DA, 4F18DB 4F19DA, 4F19DB	0.28 *(7)*	9.37 *(238)*	7.20 *(183)*	23.2 *(590)*	10.8 *(273)*	12.6 *(320)*	14.6 *(370)*	M24 x 1.57 *(M24 x 40)*	19.2 *(486)*	7.09 *(180)*	8.15 *(207)*	4-15/16 *(125.413)*	3-15/16 *(100.013)*

Dimensions shown are for reference only and are subject to change without notice, unless certified.
Certified prints are available after receipt of an order; consult factory.

Double Reduction LHY(J)-4E18DBY~4F19DBY Dimensions

All dimensions are in inches *(mm)*.

With C-Face Adapter						
Model	**NEMA C-Face**	**Y**	**Z1**	**Min. ID**	**XJ**	**Weight lb *(kg)***
4E18DB	56C-145TC	39.56 *(1005)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	833 *(378)*
	182TC-184TC	40.30 *(1024)*	0.47 *(12)*	5.43 *(138)*	3.37 *(86)*	837 *(380)*
	213TC-215TC	40.93 *(1040)*	1.47 *(37)*	5.43 *(138)*	4.37 *(111)*	839 *(380)*
4E19DA	56C-145TC	39.80 *(1011)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	912 *(414)*
	182TC-184TC	40.54 *(1030)*	0.47 *(12)*	5.43 *(138)*	3.37 *(86)*	916 *(415)*
4E19DB	56C-145TC	40.70 *(1034)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	916 *(415)*
	182TC-184TC	41.44 *(1053)*	0.47 *(12)*	5.43 *(138)*	3.45 *(88)*	920 *(417)*
	213TC-215TC	42.07 *(1069)*	1.47 *(37)*	5.43 *(138)*	4.37 *(111)*	925 *(420)*
4F18DA	143TC-145TC	41.17 *(1046)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	1195 *(542)*
	182TC-184TC	41.91 *(1065)*	0.47 *(12)*	5.43 *(138)*	3.45 *(88)*	1199 *(544)*
4F18DB	56C-145TC	43.02 *(1093)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	1221 *(554)*
	182TC-184TC	43.76 *(1112)*	0.47 *(12)*	5.43 *(138)*	3.37 *(86)*	1225 *(556)*
	213TC-215TC	44.39 *(1128)*	1.47 *(37)*	5.43 *(138)*	4.37 *(111)*	1236 *(561)*
4F19DA	182TC-184TC	43.96 *(1117)*	0.47 *(12)*	5.43 *(138)*	3.37 *(86)*	1305 *(592)*
	213TC-215TC	44.49 *(1130)*	1.47 *(37)*	5.43 *(138)*	4.37 *(111)*	1316 *(597)*
4F19DB	56C-145TC	44.13 *(1121)*	0.47 *(12)*	4.21 *(107)*	2.63 *(67)*	1305 *(592)*
	182TC-184TC	44.87 *(1140)*	0.47 *(12)*	5.43 *(138)*	3.45 *(88)*	1316 *(597)*
	213TC-215TC	45.50 *(1156)*	1.47 *(37)*	5.43 *(138)*	4.37 *(111)*	1327 *(602)*

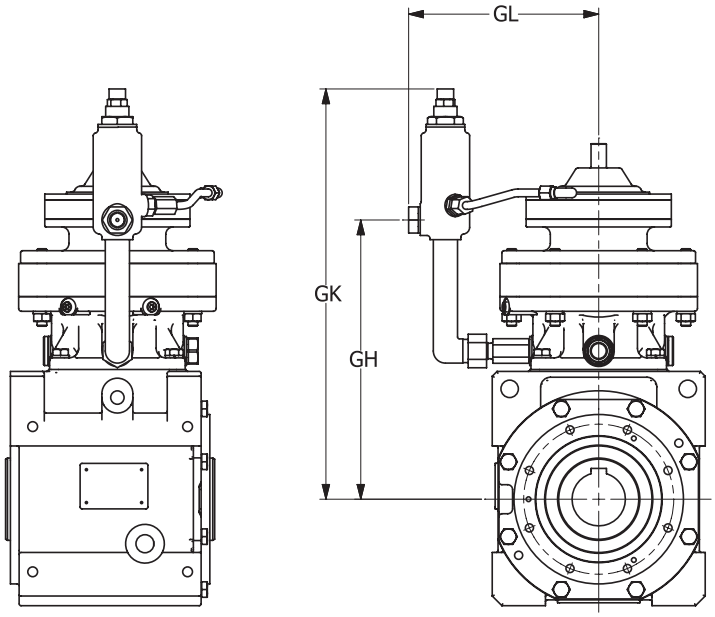
Free Shaft Input							
Model	**ØXU**	**XV**	**Key**	**CF**	**ØDC**	**J**	**Weight lb *(kg)***
4E18DB	0.875 *(22.2)*	1.57 *(39.9)*	3/16 x 3/16 x 1.38 *(4.762 x 4.762 x 35.05)*	25.31 *(643)*	14.57 *(370)*	36.93 *(938)*	825 *(374)*
4E19DA	0.750 *(19.1)*	1.38 *(35.1)*	3/16 x 3/16 x 1.02 *(4.762 x 4.762 x 26)*	25.83 *(656)*	16.93 *(430)*	37.17 *(944)*	904 *(410)*
4E19DB	0.875 *(22.2)*	1.57 *(39.9)*	3/16 x 3/16 x 1.38 *(4.762 x 4.762 x 35.05)*	26.46 *(672)*	16.93 *(430)*	38.07 *(967)*	908 *(412)*
4F18DA	0.625 *(15.9)*	0.98 *(24.9)*	3/16 x 3/16 x 0.75 *(4.762 x 4.762 x 19.05)*	26.93 *(684)*	14.57 *(370)*	38.54 *(979)*	1188 *(539)*
4F18DB	0.875 *(22.2)*	1.57 *(39.9)*	3/16 x 3/16 x 1.38 *(4.762 x 4.762 x 35.05)*	27.80 *(706)*	14.57 *(370)*	40.39 *(1026)*	1213 *(550)*
4F19DA	0.750 *(19.1)*	1.38 *(35.1)*	3/16 x 3/16 x 1.02 *(4.762 x 4.762 x 26)*	28.27 *(718)*	16.93 *(430)*	40.59 *(1031)*	1292 *(586)*
4F19DB	0.875 *(22.2)*	1.57 *(39.9)*	(3/16 x 3/16 x 1.38) *(4.762 x 4.762 x 35.05)*	28.90 *(734)*	16.93 *(430)*	41.50 *(1054)*	1297 *(588)*

NEMA C-Face Adapter	ØAJ	ØAK	ØBD	BB	ØBF
42C-48C	3.75 *(95)*	3 *(76)*	4.33 *(110)*	— —	0.28 *(7)*
56C-145TC	5.87 *(149)*	4.5 *(114)*	6.69 *(170)*	— —	0.43 *(11)*
182TC-256TC	7.25 *(184)*	8.5 *(216)*	8.98 *(228)*	0.22 *(6)*	0.55 *(14)*
284TC-286TC	9 *(229)*	10.5 *(267)*	11.1 *(282)*	0.22 *(6)*	0.55 *(14)*
324TC-326TC	11 *(279)*	12.5 *(318)*	14.17 *(360)*	0.22 *(6)*	0.71 *(18)*

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Dimensions

Double Reduction, External Lubricant Piping
LHY(J)-4A10DA ~ 4F19DB



All dimensions are in inches *(mm)*.

Frame Size	GL	GH	GK	Frame Size	GL	GH	GK	Frame Size	GL	GH	GK
4A10DA	5.98 *(152)*	10.9 *(278)*	15.6 *(397)*	**4C14DC**	9.09 *(231)*	16.5 *(418)*	22.6 *(575)*	**4E17DA**	11.4 *(289)*	20.5 *(521)*	28.7 *(728)*
4A12DA	7.99 *(203)*	11.4 *(290)*	16.9 *(428)*	**4C16DA**	10.3 *(261)*	17.0 *(433)*	23.2 *(590)*	**4E17DB**	11.4 *(289)*	20.8 *(528)*	28.9 *(735)*
4A12DB	7.99 *(203)*	11.8 *(299)*	17.2 *(437)*	**4D16DA**	10.3 *(261)*	19.9 *(505)*	26.1 *(662)*	**4E17DC**	11.4 *(289)*	21.0 *(533)*	29.1 *(740)*
4B12DA	7.99 *(203)*	12.9 *(327)*	18.3 *(465)*	**4D16DB**	10.3 *(261)*	20.2 *(512)*	26.3 *(669)*	**4E18DA**	12.4 *(314)*	21.1 *(536)*	31.6 *(803)*
4B12DB	7.99 *(203)*	13.2 *(336)*	18.7 *(474)*	**4D17DA**	11.4 *(289)*	19.5 *(496)*	27.7 *(703)*	**4E18DB**	12.4 *(314)*	20.6 *(522)*	32.2 *(819)*
4B14DA	9.09 *(231)*	13.7 *(349)*	19.9 *(506)*	**4D17DB**	11.4 *(289)*	19.8 *(503)*	28.0 *(710)*	**4F18DA**	12.4 *(314)*	23.6 *(599)*	34.1 *(866)*
4B14DB	9.09 *(231)*	13.9 *(353)*	20.1 *(510)*	**4D17DC**	11.4 *(289)*	20.0 *(508)*	28.1 *(715)*	**4F18DB**	12.4 *(314)*	24.2 *(615)*	34.7 *(882)*
4C14DA	9.09 *(231)*	16.0 *(407)*	22.2 *(564)*	**4D18DA**	12.4 *(314)*	20.1 *(511)*	31.0 *(787)*	**4F19DA**	14.0 *(355)*	24.6 *(624)*	35.1 *(891)*
4C14DB	9.09 *(231)*	16.2 *(411)*	22.4 *(568)*	**4D18DB**	12.4 *(314)*	20.7 *(527)*	31.3 *(794)*	**4F19DB**	14.0 *(355)*	24.9 *(633)*	35.4 *(900)*

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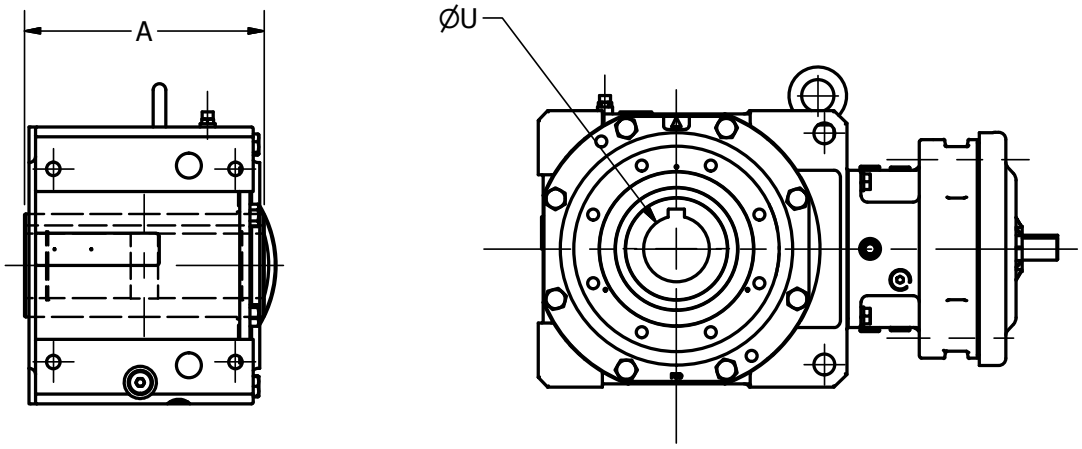
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3 Options

Options

Keyed Hollow Shaft

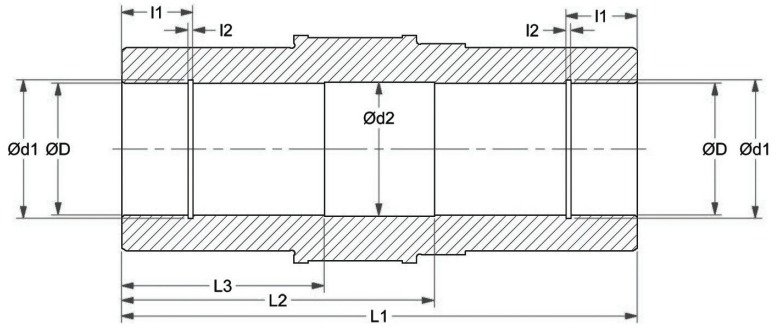


All dimensions are in inches *(mm)*.

Frame Size	Standard Inch Bore Dimension			Standard Metric Bore Dimension			A	TK*
	ØU	ØU Tolerance	Keyway	ØU	ØU Tolerance	Keyway		
4A	2.000	+0.0018/+0.0006	1/2 x 1/4	*(55)*	*(+0.046/+0.016)*	*(16 x 10)*	8.50 *(216)*	6.50 *(165)*
4B	2.375	+0.0018/+0.0006	5/8 x 5/16	*(65)*	*(+0.046/+0.016)*	*(18 x 11)*	10.20 *(259)*	7.87 *(200)*
4C	2.750	+0.0018/+0.0006	5/8 x 5/16	*(75)*	*(+0.046/+0.016)*	*(20 x 12)*	11.22 *(285)*	9.76 *(248)*
4D	3.250	+0.0021/+0.0007	3/4 X 3/8	*(85)*	*(+0.054/+0.019)*	*(22 x 14)*	13.39 *(340)*	11.93 *(303)*
4E	4.000	+0.0021/+0.0007	1 X 1/2	*(100)*	*(+0.054/+0.019)*	*(28 x 16)*	14.69 *(373)*	10.24 *(260)*
4F	4.500	+0.0023/+0.0009	1 X 1/2	*(120)*	*(+0.058/+0.023)*	*(32 x 18)*	17.13 *(435)*	12.44 *(316)*

*Recommended minimum shaft engagement

Internal Retaining Ring



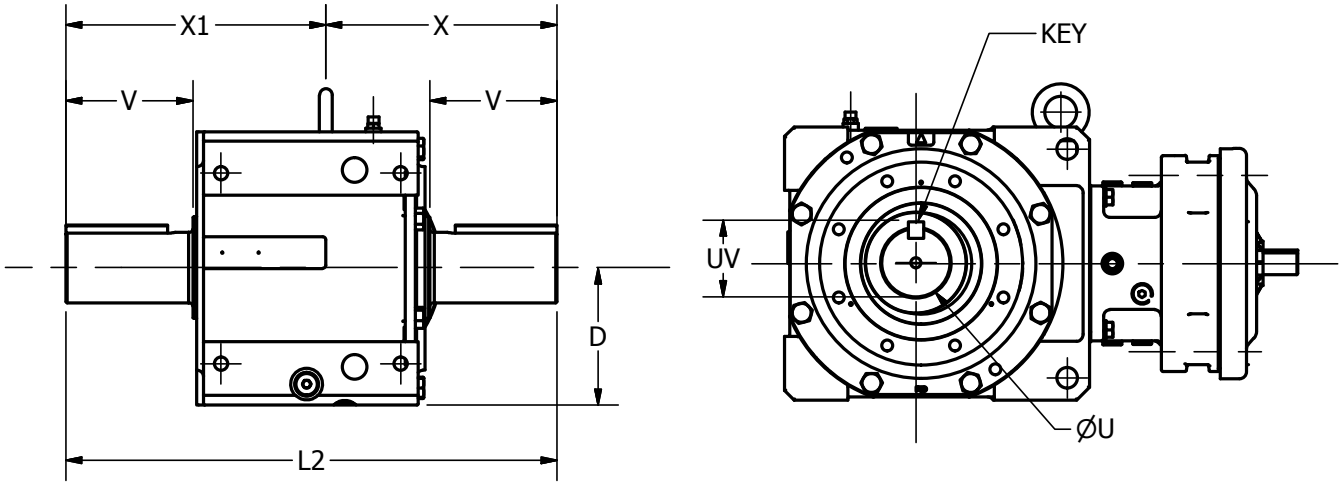
All dimensions are in inches *(mm)*.

Model	BBB		Retaining Ring Groove			Relief		
	ØD	L1	Ød1	l1	l2	Ød2	L2	L3
4A	2 *(55)*	8.50 *(216)*	2.09 *(58)*	1.18 *(30)*	.069 *(2.2)*	2.04 *(56)*	5.16 *(131)*	3.35 *(85)*
4B	2-3/8 *(65)*	10.2 *(259)*	2.51 *(68)*	1.18 *(30)*	0.085 *(2.7)*	2.42 *(66)*	6.26 *(159)*	3.94 *(100)*
4C	2-3/4 *(75)*	11.2 *(285)*	2.93 *(78)*	1.18 *(37)*	0.100 *(2.7)*	2.80 *(76)*	6.50 *(165)*	4.72 *(120)*
4D	3-1/4 *(85)*	13.4 *(340)*	3.43 *(88.5)*	1.46 *(37)*	0.116 *(3.2)*	3.31 *(86)*	7.68 *(195)*	5.71 *(145)*
4E	4 *(100)*	14.7 *(373)*	4.27 *(103.5)*	1.46 *(37)*	0.116 *(3.2)*	4.06 *(101)*	8.19 *(208)*	6.50 *(165)*
4F	4-1/2 *(120)*	17.1 *(435)*	4.74 *(124)*	1.93 *(49)*	0.120 *(4.2)*	4.55 *(121)*	9.49 or 9.69 (3) *(241 or 246 (3))*	7.44 or 7.64 (3) *(189 or 194 (3))*

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Options

Solid Output Shaft



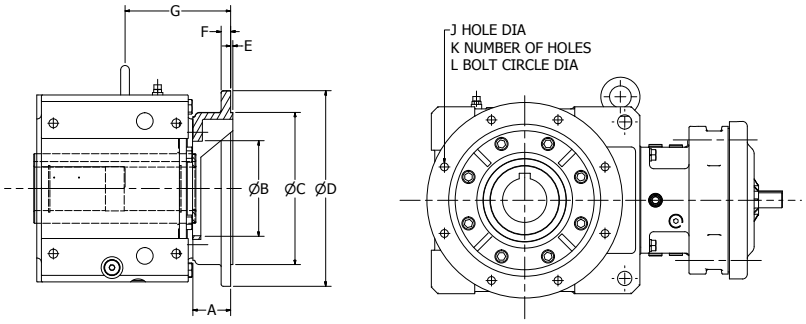
All dimensions are in inches *(mm)*.

Frame Size	Standard Inch Shaft Dimension				Standard Metric Shaft Dimensions				D	V	X	X1	L2
	ØU	ØU Tolerance	UV	Key	ØU	ØU Tolerance	UV	Key					
4A	2.000	h6: 0/-0.0006	2.22	1/2 x 1/2 x 2.76	*(50)*	*(h6: 0/-0.016)*	*(53.5)*	*(14 x 9 x 70)*	4.33 *(110)*	3.54 *(90)*	7.48 *(190)*	8.11 *(206)*	15.59 *(396)*
4B	2.875	h6: 0/-0.0007	3.20	3/4 x 3/4 x 3.15	*(65)*	*(h6: 0/-0.019)*	*(69.0)*	*(18 x 11 x 80)*	5.12 *(130)*	4.53 *(115)*	9.53 *(242)*	9.72 *(247)*	19.25 *(489)*
4C	3.125	h6: 0/-0.0007	3.45	3/4 x 3/4 x 4.72	*(80)*	*(h6: 0/-0.019)*	*(85.0)*	*(22 x 14 x 120)*	6.30 *(160)*	5.71 *(145)*	10.79 *(274)*	11.85 *(301)*	22.64 *(575)*
4D	3.625	h6 0/-0.0009	4.01	7/8 x 7/8 x 5.51	*(95)*	*(h6: 0/-0.022)*	*(100)*	*(25 x 14 x 140)*	7.48 *(190)*	6.69 *(170)*	12.80 *(325)*	13.98 *(355)*	26.77 *(680)*
4E	4.375	h6 0/-0.0009	4.82	1 x 1 x 6.30	*(110)*	*(h6: 0/-0.022)*	*(116)*	*(28 x 16 x 160)*	8.46 *(215)*	7.87 *(200)*	14.29 *(363)*	16.14 *(410)*	30.43 *(773)*
4F	4.750	h6 0/-0.0010	5.29	1-1/4 x 1-1/4 x 6.69	*(130)*	*(h6: 0/-0.025)*	*(137)*	*(32 x 18 x 170)*	9.45 *(240)*	8.27 *(210)*	15.75 *(400)*	17.91 *(455)*	33.66 *(855)*

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Options

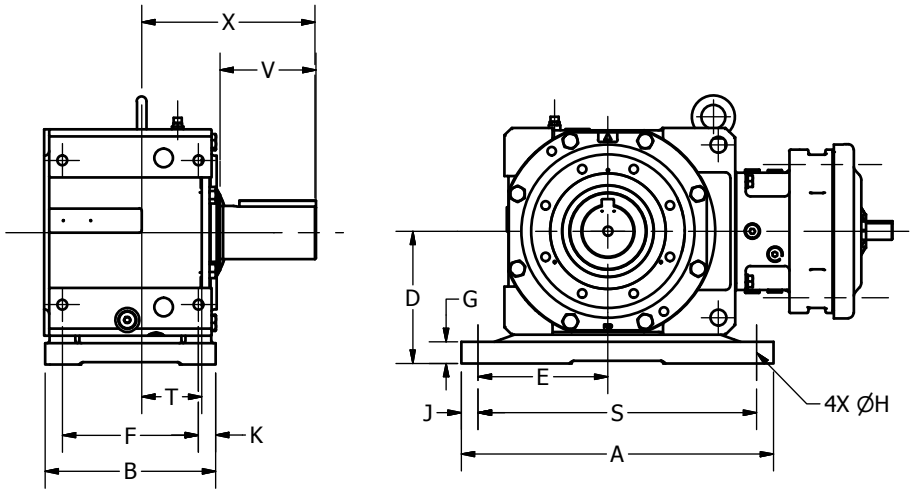
Output Flange



All dimensions are in inches *(mm)*.

Frame Size	A	ØB	ØC	ØD	E	F	G	J	K	L
4A	2.36 *(60)*	4.72 *(120)*	7.09 *(180)*	9.84 *(250)*	0.16 *(4)*	0.59 *(15)*	6.30 *(160)*	0.55 *(14)*	4	8.46 *(215)*
4B	2.40 *(61)*	5.51 *(140)*	9.06 *(230)*	11.8 *(300)*	0.16 *(4)*	0.63 *(16)*	7.40 *(188)*	0.55 *(14)*	4	10.4 *(265)*
4C	2.87 *(73)*	6.50 *(165)*	9.84 *(250)*	13.8 *(350)*	0.20 *(5)*	0.71 *(18)*	7.95 *(202)*	0.71 *(18)*	4	11.8 *(300)*
4D	3.15 *(80)*	7.68 *(195)*	13.8 *(350)*	17.7 *(450)*	0.20 *(5)*	0.87 *(22)*	9.25 *(235)*	0.71 *(18)*	8	15.8 *(400)*
4E	3.15 *(80)*	8.66 *(220)*	13.8 *(350)*	17.7 *(450)*	0.20 *(5)*	0.87 *(22)*	9.57 *(243)*	0.71 *(18)*	8	15.8 *(400)*
4F	2.56 *(65)*	9.45 *(240)*	21.7 *(550)*	26.0 *(660)*	0.20 *(5)*	0.94 *(24)*	10.0 *(255)*	0.87 *(22)*	8	23.6 *(600)*

Foot Mounted



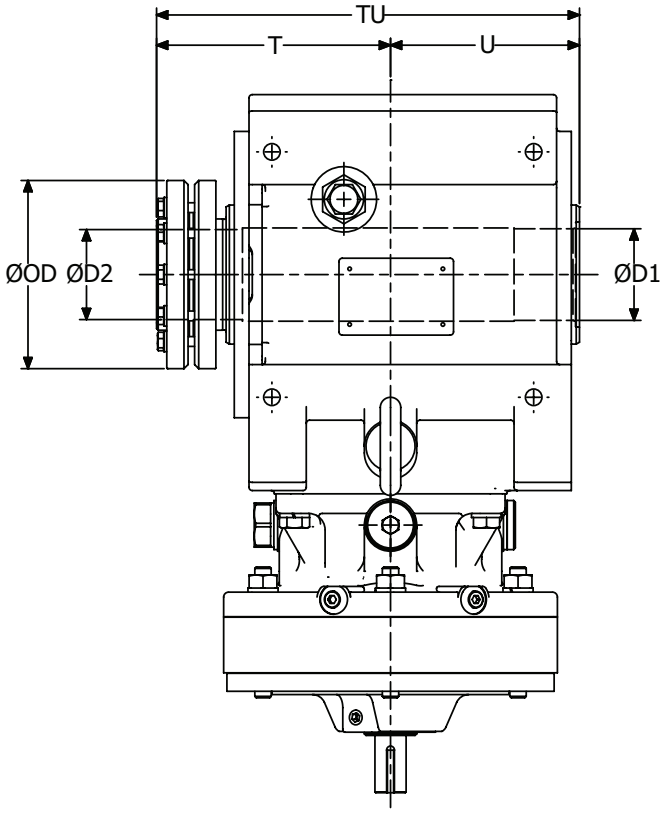
All dimensions are in inches *(mm)*.

Frame Size	A	B	D	E	F	G	ØH	J	K	S	T	V	X
4A	12.6 *(320)*	7.95 *(202)*	5.51 *(140)*	5.31 *(135)*	6.30 *(160)*	0.98 *(25)*	0.55 *(14)*	0.79 *(20)*	0.83 *(21)*	11.0 *(280)*	2.83 *(72)*	3.54 *(90)*	7.48 *(190)*
4B	15.2 *(385)*	9.65 *(245)*	6.69 *(170)*	6.30 *(160)*	7.68 *(195)*	1.38 *(35)*	0.71 *(18)*	0.79 *(20)*	0.98 *(25)*	13.6 *(345)*	3.74 *(95)*	4.53 *(115)*	9.53 *(242)*
4C	19.9 *(505)*	10.6 *(270)*	8.27 *(210)*	7.68 *(195)*	8.27 *(210)*	1.57 *(40)*	0.87 *(22)*	1.18 *(30)*	1.18 *(30)*	17.5 *(445)*	3.58 *(91)*	5.71 *(145)*	10.8 *(274)*
4D	22.1 *(560)*	12.6 *(320)*	9.65 *(245)*	9.25 *(235)*	10.2 *(260)*	1.77 *(45)*	1.02 *(26)*	1.18 *(30)*	1.18 *(30)*	19.7 *(500)*	4.53 *(115)*	6.69 *(170)*	12.8 *(325)*
4E	25.6 *(650)*	14.0 *(355)*	10.8 *(275)*	10.6 *(270)*	11.0 *(280)*	1.77 *(45)*	1.30 *(33)*	1.38 *(35)*	1.50 *(38)*	22.8 *(580)*	4.57 *(116)*	7.87 *(200)*	14.3 *(363)*
4F	29.1 *(740)*	15.8 *(400)*	12.6 *(320)*	11.8 *(300)*	12.6 *(320)*	2.56 *(65)*	1.30 *(33)*	1.38 *(35)*	1.57 *(40)*	26.4 *(670)*	4.43 *(113)*	8.27 *(210)*	15.8 *(400)*

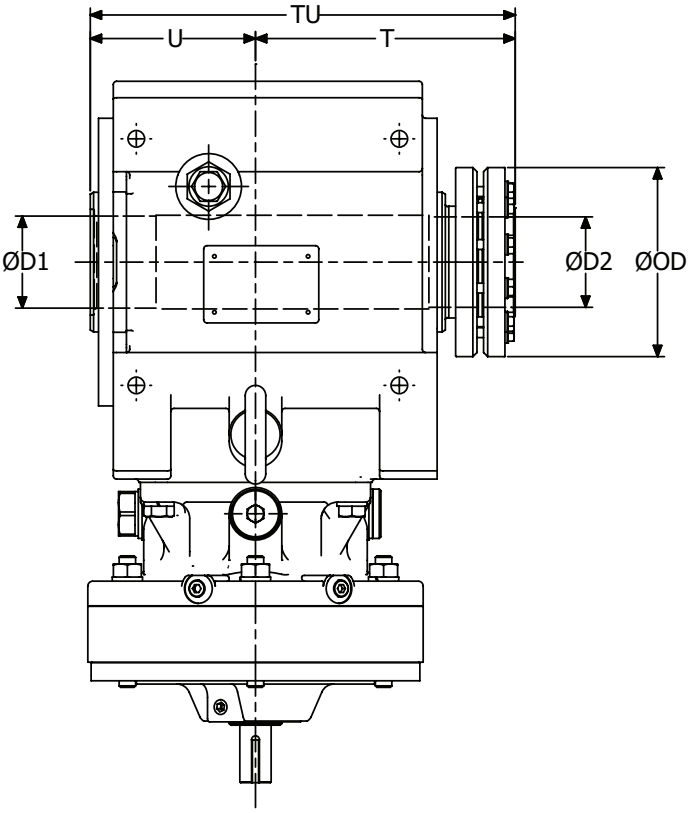
Dimensions shown are for reference only and are subject to change without notice, unless certified.
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Options

Shrink Disk



Left Projecting Shrink Disc



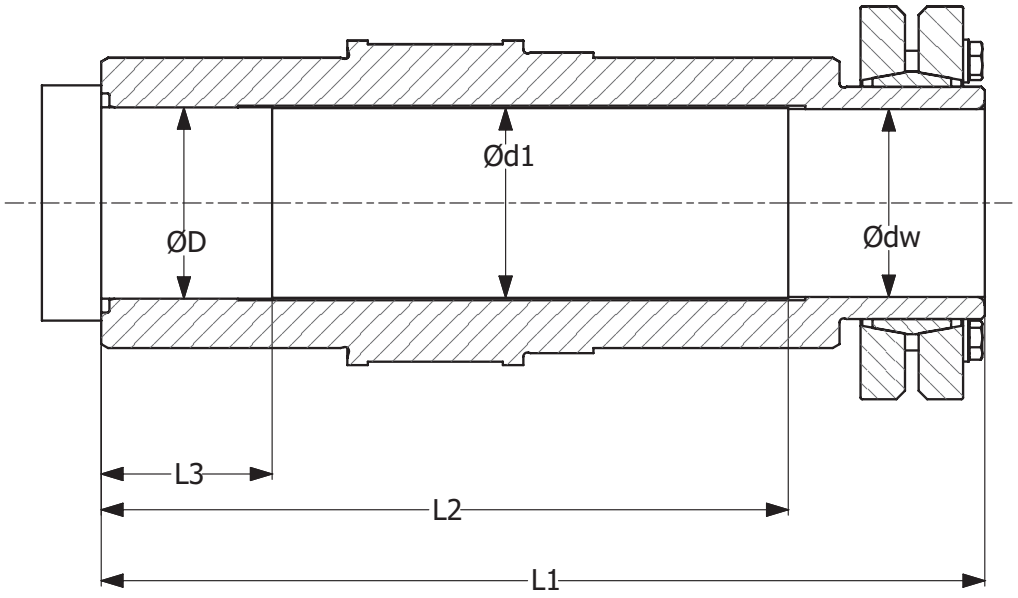
Right Projecting Shrink Disc

All dimensions are in inches *(mm)*.

Frame Size	ØD1	ØD2	ØOD	TU	Left Projecting Shrink Disc		Right Projecting Shrink Disc	
					T	U	T	U
4A	2.20 *(56)*	2.17 *(55)*	4.53 *(115)*	10.2 *(259)*	5.28 *(134)*	4.90 *(125)*	6.40 *(163)*	3.78 *(96)*
4B	2.60 *(66)*	2.56 *(65)*	5.71 *(145)*	12.0 *(304)*	6.76 *(172)*	5.19 *(132)*	6.95 *(177)*	5.00 *(127)*
4C	2.99 *(76)*	2.95 *(75)*	6.69 *(170)*	13.3 *(337)*	7.11 *(181)*	6.14 *(156)*	8.17 *(208)*	5.08 *(129)*
4D	3.39 *(86)*	3.35 *(85)*	7.28 *(185)*	16.0 *(408)*	8.76 *(223)*	7.28 *(185)*	9.94 *(253)*	6.10 *(155)*
4E	3.98 *(101)*	3.94 *(100)*	9.06 *(230)*	17.3 *(441)*	9.07 *(231)*	8.27 *(210)*	10.9 *(278)*	6.42 *(163)*
4F	4.76 *(121)*	4.72 *(120)*	11.4 *(290)*	20.2 *(513)*	10.6 *(268)*	9.65 *(245)*	12.7 *(323)*	7.48 *(190)*

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Options



Recommendations for the design of the driven shaft if Shrink Disc connection method is selected:

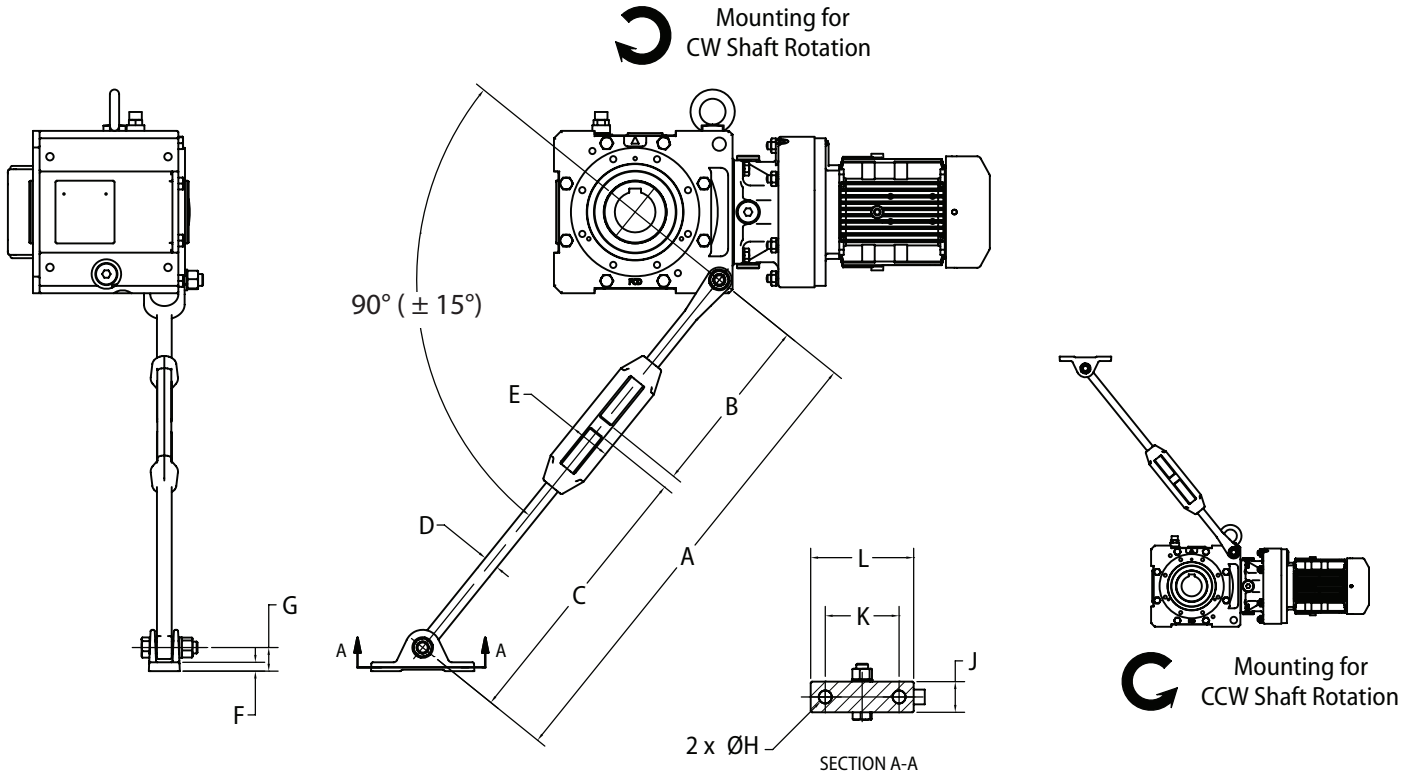
- When ordering the Cyclo® BBB4 with a shrink disc output option, be sure to designate the orientation (left or right) in which to install the shrink disc.
- Once the product is shipped from the Sumitomo factory, the orientation of the shrink disc **cannot** be changed in the field.
- When designing the driven shaft to be inserted into the shrink disc, refer to the table below for shaft design recommendations.

All dimensions are in inches *(mm)*.

Model	Driven Shaft Recommended Dimensions							
	Ødw	Ødw tolerance	Ød1	ØD	ØD tolerance	L1	L2	L3
4A100, 4A105 4A110, 4A115 4A120, 4A125 4A140, 4A145	2.17 *(55)*	h6: +0/-0.0007 *(h6: +0/-0.019)*	2.19 *(55.5)*	2.20 *(56)*	h7: +0/-0.0012 *(h7: +0/-0.030)*	10.18 *(258.5)*	7.91 *(201)*	1.97 *(50)*
4B120, 4B125 4B140, 4B145 4B160, 4B165	2.56 *(65)*	h6: +0/-0.0007 *(h6: +0/-0.019)*	2.58 *(65.5)*	2.60 *(66)*	h7: +0/-0.0012 *(h7: +0/-0.030)*	11.95 *(303.5)*	9.61 *(244)*	1.97 *(50)*
4C140, 4C145 4C160, 4C165 4C170, 4C175	2.95 *(75)*	h6: +0/-0.0007 *(h6: +0/-0.019)*	2.97 *(75.5)*	2.99 *(76)*	h7: +0/-0.0012 *(h7: +0/-0.030)*	13.25 *(336.5)*	10.63 *(270)*	1.97 *(50)*
4D160, 4D165 4D170, 4D175 4D180, 4D185	3.35 *(85)*	h6: +0/-0.0009 *(h6: +0/-0.022)*	3.37 *(85.5)*	3.39 *(86)*	h7: +0/-0.0014 *(h7: +0/-0.035)*	16.04 *(407.5)*	12.80 *(325)*	2.56 *(65)*
4E170, 4E175 4E180, 4E185 4E190, 4E195	3.94 *(100)*	h6: +0/-0.0009 *(h6: +0/-0.022)*	3.96 *(100.5)*	3.98 *(101)*	h7: +0/-0.0014 *(h7: +0/-0.035)*	17.34 *(440.5)*	14.09 *(358)*	2.56 *(65)*
4F180, 4F185 4F190, 4F195	4.72 *(120)*	h6: +0/-0.0009 *(h6: +0/-0.022)*	4.74 *(120.5)*	4.76 *(121)*	h7: +0/-0.0014 *(h7: +0/-0.035)*	20.20 *(513)*	16.34 *(415)*	3.86 *(98)*

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Options



All dimensions are in inches *(mm)*.

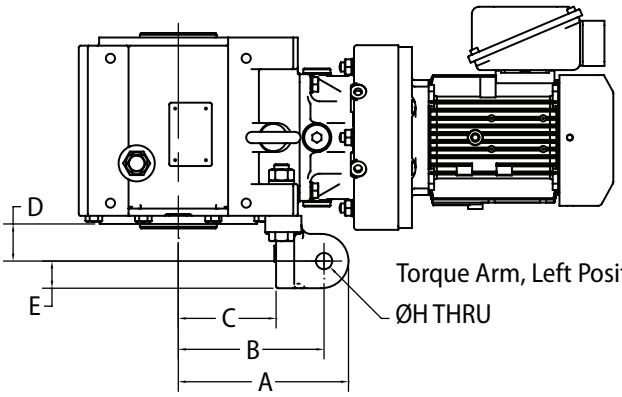
Turnbuckle Type Torque Arm Dimensions												
Frame Size	**A** Min	**A** Max	**B**	**C**	**D Thread**	**E**	**F**	**G**	**ØH**	**J**	**K**	**L**
4A	25.2 *(640)*	28.7 *(730)*	9.69 *(246)*	14.8 *(375)*	M20	2.24 *(57)*	0.47 *(12.0)*	1.26 *(32)*	0.69 *(17.5)*	1.65 *(42)*	3.94 *(100)*	5.51 *(140)*
4B	26.0 *(660)*	29.5 *(750)*	10.4 *(263)*	14.8 *(375)*	M24	2.32 *(59)*	0.81 *(20.5)*	2.13 *(54)*	0.69 *(17.5)*	2.76 *(70)*	4.76 *(121)*	6.61 *(168)*
4C	26.0 *(660)*	29.5 *(750)*	10.4 *(263)*	14.8 *(375)*	M24	2.32 *(59)*	0.81 *(20.5)*	2.13 *(54)*	0.69 *(17.5)*	2.76 *(70)*	4.76 *(121)*	6.61 *(168)*
4D, 4E	33.9 *(860)*	37.4 *(950)*	18.3 **[2]** *(465)* **[2]**	14.8 *(375)*	M24	2.32 *(59)*	0.81 *(20.5)*	2.13 *(54)*	0.69 *(17.5)*	2.76 *(70)*	4.76 *(121)*	6.61 *(168)*

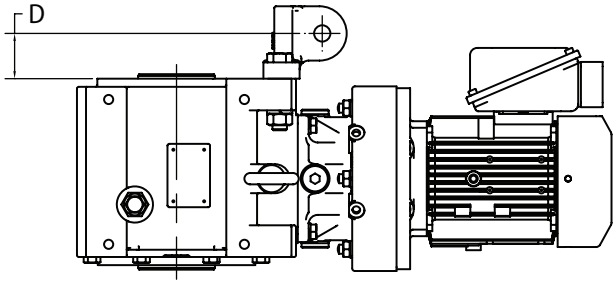
Note: [1] The Cyclo® BBB4 is shown in Y1 mounting position; use two turnbuckle torque arms if application requires shaft rotation in both directions and use torque arm in tension, not compression. Consult Operation and Maintenance Manual or the Factory when mounting in positions other than Y1.
[2] Value may vary from shown.
[3] Turnbuckle Type torque arm is not available for size F Cyclo(R) BBB4 units. Consult Factory for F-size torque arm type and dimensions.

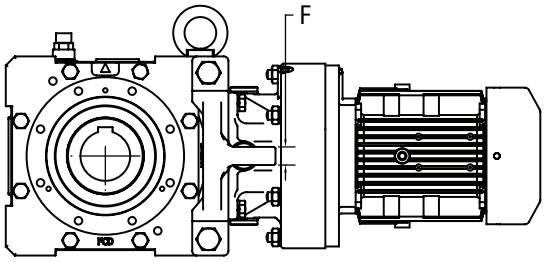
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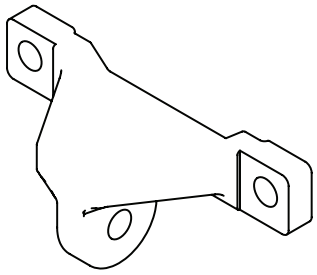
Options

Torque Arm T-Type (Optional)[1]









All dimensions are in inches *(mm)*.

T- Type Torque Arm Dimensions								
Frame Size	**A**	**B**	**C**	**D Left [2]**	**D Right [2]**	**E**	**F**	**ØH**
4A	7.40 *(188)*	6.34 *(161)*	4.25 *(108)*	1.61 *(41)*	1.97 *(50)*	1.18 *(30)*	0.79 *(20)*	0.71 *(18)*
4B	8.98 *(228)*	7.68 *(195)*	5.00 *(127)*	2.09 *(53)*	2.44 *(62)*	1.42 *(36)*	1.13 *(29)*	0.87 *(22)*
4C	10.8 *(274)*	9.13 *(232)*	6.14 *(156)*	2.60 *(66)*	2.95 *(75)*	1.77 *(45)*	1.25 *(32)*	1.02 *(26)*
4D	12.9 *(327)*	11.0 *(279)*	7.40 *(188)*	3.19 *(81)*	3.58 *(91)*	2.17 *(55)*	1.50 *(38)*	1.30 *(33)*
4E	14.2 *(361)*	12.1 *(306)*	8.27 *(210)*	3.17 *(81)*	3.58 *(91)*	2.17 *(55)*	1.42 *(36)*	1.30 *(33)*

Note: [1] The Cyclo® BBB4 is shown in Y1 mounting position

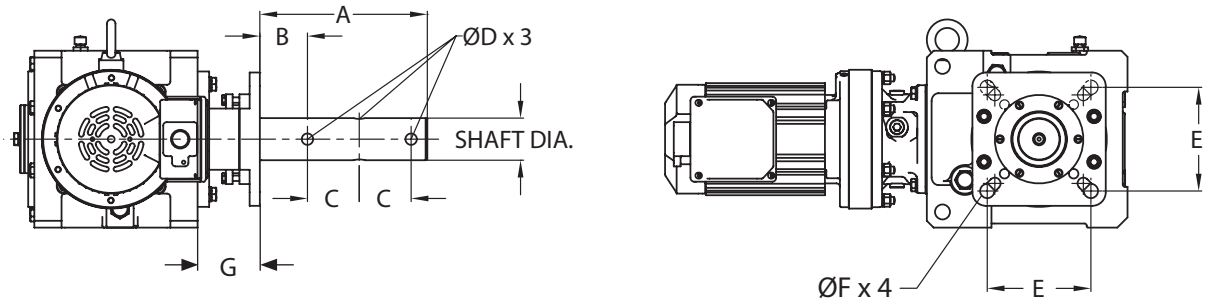
[2] D dimension is from flange-mount casing surface to hole **Ø**H.

[3] Turnbuckle Type torque arm is not available for size F Cyclo(R) BBB4 units. Consult Factory for F-size torque arm type and dimensions.

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Certified prints are available after receipt of an order; consult factory.

Options

Screw Conveyor Drive



- The Screw Conveyor option design conforms to established CEMA inch dimensions.
- Complete Cyclo® BBB screw conveyor drive consists of reducer, CEMA drive shaft assembly and mounting adapter kit. The CEMA drive shaft and mounting adapter kit require customer assembly.
- CEMA drive shafts are three hole style.

All dimensions are in inches.

Model	Shaft Diameter	To Fit Screw Diameter	A	B	C	ØD	E	ØF
4A, 4B	1-1/2	6 to 9	9.00	2.13	3.00	17/32	4.00	0.531
	2	9 to 12	9.00	2.13	3.00	21/32	0.38	0.669
	2-7/16	12 to 14	9.69	2.75	3.00	21/32	5.63	0.669
	3	12 to 20	9.88	2.88	3.00	25/32	6.00	0.827
4C, 4D	2	9 to 12	9.00	2.13	3.00	21/32	5.13	0.669
	2-7/16	12 to 14	9.69	2.75	3.00	21/32	5.63	0.669
	3	12 to 20	9.88	2.88	3.00	25/32	6.00	0.827
	3-7/16	18 to 24	13.10	3.88	4.00	29/32	6.75	0.827
4E	2-7/16	12 to 14	9.69	2.75	3.00	21/32	5.63	0.669
	3	12 to 20	9.88	2.88	3.00	25/32	6.00	0.827
	3-7/16	18 to 24	13.10	3.88	4.00	29/32	6.75	0.827

All dimensions are in inches.

Model	G
A	3.60
B	3.60
C	3.92
D	4.25
E	5.49

Shaft Option 1: Standard 'Taper Grip Hub' 3-Hole Screw Conveyor Steel Shafts

Model	Drive Shaft Diameters & CEMA Drive Shaft Assembly Part Number					Adapter Kit	
	Ø 1-1/2"	Ø 2"	Ø 2-7/16"	Ø 3"	Ø 3-7/16"	Cast Iron Option	Fabricated steel Option
4A	116E4108-C3	116E4200-C3	116E4207-C3	116E4300-C3	-	118A4050	118A4040
4B	116F4108-C3	116F4200-C3	116F4207-C3	116F4300-C3	-	118B4050	118B4040
4C	-	116G4200-C3	116G4207-C3	116G4300-C3	116G4307-C3	118C4050	118C4040
4D	-	116H4200-C3	116H4207-C3	116H4300-C3	116H4307-C3	118D4050	118D4040
4E	-	-	116J4207-C3	116J4300-C3	116J4307-C3	118E4050	118E4040

Shaft Option 2: Standard 'Keyed' 3-Hole Screw Conveyor Shafts [Steel and Stainless steel options]

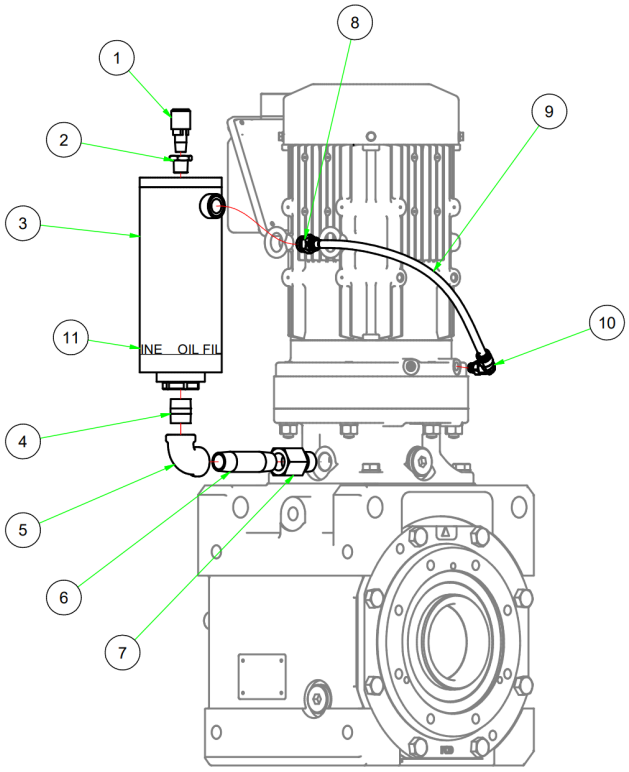
Model	Drive Shaft Diameters & CEMA Drive Shaft Assembly Part Number [3]					Adapter Kit	
	Ø 1-1/2"	Ø 2"	Ø 2-7/16"	Ø 3"	Ø 3-7/16"	Cast Iron Option	Fabricated steel Option
4A	118A5108-C3/ S3	118A5200-C3/ S3	118A5207-C3/ S3	118A5300-C3/ S3	-	118A4060	118A4040
4B	118B5108-C3/ S3	118B5200-C3/ S3	118B5207-C3/ S3	118B5300-C3/ S3	-	118B4060	118B4040
4C	-	118C5200-C3/ S3	118C5207-C3/ S3	118C5300-C3/ S3	118C5307-C3/ S3	118C4060	118C4040
4D	-	118D5200-C3/ S3	118D5207-C3/ S3	118D5300-C3/ S3	118D5307-C3/ S3	-	118D4040
4E	-	-	118E5207-C3/ S3	118E5300-C3/ S3	118E5307-C3/ S3	-	118E4040

Note: [1] The dimension shown is E maximum.
[2] Consult Factory for information on F-size Screw Conveyor options
[3] Use suffix 'C3' for Carbon Steel, and 'S3' for Stainless Steel (AISI316) shaft material

Dimensions shown are for reference only and are subject to change without notice, unless certified.
Certified prints are available after receipt of an order; consult factory.

Options

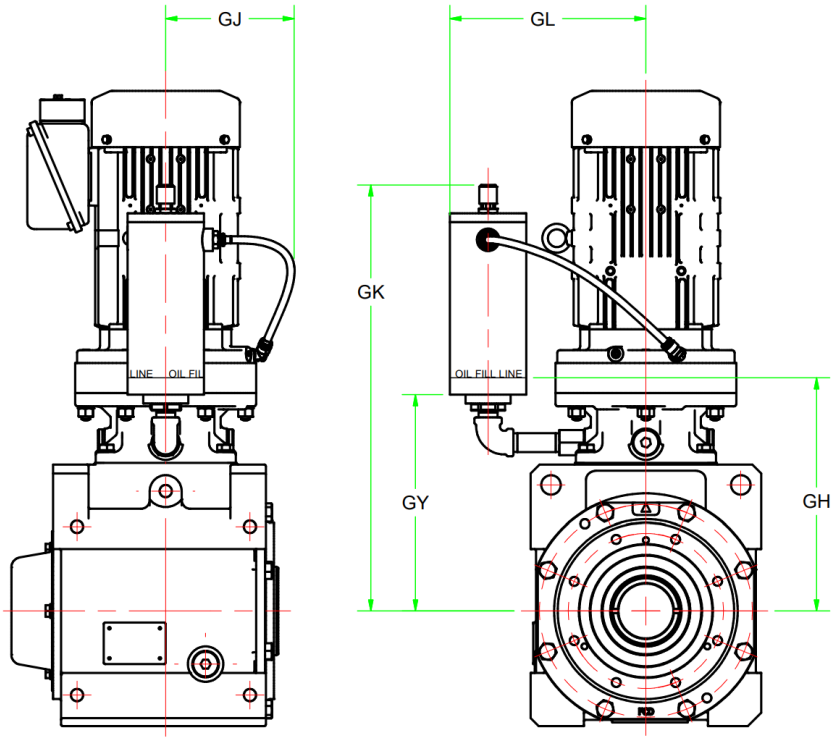
Clear Oil Fill Cup



Item	Frame Size	Part No.	Description	Qty.
1	ALL	AT1093G	Air vent	1
2	ALL	332F006R004NG	Reducer bushing	1
3	4A, 4B	TPMR4057-1	4A, 4B fill cup set	1
	4C, 4D	TPMR4057-2	4C, 4D fill cup set	1
4	4A10		Nipple, 1/2″npt x 1.5″	1
	4A11			1
	4A12			1
	4A14			1
	4B12			1
	4B14			1
	4B16			1
	4C14			1
	4C16			1
	4C17	800A008A048NG	Nipple, 1/2″npt x 3″	1
	4D16	800A008A024NG	Nipple, 1/2″npt x 1.5″	1
	4D17	800A008A048NG	Nipple, 1/2″npt x 3″	1
	4D18	800A008A056NG	Nipple, 1/2″npt x 3.5″	1
5	ALL	300F008P---NG	Elbow, 1/2″npt	1
6	4A10	800A008A048NG	Nipple, 1/2″npt x 3″	1
	4A11	800A008A064NG	Nipple, 1/2″npt x 4″	1
	4A12	800A008A056NG	Nipple, 1/2″npt x 3.5″	1
	4A14	800A008A080NG	Nipple, 1/2″npt x 5″	1
	4B12	800A008A056NG	Nipple, 1/2″npt x 3.5″	1
	4B14	800A008A080NG	Nipple, 1/2″npt x 5″	1
	4B16	800A008A088NG	Nipple, 1/2″npt x 5.5″	1
	4C14			
	4C16	800A008A096NG	Nipple, 1/2"npt x 6"	1
	4C17			
	4D16			
	4D17	800A008A088NG	Nipple, 1/2″npt x 5.5″	1
	4D18			
7	ALL	33R008A008NG	Conversion adapter	1
8	ALL	36MB308E002NG	Push to oil fill cup	1
9	ALL	80MP005095--G	Tubing	1
10	ALL	37LB308E002NG	Push to motor flange	A/R
11	ALL	TMPK5160	Oil fill line sticker	2

Options

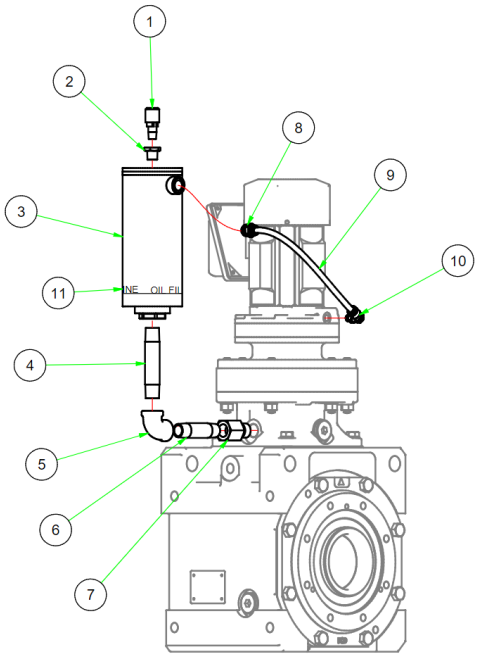
Clear Oil Fill Cup



Frame Size	GH	GL	GK	GY	GJ.
4A100/5	8.66 (220)	9.09 (231)	18.73 (476)	8.66 (220)	3.78 (96)
4A110/5	8.98 (228)	10.18 (259)	18.74 (476)	8.67 (220)	4.02 (102)
4A120/5	8.90 (226)	9.96 (253)	18.55 (471)	8.47 (215)	5.28 (134)
4A140/5	9.61 (244)	11.89 (302)	18.61 (473)	8.54 (217)	5.28 (134)
4B120/5	10.35 (263)	9.96 (253)	19.99 (508)	9.92 (252)	5.28 (134)
4B140/5	10.87 (276)	11.89 (302)	19.89 (505)	9.82 (250)	5.28 (134)
4B160/5	11.54 (293)	12.79 (325)	19.85 (504)	9.78 (248)	6.61 (168)
4C140/5	13.15 (334)	12.89 (327)	24.55 (624)	12.11 (308)	5.28 (134)
4C160/5	13.54 (344)	14.26 (362)	24.29 (617)	11.85 (301)	6.61 (168)
4C170/5	14.09 (358)	14.26 (362)	25.29 (642)	12.85 (326)	7.32 (186)
4D160/5	16.38 (416)	14.26 (362)	27.13 (689)	14.70 (373)	6.61 (168)
4D170/5	16.06 (408)	14.19 (360)	27.24 (692)	14.81 (376)	7.32 (186)
4D180/5	16.18 (411)	14.19 (360)	27.12 (689)	14.68 (373)	7.99 (203)

Options

Clear Oil Fill Cup

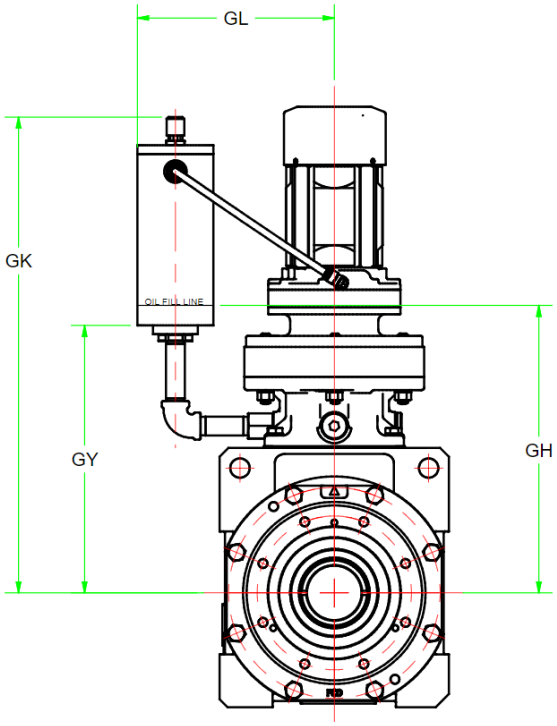


Item	Frame Size	Part No.	Description	Qty.
1	ALL	AT1093G	Air vent	1
2	ALL	332F006R004NG	Reducer bushing	1
3	4A, 4B	TPMR4057-1	4A, 4B fill cup set	1
	4C, 4D	TPMR4057-2	4C, 4D fill cup set	1
4	4A10DA	800A008A032NG	Nipple, 1/2"npt x 2"	1
	4A12DA	800A008A048NG	Nipple, 1/2"npt x 3"	1
	4A12DB			
	4B12DA			
	4B12DB			
	4B14DA	800A008A056NG	Nipple, 1/2"npt x 3.5"	1
	4B14DB	800A008A064NG	Nipple, 1/2"npt x 4"	1
	4B14DC			
	4C14DA	800A008A056NG	Nipple, 1/2"npt x 3.5"	1
	4C14DB	800A008A064NG	Nipple, 1/2"npt x 4"	1
	4C14DC			
	4C16DA	800A008A080NG	Nipple, 1/2"npt x 5"	1
	4C16DB			
	4C16DC			
	4C17DC	800A008A096NG	Nipple, 1/2"npt x 6"	1
	4D16DA	800A008A080NG	Nipple, 1/2"npt x 5"	1
	4D16DB			
	4D16DC			
	4D17DA	800A008A096NG	Nipple, 1/2"npt x 6"	1
	4D17DB			
	4D17DC			
	4D18DA	800A008A128NG	Nipple, 1/2"npt x 7"	1
	4D18DB	800A008A112NG	Nipple, 1/2"npt x 8"	1
5	ALL	300F008P---NG	Elbow, 1/2"npt	1

Item	Frame Size	Part No.	Description	Qty.
6	4A10DA	800A008A032NG	Nipple, 1/2"npt x 2"	1
	4A12DA	800A008A048NG	Nipple, 1/2"npt x 3"	1
	4A12DB			
	4B12DA			
	4B12DB			
	4B14DA			
	4B14DB			
	4B14DC			
	4C14DA	800A008A056NG	Nipple, 1/2"npt x 3.5"	1
	4C14DB			
	4C14DC			
	4C16DA	800A008A064NG	Nipple, 1/2"npt x 4"	1
	4C16DB			
	4C16DC			
	4C17DC	800A008A080NG	Nipple, 1/2"npt x 5"	1
	4D16DA	800A008A064NG	Nipple, 1/2"npt x 4"	1
	4D16DB			
	4D16DC			
	4D17DA	800A008A072NG	Nipple, 1/2"npt x 4.5"	1
	4D17DB			
	4D17DC			
	4D18DA	800A008A080NG	Nipple, 1/2"npt x 5"	1
	4D18DB			
7	ALL	33R008A008NG	Conversion adapter	1
8	ALL	36MB308E002NG	Push to oil fill cup	1
9	ALL	80MP005095--G	Tubing	1
10	ALL	37LB308E002NG	Push to motor flange	A/R
11	ALL	TMPK5160	Oil fill line sticker	2

Options

Clear Oil Fill Cup



Frame Size	GH	GL	GK	GY
4A10DA	10.94 (278)	8.09 (205)	19.23 (488)	9.16 (233)
4A12DA	11.42 (290)	9.46 (240)	20.05 (509)	9.97 (253)
4A12DB	11.77 (2.99)	9.46 (240)	20.05 (509)	9.97 (253)
4B12DA	12.87 (327)	9.46 (240)	21.49 (546)	11.42 (290)
4B12DB	13.23 (336)	9.46 (240)	21.49 (546)	11.42 (290)
4B14DA	13.74 (349)	9.89 (251)	21.89 (556)	11.82 (300)
4B14DB	13.90 (353)	9.89 (251)	22.39 (569)	12.32 (313)
4B14DC	14.13 (359)	9.89 (251)	22.39 (569)	12.32 (313)
4C14DA	16.02 (407)	10.89 (277)	26.55 (674)	14.11 (359)
4C14DB	16.18 (411)	10.89 (277)	27.05 (687)	14.61 (371)
4C14DC	16.46 (418)	10.89 (277)	27.05 (687)	14.61 (371)
4C16DA	17.05 (433)	12.26 (311)	27.79 (706)	15.35 (390)
4C16DB	17.32 (440)	12.26 (311)	27.79 (706)	15.35 (390)
4C16DC	17.36 (441)	12.26 (311)	27.79 (706)	15.35 (390)
4C17DC	18.11 (460)	13.26 (337)	28.29 (718)	15.85 (403)
4D16DA	19.88 (505)	12.26 (311)	30.63 (778)	18.20 (462)
4D16DB	20.16 (512)	12.26 (311)	30.63 (778)	18.20 (462)
4D16DC	20.23 (514)	12.26 (311)	30.63 (778)	18.20 (462)
4D17DA	19.53 (496)	13.19 (335)	30.24 (768)	17.81 (452)
4D17DB	19.80 (503)	13.19 (335)	30.24 (768)	17.81 (452)
4D17DC	20.00 (509)	13.19 (335)	30.24 (768)	17.81 (452)
4D18DA	20.12 (511)	13.69 (348)	30.62 (778)	18.18 (462)
4D18DB	20.75 (527)	13.69 (348)	31. 62 (803)	19.18 (487)

Options

Shaft Availability - Keyed Hollow Bore

All dimensions are in inches.

Bore (in)	Frame Size					
	4A	4B	4C	4D	4E	4F
1-7/16″	○					
1-1/2″	○					
1-5/8″	○					
1-11/16″	○					
1-3/4″	○					
1-13/16″	○	○				
1-7/8″	○	○				
1- 15/16″	● ◊	○				
2″	● ◊	○				
2-3/16″	● ◊	● ◊				
2-1/4″		○				
2-3/8″		● ◊	○			
2-7/16″		● ◊	○			
2-1/2″		○	○			
2-9/16″			○			
2-5/8″			○			
2-3/4″			● ◊			
2-7/8″			○			
2-15/16″			● ◊	○		
3″			○	○		
3-1/8″			○	○		
3-3/16″			○	○		
3-1/4″			○	○		
3-3/8″			○	○	○	○
3-7/16″			○	●	○	○
3-1/2″			○	○	○	○
3-5/8″				○	○	○
3-3/4″				○	○	○
3-7/8″				○	○	○
3-15/16″				○	○	○
4″				○	●	○
4-7/16″						○
4-1/2″						●
4-3/4″						○

All dimensions are in millimeters.

Bore (mm)	Frame Size					
	4A	4B	4C	4D	4E	4F
35	○					
40	○					
45	○	○				
50	○	○				
55	●	○				
60		○	○			
65		●	○			
70			○			
75			●	○		
80				○		
85				●	○	
90				○	○	
95					○	
100					●	
105					○	
110						○
115						○
120						●

● Standard shaft size (Carbon steel material)
○ On-demand shaft size (carbon steel material)
◊ Standard Stainless Steel shaft size (AIS 304 grade material)

Note: 1) The customer is responsible for validating the strength of the driven shaft.
2) Consult factory for the price and delivery of 'On-demand' shaft sizes.
3) If the required shaft size is different than the above mentioned sizes, please consult the factory.

Options

Shaft Availability - Shrink Disc

All dimensions are in inches.

Bore (in)	Frame Size					
	4A	4B	4C	4D	4E	4F
1- 15/16"	○ ◊					
2"	○ ◊	○				
2-3/16"	○ ◊	○ ◊				
2-3/8"		○ ◊				
2-7/16"		○ ◊				
2-3/4"			○ ◊			
2-15/16"			○ ◊			
3-15/16"						

All dimensions are in millimeters.

Bore (mm)	Frame Size					
	4A	4B	4C	4D	4E	4F
55	●					
65		●				
66						
75			●			
85				●		
100					●	
120						●

- ● Standard shaft size (Carbon steel material)
- ○ On-demand shaft size (carbon steel material)
- ◊ Standard Stainless Steel shaft size (AIS 304 grade material)

Note: 1) Shrink disc bore with LEFT as well as RIGHT projections are available (refer figures on page 3.5).
2) Shrink disc bore size mentioned in above is ødw dimension of the Table on page 3.6
3) If the required shaft size is different than the above mentioned sizes, please consult the factory.

Shaft Availability - Taper Grip Bushing

Please refer øU dimensions in 'Dimensions' section for the shaft size range (Min. & Max.)

Options

Shaft Availability - Solid Shaft

All dimensions are in inches.

Bore (in)	Frame Size					
	4A	4B	4C	4D	4E	4F
1-7/16"	○					
1-1/2"	○					
1-9/16"	○					
1-5/8"	○					
1-3/4"	○					
1-7/8"	○	○				
1-15/16"	○	○				
2"	●	○				
2-1/8"	○	○				
2-3/16"	○	○				
2-1/4"		○				
2.236"		○				
2-3/8"		○	○			
2-7/16"		○	○			
2-1/2"		○	○			
2-5/8"		○	○			
2-3/4"		○	○			
2-7/8"		●	○	○		
2-15/16"			○	○		
3"			○	○		
3-1/8"			●	○		
3-1/4"				○		
3-3/8"				○	○	
3-7/16"				○	○	
3-5/8"				●	○	
3-7/8"					○	
4"					○	
4-3/8"					●	○
4-7/16"						○
4-1/2"					○	○
4-5/8"						○
4-3/4"						●

All dimensions are in millimeters.

Bore (mm)	Frame Size					
	4A	4B	4C	4D	4E	4F
25	○					
45	○					
50	●					
55						
60		○				
65		●				
70						
75			○			
80			●			
85				○		
90				○		
95				●	○	
100					○	
110					●	
115						
120						
130						●

● Standard shaft size (Carbon steel material)
○ On-demand shaft size (carbon steel material)
◊ Standard Stainless Steel shaft size (AIS 304 grade material)

Note: 1) The customer is responsible for validating the strength of the driven shaft.
2) Consult factory for the price and delivery of 'On-demand' shaft sizes.
3) If the required shaft size is different than the above mentioned sizes, please consult the factory.
4) Solid shaft with LEFT, RIGHT as well as DOUBLE EXTENDED projections are available.

Options

Food Industry Packages

Three food-grade packages are available for use in machinery where there in incidental food contact.
When ordering, chose the Special Specification Code (SSC) that meets your requirements to obtain the features listed below.

Available Food Industry Option Packages

REDUCER OPTIONS	SHIELD*360°* ™	CHEMI SHIELD*360°* ™	ULTRA SHIELD*360°* ™*
DuPont Alesta AM Powder Coat			
FDA White Acrylic Topcoat	♦		
Stainless Steel Gray Acrylic Topcoat		♦	
Stainless Steel Gray 2-Part Epoxy Topcoat			♦
FDA Approved Grease	♦		
Triple Lip Seals	♦		
FKM Antimicrobial Cassette Seals		♦	♦
Stainless Steel Hardware			
Stainless Steel Nameplate		♦	♦
Corrosion Preventative Plugs		♦	♦
Carbon Output Shaft	♦		
Stainless Steel Output Shaft		♦	♦

Stainless Steel Hollow Shaft - ratings with stainless steel hollow shaft are the same as those listed in this catalog for standard models

* UltraShield360° ™ available in quill option only

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4
Appendix

Exact Ratios

Bevel Buddybox catalog ratio 11, 13, 14, 16, and 18 utilize a planetary gearset for the first reduction stage.

The exact ratio of planetary gearing can be calculated using the following formula:

$i_{PLANETARY} = (Z_{SUN} + Z_{RING}) / Z_{SUN}$

where: Z_{SUN} = Number of teeth in the sun gear

Z_{RING} = Number of teeth in the ring gear

The overall gearbox ratio can be determined using the following formula:

$i_{OVERALL} = (Z_{GEAR} / Z_{PINION}) \times i_{PLANETARY}$

where: Z_{GEAR} = Number of teeth in the bevel gear

Z_{PINION} = Number of teeth in the bevel pinion

Table 4.1 BBB4 with Planetary Input - Exact Ratios

Nominal Ratio	Frame Size	Gearing Tooth Count				Calculated Ratio $i_{OVERALL}$
		Bevel		Planetary		
		Z_{GEAR}	Z_{PINION}	Z_{SUN}	Z_{RING}	
11	4A100/5	35	10	46	92	10.50
	4A120/5	35	10	60	120	10.50
	4A140/5	35	10	54	114	10.89
	4B120/5	35	10	60	120	10.50
	4B140/5	35	10	54	114	10.89
	4B160/5	35	10	60	126	10.85
	4C140/5	35	10	54	114	10.89
	4C160/5	35	10	60	126	10.85
	4C170/5	35	10	58	122	10.86
	4D170/5	35	10	58	122	10.86
	4D180/5	35	10	68	136	10.50
	4E170/5	35	10	58	122	10.86
	4E180/5	35	10	68	136	10.50
	4E190/5	35	10	66	138	10.82
	4F180/5	35	10	68	136	10.50
	4F190/5	35	10	66	138	10.82
13	4A100/5	32	10	34	104	12.99
	4A120/5	32	10	45	135	12.80
	4A140/5	32	10	43	131	12.95
	4B120/5	32	10	45	135	12.80
	4B140/5	32	10	43	131	12.95
	4B160/5	32	10	48	144	12.80
	4C140/5	32	10	43	131	12.95
	4C160/5	32	10	48	144	12.80
	4C170/5	32	10	44	136	13.09
	4D170/5	32	10	44	136	13.09
	4D180/5	32	10	44	136	13.09
	4E170/5	32	10	44	136	13.09
	4E180/5	32	10	44	136	13.09
	4E190/5	32	10	45	138	13.01
	4F180/5	32	10	44	136	13.09
	4F190/5	32	10	45	138	13.01

Exact Ratios

Table 4.1 BBB4 with Planetary Input - Exact Ratios continued

Nominal Ratio	Frame Size	Gearing Tooth Count				Calculated Ratio
		Bevel		Planetary		
		Z_{GEAR}	Z_{PINION}	Z_{SUN}	Z_{RING}	$i_{OVERALL}$
14	4A100/5	35	10	34	104	14.21
	4A120/5	35	10	45	135	14.00
	4A140/5	35	10	43	131	14.16
	4B120/5	35	10	45	135	14.00
	4B140/5	35	10	43	131	14.16
	4B160/5	35	10	48	144	14.00
	4C140/5	35	10	43	131	14.16
	4C160/5	35	10	48	144	14.00
	4C170/5	35	10	44	136	14.32
	4D170/5	35	10	44	136	14.32
	4D180/5	35	10	44	136	14.32
	4E170/5	35	10	44	136	14.32
	4E180/5	35	10	44	136	14.32
	4E190/5	35	10	45	138	14.23
	4F180/5	35	10	44	136	14.32
	4F190/5	35	10	45	138	14.23
16	4A100/5	32	10	30	114	15.36
	4A120/5	32	10	38	148	15.66
	4A140/5	32	10	36	144	16.00
	4B120/5	32	10	38	148	15.66
	4B140/5	32	10	36	144	16.00
	4B160/5	32	10	39	159	16.25
	4C140/5	32	10	36	144	16.00
	4C160/5	32	10	39	159	16.25
	4C170/5	32	10	38	154	16.17
	4D170/5	32	10	38	154	16.17
	4D180/5	32	10	35	136	15.63
	4E170/5	32	10	38	154	16.17
	4E180/5	32	10	35	136	15.63
	4E190/5	32	10	36	138	15.47
	4F180/5	32	10	35	136	15.63
	4F190/5	32	10	36	138	15.47
18	4A100/5	35	10	30	114	16.80
	4A120/5	35	10	38	148	17.13
	4A140/5	35	10	36	144	17.50
	4B120/5	35	10	38	148	17.13
	4B140/5	35	10	36	144	17.50
	4B160/5	35	10	39	159	17.77
	4C140/5	35	10	36	144	17.50
	4C160/5	35	10	39	159	17.77
	4C170/5	35	10	38	154	17.68
	4D170/5	35	10	38	154	17.68
	4D180/5	35	10	35	136	17.10
	4E170/5	35	10	38	154	17.68
	4E180/5	35	10	35	136	17.10
	4E190/5	35	10	36	138	16.92
	4F180/5	35	10	35	136	17.10
	4F190/5	35	10	36	138	16.92

Exact Ratios

Bevel Buddybox catalog ratios greater than 18:1 utilize Cyclo as the first (or first and second) reduction stage

Cyclo reduction ratios are exact thus the exact overall Bevel Buddybox reduction ratio can be calculated as:

$i_{OVERALL} = (Z_{GEAR} / Z_{PINION}) \times i_{CYCLO}$

where: Z_{GEAR} = Number of teeth in the bevel gear

Z_{PINION} = Number of teeth in the bevel pinion

Table 4.2 BBB4 with Cyclo Input - Exact Ratios

Single Reduction Cyclo

Nominal Ratio	Frame Size	Bevel Gear Tooth Count		Cyclo Ratio (i_{CYCLO})	Calculated Ratio $i_{OVERALL}$
		Z_{GEAR}	Z_{PINION}		
21	ALL[1]	35	10	6	21.00
22		32	10	7	22.40
25		35	10	7	24.50
28		35	10	8	28.00
35		32	10	11	35.20
39		35	10	11	38.50
46		35	10	13	45.50
53		35	10	15	52.50
60		35	10	17	59.50
67		32	10	21	67.20
74		35	10	21	73.50
80		32	10	25	80.00
88		35	10	25	87.50
102		35	10	29	101.50
112		32	10	35	112.00
123		35	10	35	122.50
151		35	10	43	150.50
179		35	10	51	178.50
207		35	10	59	206.50
249		35	10	71	248.50
305		35	10	87	304.50
417	4A10	35	10	119	416.50

Note [1]: 22:1 and 25:1 ratios are not available for 4A100/5 and 4A110/5 sizes.

Exact Ratios

Table 4.3 BBB4 with Cyclo Input - Exact Ratios

Double Reduction Cyclo

Nominal Ratio	Frame Size	Bevel Gearing Tooth Count		Cyclo Ratio (i_{CYCLO})	Calculated Ratio $i_{OVERALL}$
		Z_{GEAR}	Z_{PINION}		
364	ALL	35	10	104	364.000
424		35	10	121	423.500
501		35	10	143	500.500
578		35	10	165	577.500
683		35	10	195	682.500
809		35	10	231	808.500
956		35	10	273	955.500
1117		35	10	319	1116.50
1320		35	10	377	1319.50
1656		35	10	473	1655.50
1957		35	10	559	1956.50
2272		35	10	649	2271.50
2559		35	10	731	2558.50
2944		35	10	841	2943.50
3511		35	10	1003	3510.50
4365		35	10	1247	4364.50
5177		35	10	1479	5176.50
6472		35	10	1849	6471.50
7228		35	10	2065	7227.50
8880		35	10	2537	8879.50
10658		35	10	3045	10657.5
12184		35	10	3481	12183.5
15530		35	10	4437	15529.5
17966		35	10	5133	17965.5
21620		35	10	6177	21619.5
26492		35	10	7569	26491.5

Special Load Guidelines Overhung Load

Reducer Output Shaft Allowable Overhung Load

When a sprocket, sheave, or gear is mounted on the slowspeed of a reducer, an overhung load is applied on that shaft. It is necessary to check if the shaft of the Cyclo® BBB4 Speed Reducer will allow the overhung load. Calculate the overhung load using the following formulas:

1) Radial load, Pr

$$Pr = \frac{Tl}{R} \leq \frac{Pro}{Lf \cdot Cf \cdot Sf} \quad \text{(lbs, } N\text{)}$$

2) Axial Load, Pa

$$Pa \leq \frac{Pao}{Cf \cdot Sf} \quad \text{(lbs, } N\text{)}$$

3) When there is combined radial and axial loading on the output shaft

$$\left(\frac{Pr}{Pro} + \frac{Pa}{Pao}\right) \cdot Cf \cdot Sf \leq 1 \quad \text{(lbs, } N\text{)}$$

LEGEND
- **Pr** = Actual radial load (lbs, *N*)
- **Tl** = Actual transmitted torque on slow speed shaft of reducer (lb·in, *N·m*)
- **R** = Pitch circle radius of sprocket, gear, pulley, etc. (inch, meter)
- **Pro** = Allowable radial load (lbs, *N*)
- **Pa** = Actual axial load (lbs, *N*)
- **Pao** = Allowable axial load (lbs, *N*)
- **Cf** = Coupling factor
- **Sf** = Service factor
- **Lf** = Load Location factor = 1.0[1]

The values shown in the tables within are the allowable OHL[2] when it is applied to the center of the solid shaft extension or at the load-side edge of the hollow bore. Please consult the factory when the center point of the load is located elsewhere.

Table 4.4 Coupling Factor, Cf

Type of Connection	Cf
General Purpose Chain	1.0
Machined Gear, Pinion or Synchronous Belt	1.25
V-Belt	1.5
Flat Belt	2.5

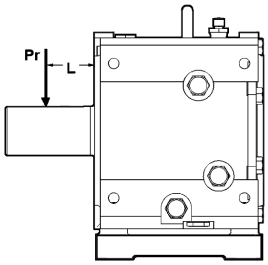
Table 4.5 Service Factor, Sf

Shock Factor	Sf
No Shock	1.0
Moderate Shock	1.5
Heavy Shock	2.0

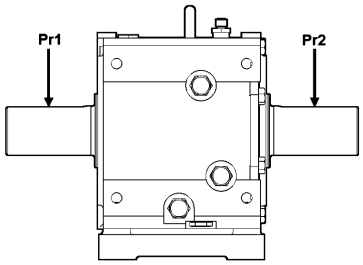
Overhung Load, capacity for solid output shaft

OHL[2] ratings assume there is no axial load applied to the shaft and that the unit is horizontal to floor/foundation. (Mounting feet at bottom or top.) Consult factory when it is wall mount or vertical position. When flange mounted, OHL location should be same side as flange. Consult factory when OHL is opposite flange side. Use ISO/JIS Class 12.9 for mounting hardware.

Loading position L is the distance from the output shaft shoulder



Pro from table must be ≥ Pr



For double extension, Pr1 and Pr2 is assumed to be in the same direction. Pr0 from table must be ≥ Pr1+ Pr2

Note [1]: For output speeds that are in between those detailed in Tables 4.6a through 4.7c, the overhung load capacity may be calculated through interpolation.
[2]: OHL = Overhung Load

Special Load Guidelines Output Shaft Overhung Load continued

Table 4.6a Allowable Overhung Load for Output Shaft (Solid Output Shaft) (Cf, Sf = 1)

Force Units: lbs, (*N*)

Model	L inch *(mm)*	Output Shaft, RPM									
		5	10	20	30	35	45	50	60	75	90
	0.75 *(19.1)*	7170 *(31890)*	8360 *(37180)*	7190 *(31980)*	6110 *(27170)*	5740 *(25530)*	5160 *(22950)*	4940 *(21970)*	4570 *(20320)*	4120 *(18320)*	3790 *(16850)*
	1.00 *(25.4)*	6850 *(30460)*	7490 *(33310)*	6960 *(30950)*	5940 *(26420)*	5560 *(24730)*	5020 *(22320)*	4790 *(21300)*	4420 *(19660)*	3990 *(17740)*	3670 *(16320)*
	1.25 *(31.8)*	5940 *(26420)*	6240 *(27750)*	6240 *(27750)*	5760 *(25620)*	5410 *(24060)*	4870 *(21660)*	4640 *(20630)*	4290 *(19080)*	3890 *(17300)*	3570 *(15870)*
4A100	1.50 *(38.1)*	5230 *(23260)*	5340 *(23750)*	5340 *(23750)*	5340 *(23750)*	5260 *(23390)*	4740 *(21080)*	4520 *(20100)*	4170 *(18540)*	3770 *(16760)*	3470 *(15430)*
4A105 **4A110**	1.75 *(44.5)*	4670 *(20770)*	4670 *(20770)*	4670 *(20770)*	4670 *(20770)*	4670 *(20770)*	4590 *(20410)*	4390 *(19520)*	4070 *(18100)*	3670 *(16320)*	3370 *(14980)*
4A115 **4A120**	1.88 *(47.6)*	3970 *(17650)*	4170 *(18540)*	4170 *(18540)*	4170 *(18540)*	4170 *(18540)*	4170 *(18540)*	4170 *(18540)*	3970 *(17650)*	3570 *(15870)*	3290 *(14630)*
4A125 **4A140**	2.00 *(50.8)*	3420 *(15210)*	3740 *(16630)*	3740 *(16630)*	3740 *(16630)*	3740 *(16630)*	3740 *(16630)*	3740 *(16630)*	3740 *(16630)*	3490 *(15520)*	3190 *(14180)*
4A145	2.50 *(63.5)*	2970 *(13210*	3120 *(13870*	3120 *(13870*	3120 *(13870*	3120 *(13870*	3120 *(13870*	3120 *(13870*	3120 *(13870*	3120 *(13870*	3040 *(13520)*
	3.00 *(76.2)*	2610 *(11600)*	2670 *(11870)*	2670 *(11870)*	2670 *(11870)*	2670 *(11870)*	2670 *(11870)*	2670 *(11870)*	2670 *(11870)*	2670 *(11870)*	2670 *(11870)*
	3.50 *(88.9)*	2340 *(10400)*	2340 *(10400)*	2340 *(10400)*	2340 *(10400)*	2340 *(10400)*	2340 *(10400)*	2340 *(10400)*	2340 *(10400)*	2340 *(10400)*	2340 *(10400)*
	4.00 *(102)*	2110 *(9380)*	2080 *(9250)*	2080 *(9250)*	2080 *(9250)*	2080 *(9250)*	2080 *(9250)*	2080 *(9250)*	2080 *(9250)*	2080 *(9250)*	2080 *(9250)*
	0.75 *(19.1)*	11800 *(52480)*	11830 *(52610)*	8810 *(39180)*	7340 *(32640)*	6810 *(30290)*	6010 *(26730)*	5690 *(25300)*	5160 *(22950)*	4570 *(20320)*	4120 *(18320)*
	1.00 *(25.4)*	12350 *(54930)*	11530 *(51280)*	8610 *(38290)*	7160 *(31840)*	6660 *(29620)*	5860 *(26060)*	5560 *(24730)*	5040 *(22410)*	4470 *(19880)*	4020 *(17880)*
	1.25 *(31.8)*	12620 *(56130)*	11260 *(50080)*	8410 *(37400)*	6990 *(31090)*	6490 *(28860)*	5740 *(25530)*	5440 *(24190)*	4940 *(21970)*	4370 *(19430)*	3920 *(17430)*
	1.50 *(38.1)*	11720 *(52130)*	11010 *(48970)*	8210 *(36510)*	6840 *(30420)*	6340 *(28200)*	5610 *(24950)*	5310 *(23610)*	4820 *(21430)*	4270 *(18990)*	3820 *(16990)*
	1.75 *(44.5)*	10460 *(46520)*	10460 *(46520)*	8040 *(35760)*	6660 *(29620)*	6210 *(27620)*	5460 *(24280)*	5190 *(23080)*	4720 *(20990)*	4170 *(18540)*	3740 *(16630)*
4B120 **4B125**	1.88 *(47.6)*	8870 *(39450)*	9310 *(41410)*	7860 *(34960)*	6540 *(29080)*	6060 *(26950)*	5360 *(23840)*	5060 *(22500)*	4620 *(20540)*	4070 *(18100)*	3670 *(16320)*
4B140 **4B145**	2.00 *(50.8)*	7650 *(34020)*	8360 *(37180)*	7690 *(34200)*	6390 *(28420)*	5940 *(26420)*	5240 *(23300)*	4970 *(22100)*	4520 *(20100)*	3990 *(17740)*	3570 *(15870)*
4B160 **4B165**	2.50 *(63.5)*	6650 *(29570)*	6990 *(31090)*	6990 *(31090)*	6110 *(27170)*	5690 *(25300)*	5020 *(22320)*	4770 *(21210)*	4320 *(19210)*	3820 *(16990)*	3420 *(15210)*
	3.00 *(76.2)*	5870 *(26100)*	5990 *(26640)*	5990 *(26640)*	5890 *(26190)*	5460 *(24280)*	4820 *(21430)*	4570 *(20320)*	4140 *(18410)*	3670 *(16320)*	3290 *(14630)*
	3.50 *(88.9)*	5240 *(23300)*	5240 *(23300)*	5240 *(23300)*	5240 *(23300)*	5240 *(23300)*	4640 *(20630)*	4390 *(19520)*	3990 *(17740)*	3520 *(15650)*	3170 *(14100)*
	4.00 *(102)*	4720 *(20990)*	4640 *(20630)*	4640 *(20630)*	4640 *(20630)*	4640 *(20630)*	4470 *(19880)*	4240 *(18850)*	3840 *(17080)*	3390 *(15070)*	3040 *(13520)*
	4.50 *(114)*	4310 *(19170)*	4190 *(18630)*	4190 *(18630)*	4190 *(18630)*	4190 *(18630)*	4190 *(18630)*	4090 *(18190)*	3720 *(16540)*	3270 *(14540)*	2940 *(13070)*
	5.00 *(127)*	3320 *(14760)*	3490 *(15520)*	3490 *(15520)*	3490 *(15520)*	3490 *(15520)*	3490 *(15520)*	3490 *(15520)*	3470 *(15430)*	3070 *(13650)*	2740 *(12180)*

Note [1]: For output speeds that are in between those detailed in Tables 4.6a through 4.7c, the overhung load capacity may be calculated through interpolation.

Special Load Guidelines Output Shaft Overhung Load continued

Table 4.6b Allowable Overhung Load for Output Shaft (Solid Output Shaft) (Cf, Sf = 1), continued

Force Units: lbs, (*N*)

Model	L inch *(mm)*	Output shaft, RPM									
		5	10	20	30	35	45	50	60	75	90
	0.75 *(19.1)*	16770 *(74590)*	16650 *(74050)*	12330 *(54840)*	10180 *(45280)*	9460 *(42070)*	8310 *(36960)*	7860 *(34960)*	7090 *(31530)*	6240 *(27750)*	5560 *(24730)*
	1.00 *(25.4)*	17560 *(78100)*	16280 *(72410)*	12060 *(53640)*	9960 *(44300)*	9240 *(41090)*	8110 *(36070)*	7690 *(34200)*	6940 *(30860)*	6090 *(27080)*	5440 *(24190)*
	1.25 *(31.8)*	17980 *(79970)*	15930 *(70850)*	11810 *(52530)*	9760 *(43410)*	9040 *(40200)*	7940 *(35310)*	7510 *(33400)*	6790 *(30200)*	5960 *(26510)*	5310 *(23610)*
	1.50 *(38.1)*	18210 *(80990)*	15580 *(69290)*	11530 *(51280)*	9540 *(42430)*	8840 *(39320)*	7790 *(34640)*	7360 *(32730)*	6640 *(29530)*	5840 *(25970)*	5210 *(23170)*
	1.75 *(44.5)*	18280 *(81300)*	15250 *(67830)*	11310 *(50300)*	9340 *(41540)*	8660 *(38510)*	7610 *(33840)*	7190 *(31980)*	6510 *(28950)*	5710 *(25390)*	5090 *(22640)*
4C140	1.88 *(47.6)*	17120 *(76140)*	14960 *(66540)*	11080 *(49280)*	9160 *(40740)*	8490 *(37760*	7460 *(33180)*	7060 *(31400)*	6360 *(28280)*	5590 *(24860)*	4990 *(22190)*
4C145 **4C160**	2.00 *(50.8)*	15780 *(70180)*	14660 *(65200)*	10860 *(48300)*	8990 *(39980)*	8310 *(36960)*	7310 *(32510)*	6910 *(30730)*	6240 *(27750)*	5490 *(24410)*	4890 *(21750)*
4C165 **4C170**	2.50 *(63.5)*	13690 *(60890)*	14080 *(62620)*	10430 *(46390)*	8640 *(38430)*	7990 *(35530)*	7040 *(31310)*	6640 *(29530)*	6010 *(26730)*	5260 *(23390)*	4720 *(20990)*
4C175	3.00 *(76.2)*	12090 *(53770)*	12330 *(54840)*	10060 *(44740)*	8310 *(36960)*	7710 *(34290)*	6760 *(30060)*	6390 *(28420)*	5790 *(25750)*	5060 *(22500)*	4540 *(20190)*
	3.50 *(88.9)*	10780 *(47940)*	10780 *(47940)*	9690 *(43100)*	8010 *(35620)*	7440 *(33090)*	6540 *(29080)*	6160 *(27390)*	5590 *(24860)*	4890 *(21750)*	4370 *(19430)*
	4.00 *(102)*	9740 *(43320)*	9590 *(42650)*	9360 *(41630)*	7740 *(34420)*	7160 *(31840)*	6310 *(28060)*	5960 *(26510)*	5390 *(23970)*	4720 *(20990)*	4220 *(18770)*
	4.50 *(114)*	8860 *(39400)*	8610 *(38290)*	8610 *(38290)*	7490 *(33310)*	6940 *(30860)*	6090 *(27080)*	5760 *(25620)*	5210 *(23170)*	4570 *(20320)*	4090 *(18190)*
	5.00 *(127)*	6840 *(30420)*	7190 *(31980)*	7190 *(31980)*	7010 *(31180)*	6490 *(28860)*	5710 *(25390)*	5390 *(23970)*	4890 *(21750)*	4290 *(19080)*	3820 *(16990)*
	6.00 *(152)*	6040 *(26860)*	6160 *(27390)*	6160 *(27390)*	6160 *(27390)*	6110 *(27170)*	5360 *(23840)*	5090 *(22640)*	4590 *(20410)*	4040 *(17960)*	3590 *(15960)*

Note [1]: For output speeds that are in between those detailed in Tables 4.6a through 4.7c, the overhung load capacity may be calculated through interpolation.

Special Load Guidelines Output Shaft Overhung Load continued

Table 4.6c Allowable Overhung Load for Output Shaft (Solid Output Shaft) (Cf, Sf = 1), continued

Force Units: lbs, (*N*)

Model	L inch *(mm)*	Output Shaft, RPM									
		5	10	20	30	35	45	50	60	75	90
	0.75 *(19.1)*	21850 *(97180)*	23970 *(106610)*	17730 *(78860)*	14630 *(65070)*	13530 *(60180)*	11880 *(52840)*	11210 *(49860)*	10110 *(44960)*	8860 *(39400)*	7890 *(35090)*
	1.00 *(25.4)*	23060 *(102570)*	23550 *(104750)*	17400 *(77390)*	14360 *(63870)*	13280 *(59060)*	11660 *(51860)*	11010 *(48970)*	9940 *(44210)*	8690 *(38650)*	7740 *(34420)*
	1.25 *(31.8)*	23590 *(104920)*	23100 *(102740)*	17080 *(75970)*	14080 *(62620)*	13030 *(57950)*	11430 *(50840)*	10810 *(48080)*	9740 *(43320)*	8540 *(37980)*	7590 *(33760)*
	1.50 *(38.1)*	23940 *(106480)*	22700 *(100960)*	16780 *(74630)*	13830 *(61510)*	12810 *(56970)*	11230 *(49950)*	10610 *(47190)*	9560 *(42520)*	8390 *(37310)*	7460 *(33180)*
	1.75 *(44.5)*	24070 *(107060)*	22300 *(99190)*	16480 *(73300)*	13580 *(60400)*	12580 *(55950)*	11030 *(49060)*	10410 *(46300)*	9410 *(41850)*	8240 *(36650)*	7340 *(32640)*
	1.88 *(47.6)*	22610 *(100560)*	21900 *(97410)*	16180 *(71960)*	13360 *(59420)*	12360 *(54970)*	10830 *(48170)*	10230 *(45500)*	9240 *(41090)*	8090 *(35980)*	7210 *(32070)*
4D160 **4D165**	2.00 *(50.8)*	21420 *(95270)*	21520 *(95720)*	15900 *(70720)*	13130 *(58400)*	12160 *(54080)*	10660 *(47410)*	10060 *(44740)*	9090 *(40430)*	7960 *(35400)*	7090 *(31530)*
4D170 **4D175**	2.50 *(63.5)*	20310 *(90330)*	20820 *(92600)*	15380 *(68410)*	12680 *(56400)*	11760 *(52300)*	10310 *(45850)*	9740 *(43320)*	8790 *(39090)*	7690 *(34200)*	6840 *(30420)*
4D180 **4D185**	3.00 *(76.2)*	17910 *(79660)*	18280 *(81300)*	14910 *(66310)*	12280 *(54620)*	11380 *(50610)*	9990 *(44430)*	9440 *(41980)*	8510 *(37850)*	7440 *(33090)*	6640 *(29530)*
	3.50 *(88.9)*	16000 *(71160)*	16000 *(71160)*	14430 *(64180)*	11910 *(52970)*	11030 *(49060)*	9660 *(42960)*	9140 *(40650)*	8240 *(36650)*	7210 *(32070)*	6410 *(28510)*
	4.00 *(102)*	14440 *(64220)*	14210 *(63200)*	14010 *(62310)*	11560 *(51410)*	10680 *(47500)*	9390 *(41760)*	8860 *(39400)*	7990 *(35530)*	6990 *(31090)*	6240 *(27750)*
	4.50 *(114)*	13180 *(58620)*	12810 *(56970)*	12810 *(56970)*	11210 *(49860)*	10380 *(46170)*	9110 *(40520)*	8610 *(38290)*	7760 *(34510)*	6790 *(30200)*	6040 *(26860)*
	5.00 *(127)*	10150 *(45140)*	10660 *(47410)*	10660 *(47410)*	10610 *(47190)*	9810 *(43630)*	8610 *(38290)*	8140 *(36200)*	7340 *(32640)*	6410 *(28510)*	5710 *(25390)*
	6.00 *(152)*	8950 *(39800)*	9140 *(40650)*	9140 *(40650)*	9140 *(40650)*	9140 *(40650)*	8160 *(36290)*	7710 *(34290)*	6960 *(30950)*	6090 *(27080)*	5410 *(24060)*
	7.00 *(178)*	7990 *(35530)*	7990 *(35530)*	7990 *(35530)*	7990 *(35530)*	7990 *(35530)*	7760 *(34510)*	7310 *(32510)*	6610 *(29400)*	5790 *(25750)*	5140 *(22860)*

Note [1]: For output speeds that are in between those detailed in Tables 4.6a through 4.7c, the overhung load capacity may be calculated through interpolation.

Special Load Guidelines Output Shaft Overhung Load continued

Table 4.6d Allowable Overhung Load for Output Shaft (Solid Output Shaft) (Cf, Sf = 1), continued

Force Units: lbs, (*N*)

Model	L inch (mm)	Output Shaft, RPM									
		5	10	20	30	35	45	50	60	75	90
	0.75 (19.1)	22060 (98120)	25720 (114400)	24970 (111060)	20970 (93270)	19550 (86950)	17350 (77170)	16480 (73300)	15030 (66850)	13380 (59510)	12110 (53860)
	1.00 (25.4)	23290 (103590)	25470 (113290)	24620 (109500)	20600 (91620)	19200 (85400)	17050 (75830)	16200 (72050)	14780 (65740)	13160 (58530)	11880 (52840)
	1.25 (31.8)	23780 (105770)	24970 (111060)	24200 (107640)	20250 (90070)	18880 (83970)	16780 (74630)	15930 (70850)	14530 (64620)	12930 (57510)	11680 (51950)
	1.50 (38.1)	24210 (107680)	24700 (109860)	23800 (105860)	19930 (88640)	18580 (82640)	16480 (73300)	15650 (69610)	14280 (63510)	12710 (56530)	11510 (51190)
	1.75 (44.5)	24370 (108390)	24370 (108390)	23420 (104170)	19600 (87180)	18280 (81300)	16230 (72190)	15400 (68490)	14060 (62530)	12510 (55640)	11310 (50300)
	1.88 (47.6)	22920 (101940)	24070 (107060)	23050 (102520)	19280 (85750)	17980 (79970)	15950 (70940)	15150 (67380)	13830 (61510)	12310 (54750)	11130 (49500)
4E170 **4E175**	2.00 (50.8)	21720 (96610)	23750 (105640)	22670 (100830)	18980 (84420)	17700 (78720)	15700 (69830)	14930 (66400)	13610 (60530)	12110 (53860)	10960 (48750)
4E180 **4E185**	2.50 (63.5)	22070 (98160)	23170 (103060)	22000 (97850)	18400 (81840)	17150 (76280)	15230 (67740)	14460 (64310)	13210 (58750)	11730 (52170)	10630 (47280)
4E190 **4E195**	3.00 (76.2)	22150 (98520)	22600 (100520)	21350 (94960)	17850 (79390)	16650 (74050)	14780 (65740)	14030 (62400)	12810 (56970)	11380 (50610)	10310 (45850)
	3.50 (88.9)	22070 (98160)	22070 (98160)	20720 (92160)	17350 (77170)	16150 (71830)	14360 (63870)	13630 (60620)	12430 (55280)	11060 (49190)	10010 (44520)
	4.00 (102)	21900 (97410)	21550 (95850)	20150 (89620)	16850 (74940)	15700 (69830)	13960 (62090)	13260 (58980)	12080 (53730)	10760 (47860)	9740 (43320)
	4.50 (114)	21680 (96430)	21070 (93710)	19600 (87180)	16400 (72940)	15280 (67960	13580 (60400	12880 (57290)	11760 (52300)	10460 (46520)	9460 (42070)
	5.00 (127)	17810 (79210)	18700 (83170)	18580 (82640)	15550 (69160)	14510 (64540)	12880 (57290)	12230 (54390)	11160 (49630)	9940 (44210)	8990 (39980)
	6.00 (152)	15710 (69870)	16030 (71300)	16030 (71300)	14780 (65740)	13780 (61290)	12230 (54390)	11630 (51730)	10610 (47190)	9440 (41980)	8540 (37980)
	7.00 (178)	14030 (62400)	14030 (62400)	14030 (62400)	14030 (62400)	13130 (58400)	11660 (51860)	11080 (49280)	10110 (44960)	8990 (39980)	8140 (36200)
	0.75 (19.1)	28700 (127650)	33460 (148830)	33460 (148830)	33460 (148830)	33210 (147710)	29720 (132190)	28470 (126630)	25970 (115510)	23320 (103720)	21270 (94600)
	1.00 (25.4)	30370 (135080)	33210 (147710)	33210 (147710)	33210 (147710)	32710 (145490)	29220 (129970)	27970 (124410)	25720 (114400)	23000 (102300)	20950 (93180)
	1.25 (31.8)	31150 (138550)	32710 (145490)	32710 (145490)	32710 (145490)	32460 (144380)	28970 (128850)	27470 (122180)	25220 (112170)	22650 (100740)	20650 (91850)
	1.50 (38.1)	31820 (141530)	32460 (144380)	32460 (144380)	32460 (144380)	31960 (142150)	28470 (126630)	27220 (121070)	24920 (110840)	22350 (99410)	20350 (90510)
	1.75 (44.5)	31960 (142150)	31960 (142150)	31960 (142150)	31960 (142150)	31460 (139930)	28220 (125520)	26720 (118850)	24570 (109280)	22020 (97940)	20080 (89310)
	1.88 (47.6)	30200 (134320)	31710 (141040)	31710 (141040)	31710 (141040)	30960 (137710)	27720 (123290)	26470 (117730)	24220 (107730)	21720 (96610)	19800 (88070)
4F180	2.00 (50.8)	28770 (127960)	31460 (139930)	31460 (139930)	31460 (139930)	30460 (135480)	27220 (121070)	25970 (115510)	23900 (106300)	21420 (95270)	19530 (86860)
4F185 **4F190**	2.50 (63.5)	29250 (130100)	30710 (136590)	30710 (136590)	30710 (136590)	29720 (132190)	26720 (118850)	25470 (113290)	23270 (103500)	20870 (92820)	19030 (84640)
4F195	3.00 (76.2)	29620 (131740)	30220 (134410)	30220 (134410)	30220 (134410)	28970 (128850)	25970 (115510)	24700 (109860)	22670 (100830)	20320 (90380)	18530 (82420)
	3.50 (88.9)	29470 (131080)	29470 (131080)	29470 (131080)	29470 (131080)	28220 (125520)	25220 (112170)	24070 (107060)	22100 (98300)	19830 (88200)	18050 (80280)
	4.00 (102)	29440 (130940)	28970 (128850)	28970 (128850)	28970 (128850)	27720 (123290)	24650 (109640)	23500 (104520)	21550 (95850)	19330 (85970)	17630 (78410)
	4.50 (114)	29800 (132550)	28970 (128850)	28970 (128850)	28720 (127740)	26970 (119960)	24070 (107060)	22920 (101940)	21050 (93630)	18880 (83970)	17200 (76500)
	5.00 (127)	27110 (120580)	28470 (126630)	28470 (126630)	27470 (122180)	25720 (114400)	22970 (102170)	21870 (97270)	20080 (89310)	18000 (80060)	16400 (72940)
	6.00 (152)	25700 (114310)	26220 (116620)	26220 (116620)	26220 (116620)	24600 (109420)	21970 (97720)	20920 (93050)	19200 (85400)	17230 (76630)	15700 (69830)
	7.00 (178)	23900 (106300)	23900 (106300)	23900 (106300)	23900 (106300)	23550 (104750)	21050 (93630)	20050 (89180)	18400 (81840)	16500 (73390)	15030 (66850)

Note [1]: For output speeds that are in between those detailed in Tables 4.6a through 4.7c, the overhung load capacity may be calculated through interpolation.

Special Load Guidelines Output Shaft Overhung Load continued

Table 4.7a Allowable Overhung Load for Output Shaft (Keyed Hollow Bore, Shrink Disc, Taper Grip Bushing) (Cf, Sf = 1)

Force Units: lbs, (*N*)

Model	L inch *(mm)*	Output Shaft, RPM									
		5	10	20	30	35	45	50	60	75	90
	0.75 *(19.1)*	7170 *(31890)*	8360 *(37180)*	7510 *(33400)*	6440 *(28640)*	6060 *(26950)*	5490 *(24410)*	5260 *(23390)*	4870 *(21660)*	4440 *(19740)*	4120 *(18320)*
	1.00 *(25.4)*	7490 *(33310)*	8190 *(36420)*	7290 *(32420)*	6240 *(27750)*	5890 *(26190)*	5310 *(23610)*	5090 *(22640)*	4740 *(21080)*	4320 *(19210)*	3990 *(17740)*
	1.25 *(31.8)*	7610 *(33840)*	7990 *(35530)*	7060 *(31400)*	6060 *(26950)*	5710 *(25390)*	5160 *(22950)*	4940 *(21970)*	4590 *(20410)*	4190 *(18630)*	3870 *(17210)*
	1.50 *(38.1)*	7680 *(34160)*	7840 *(34870)*	6860 *(30510)*	5890 *(26190)*	5540 *(24640)*	5020 *(22320)*	4820 *(21430)*	4470 *(19880)*	4070 *(18100)*	3770 *(16760)*
4A100	1.75 *(44.5)*	7660 *(34070)*	7660 *(34070)*	6690 *(29750)*	5740 *(25530)*	5390 *(23970)*	4890 *(21750)*	4690 *(20860)*	4340 *(19300)*	3970 *(17650)*	3670 *(16320)*
4A105	1.88 *(47.6)*	7150 *(31800)*	7510 *(33400)*	6510 *(28950)*	5590 *(24860)*	5260 *(23390)*	4770 *(21210)*	4570 *(20320)*	4240 *(18850)*	3870 *(17210)*	3570 *(15870)*
4A110	2.00 *(50.8)*	6730 *(29930)*	7360 *(32730)*	6340 *(28200)*	5440 *(24190)*	5110 *(22720)*	4640 *(20630)*	4440 *(19740)*	4120 *(18320)*	3770 *(16760)*	3470 *(15430)*
4A115	2.50 *(63.5)*	6730 *(29930)*	7060 *(31400)*	6040 *(26860)*	5160 *(22950)*	4870 *(21660)*	4420 *(19660)*	4220 *(18770)*	3920 *(17430)*	3570 *(15870)*	3290 *(14630)*
4A120	3.00 *(76.2)*	6680 *(29710)*	6810 *(30290)*	5760 *(25620)*	4940 *(21970)*	4640 *(20630)*	4220 *(18770)*	4040 *(17960)*	3740 *(16630)*	3420 *(15210)*	3140 *(13960)*
4A125	3.50 *(88.9)*	6560 *(29170)*	6560 *(29170)*	5490 *(24410)*	4720 *(20990)*	4440 *(19740)*	4020 *(17880)*	3840 *(17080)*	3570 *(15870)*	3240 *(14410)*	3020 *(13430)*
4A140	4.00 *(102)*	6390 *(28420)*	6290 *(27970)*	5260 *(23390)*	4520 *(20100)*	4240 *(18850)*	3840 *(17080)*	3690 *(16410)*	3420 *(15210)*	3120 *(13870)*	2890 *(12850)*
4A145	0.75 *(19.1)*	11800 *(52480)*	13010 *(57860)*	10010 *(44520)*	8510 *(37850)*	7990 *(35530)*	7190 *(31980)*	6890 *(30640)*	6360 *(28280)*	5740 *(25530)*	5290 *(23520)*
	1.00 *(25.4)*	12350 *(54930)*	12680 *(56400)*	9760 *(43410)*	8310 *(36960)*	7790 *(34640)*	7010 *(31180)*	6710 *(29840)*	6190 *(27530)*	5610 *(24950)*	5160 *(22950)*
	1.25 *(31.8)*	12410 *(55190)*	12380 *(55060)*	9540 *(42430)*	8110 *(36070)*	7610 *(33840)*	6860 *(30510)*	6560 *(29170)*	6060 *(26950)*	5490 *(24410)*	5040 *(22410)*
	1.50 *(38.1)*	12210 *(54310)*	12110 *(53860)*	9310 *(41410)*	7910 *(35180)*	7440 *(33090)*	6690 *(29750)*	6410 *(28510)*	5910 *(26280)*	5340 *(23750)*	4920 *(21880)*
	1.75 *(44.5)*	11910 *(52970)*	11830 *(52610)*	9110 *(40520)*	7740 *(34420)*	7260 *(32290)*	6540 *(29080)*	6260 *(27840)*	5790 *(25750)*	5240 *(23300)*	4820 *(21430)*
4B120	1.88 *(47.6)*	10890 *(48430)*	11430 *(50840)*	8910 *(39630)*	7590 *(33760)*	7110 *(31620)*	6410 *(28510)*	6110 *(27170)*	5660 *(25170)*	5110 *(22720)*	4690 *(20860)*
4B125	2.00 *(50.8)*	10040 *(44650)*	10980 *(48830)*	8710 *(38740)*	7410 *(32950)*	6960 *(30950)*	6260 *(27840)*	5990 *(26640)*	5540 *(24640)*	5020 *(22320)*	4590 *(20410)*
4B140	2.50 *(63.5)*	9680 *(43050)*	10160 *(45190)*	8340 *(37090)*	7110 *(31620)*	6660 *(29620)*	6010 *(26730)*	5740 *(25530)*	5310 *(23610)*	4790 *(21300)*	4420 *(19660)*
4B145	3.00 *(76.2)*	9300 *(41360)*	9490 *(42210)*	8010 *(35620)*	6810 *(30290)*	6410 *(28510)*	5760 *(25620)*	5510 *(24500)*	5090 *(22640)*	4620 *(20540)*	4240 *(18850)*
4B160	3.50 *(88.9)*	8860 *(39400)*	8860 *(39400)*	7710 *(34290)*	6560 *(29170)*	6160 *(27390)*	5540 *(24640)*	5310 *(23610)*	4890 *(21750)*	4440 *(19740)*	4070 *(18100)*
4B165	4.00 *(102)*	8470 *(37670)*	8340 *(37090)*	7440 *(33090)*	6310 *(28060)*	5940 *(26420)*	5340 *(23750)*	5110 *(22720)*	4720 *(20990)*	4270 *(18990)*	3920 *(17430)*
	4.50 *(114)*	8090 *(35980)*	7860 *(34960)*	7160 *(31840)*	6090 *(27080)*	5740 *(25530)*	5160 *(22950)*	4940 *(21970)*	4540 *(20190)*	4120 *(18320)*	3790 *(16850)*
	5.00 *(127)*	6730 *(29930)*	7060 *(31400)*	6690 *(29750)*	5690 *(25300)*	5340 *(23750)*	4820 *(21430)*	4590 *(20410)*	4240 *(18850)*	3840 *(17080)*	3540 *(15740)*

Note [1]: For output speeds that are in between those detailed in Tables 4.6a through 4.7c, the overhung load capacity may be calculated through interpolation.

Special Load Guidelines Output Shaft Overhung Load continued

Table 4.7b Allowable Overhung Load for Output Shaft (Keyed Hollow Bore, Shrink Disc, Taper Grip Bushing) (Cf, Sf = 1), continued Force Units: lbs, (*N*)

Model	L inch *(mm)*	Output Shaft, RPM									
		5	10	20	30	35	45	50	60	75	90
	0.75 *(19.1)*	16770 *(74590)*	17480 *(77750)*	13160 *(58530)*	11030 *(49060)*	10280 *(45720)*	9140 *(40650)*	8690 *(38650)*	7940 *(35310)*	7060 *(31400)*	6390 *(28420)*
	1.00 *(25.4)*	17560 *(78100)*	17080 *(75970)*	12880 *(57290)*	10780 *(47940)*	10060 *(44740)*	8940 *(39760)*	8490 *(37760)*	7760 *(34510)*	6910 *(30730)*	6260 *(27840)*
	1.25 *(31.8)*	17980 *(79970)*	16730 *(74410)*	12610 *(56080)*	10560 *(46970)*	9840 *(43760)*	8740 *(38870)*	8310 *(36960)*	7590 *(33760)*	6760 *(30060)*	6110 *(27170)*
	1.50 *(38.1)*	18210 *(80990)*	16350 *(72720)*	12330 *(54840)*	10330 *(45940)*	9640 *(42870)*	8560 *(38070)*	8140 *(36200)*	7440 *(33090)*	6610 *(29400)*	5990 *(26640)*
	1.75 *(44.5)*	18280 *(81300)*	16030 *(71300)*	12080 *(53730)*	10110 *(44960)*	9440 *(41980)*	8390 *(37310)*	7960 *(35400)*	7260 *(32290)*	6490 *(28860)*	5860 *(26060)*
4C140	1.88 *(47.6)*	17120 *(76140)*	15700 *(69830)*	11830 *(52610)*	9910 *(44070)*	9240 *(41090)*	8210 *(36510)*	7810 *(34730)*	7110 *(31620)*	6340 *(28200)*	5740 *(25530)*
4C145 **4C160**	2.00 *(50.8)*	16170 *(71920)*	15380 *(68410)*	11580 *(51500)*	9710 *(43190)*	9060 *(40290)*	8040 *(35760)*	7640 *(33980)*	6990 *(31090)*	6210 *(27620)*	5640 *(25080)*
4C165 **4C170**	2.50 *(63.5)*	16260 *(72320)*	14780 *(65740)*	11130 *(49500)*	9340 *(41540)*	8710 *(38740)*	7740 *(34420)*	7360 *(32730)*	6710 *(29840)*	5990 *(26640)*	5410 *(24060)*
4C175	3.00 *(76.2)*	15640 *(69560)*	14260 *(63420)*	10730 *(47720)*	8990 *(39980)*	8390 *(37310)*	7460 *(33180)*	7090 *(31530)*	6460 *(28730)*	5760 *(25620)*	5210 *(23170)*
	3.50 *(88.9)*	14980 *(66630)*	13730 *(61070)*	10360 *(46080)*	8660 *(38510)*	8090 *(35980)*	7190 *(31980)*	6840 *(30420)*	6240 *(27750)*	5560 *(24730)*	5040 *(22410)*
	4.00 *(102)*	14360 *(63870)*	13260 *(58980)*	9990 *(44430)*	8360 *(37180)*	7810 *(34730)*	6940 *(30860)*	6590 *(29310)*	6010 *(26730)*	5360 *(23840)*	4870 *(21660)*
	4.50 *(114)*	13740 *(61110)*	12830 *(57060)*	9660 *(42960)*	8090 *(35980)*	7540 *(33530)*	6710 *(29840)*	6360 *(28280)*	5810 *(25840)*	5190 *(23080)*	4690 *(20860)*
	5.00 *(127)*	11480 *(51060)*	12030 *(53500)*	9060 *(40290)*	7590 *(33760)*	7060 *(31400)*	6290 *(27970)*	5960 *(26510)*	5460 *(24280)*	4870 *(21660)*	4390 *(19520)*
	6.00 *(152)*	10770 *(47900)*	10980 *(48830)*	8540 *(37980)*	7140 *(31750)*	6660 *(29620)*	5910 *(26280)*	5610 *(24950)*	5140 *(22860)*	4570 *(20320)*	4140 *(18410)*
	0.75 *(19.1)*	21850 *(97180)*	25470 *(113290)*	19150 *(85170)*	16050 *(71390)*	14960 *(66540)*	13310 *(59200)*	12630 *(56170)*	11560 *(51410)*	10280 *(45720)*	9310 *(41410)*
	1.00 *(25.4)*	23060 *(102570)*	24950 *(110970)*	18800 *(83620)*	15750 *(70050)*	14680 *(65290)*	13060 *(58090)*	12410 *(55190)*	11330 *(50390)*	10090 *(44880)*	9140 *(40650)*
	1.25 *(31.8)*	23590 *(104920)*	24500 *(108970)*	18450 *(82060)*	15450 *(68720)*	14430 *(64180)*	12810 *(56970)*	12180 *(54170)*	11130 *(49500)*	9910 *(44070)*	8990 *(39980)*
	1.50 *(38.1)*	23940 *(106480)*	24050 *(106970)*	18130 *(80640)*	15180 *(67520)*	14160 *(62980)*	12580 *(55950)*	11960 *(53190)*	10930 *(48610)*	9740 *(43320)*	8810 *(39180)*
	1.75 *(44.5)*	24070 *(107060)*	23620 *(105060)*	17800 *(79170)*	14930 *(66400)*	13910 *(61870)*	12360 *(54970)*	11760 *(52300)*	10730 *(47720)*	9560 *(42520)*	8660 *(38510)*
	1.88 *(47.6)*	22610 *(100560)*	23220 *(103280)*	17500 *(77840)*	14660 *(65200)*	13680 *(60840)*	12160 *(54080)*	11560 *(51410)*	10560 *(46970)*	9390 *(41760)*	8510 *(37850)*
4D160 **4D165**	2.00 *(50.8)*	21420 *(95270)*	22820 *(101500)*	17200 *(76500)*	14410 *(64090)*	13430 *(59730)*	11960 *(53190)*	11360 *(50520)*	10360 *(46080)*	9240 *(41090)*	8360 *(37180)*
4D170 **4D175**	2.50 *(63.5)*	21710 *(96560)*	22070 *(98160)*	16630 *(73970)*	13930 *(61960)*	13010 *(57860)*	11560 *(51410)*	10980 *(48830)*	10040 *(44650)*	8940 *(39760)*	8090 *(35980)*
4D180 **4D185**	3.00 *(76.2)*	21760 *(96780)*	21370 *(95050)*	16100 *(71610)*	13510 *(60090)*	12580 *(55950)*	11180 *(49720)*	10630 *(47280)*	9710 *(43190)*	8640 *(38430)*	7840 *(34870)*
	3.50 *(88.9)*	21650 *(96290)*	20700 *(92070)*	15600 *(69380)*	13080 *(58170)*	12180 *(54170)*	10830 *(48170)*	10310 *(45850)*	9410 *(41850)*	8390 *(37310)*	7590 *(33760)*
	4.00 *(102)*	21470 *(95490)*	20080 *(89310)*	15130 *(67290)*	12680 *(56400)*	11830 *(52610)*	10510 *(46740)*	9990 *(44430)*	9140 *(40650)*	8140 *(36200)*	7360 *(32730)*
	4.50 *(114)*	20940 *(93140)*	19500 *(86730)*	14710 *(65430)*	12310 *(54750)*	11480 *(51060)*	10210 *(45410)*	9710 *(43190)*	8860 *(39400)*	7890 *(35090)*	7140 *(31750)*
	5.00 *(127)*	17570 *(78150)*	18430 *(81970)*	13880 *(61730)*	11630 *(51730)*	10860 *(48300)*	9640 *(42870)*	9160 *(40740)*	8390 *(37310)*	7460 *(33180)*	6760 *(30060)*
	6.00 *(152)*	16540 *(73560)*	16880 *(75080)*	13160 *(58530)*	11030 *(49060)*	10280 *(45720)*	9140 *(40650)*	8690 *(38650)*	7940 *(35310)*	7060 *(31400)*	6410 *(28510)*
	7.00 *(178)*	15550 *(69160)*	15550 *(69160)*	12510 *(55640)*	10480 *(46610)*	9790 *(43540)*	8690 *(38650)*	8260 *(36740)*	7540 *(33530)*	6710 *(29840)*	6090 *(27080)*

Note [1]: For output speeds that are in between those detailed in Tables 4.6a through 4.7c, the overhung load capacity may be calculated through interpolation.

Special Load Guidelines Output Shaft Overhung Load continued

Table 4.7c Allowable Overhung Load for Output Shaft (Keyed Hollow Bore, Shrink Disc, Taper Grip Bushing) (Cf, Sf = 1)

Force Units: lbs, (*N*)

Model	L inch *(mm)*	Output Shaft, RPM									
		5	10	20	30	35	45	50	60	75	90
	0.75 *(19.1)*	22060 *(98120)*	25720 *(114400)*	25720 *(114400)*	21700 *(96520)*	20270 *(90160)*	18100 *(80500)*	17230 *(76630)*	15780 *(70180)*	14130 *(62850)*	12830 *(57060)*
	1.00 *(25.4)*	23290 *(103590)*	25470 *(113290)*	25470 *(113290)*	21350 *(94960)*	19930 *(88640)*	17780 *(79080)*	16930 *(75300)*	15500 *(68940)*	13880 *(61730)*	12630 *(56170)*
	1.25 *(31.8)*	23780 *(105770)*	24970 *(111060)*	24920 *(110840)*	20970 *(93270)*	19600 *(87180)*	17480 *(77750)*	16650 *(74050)*	15250 *(67830)*	13660 *(60750)*	12410 *(55190)*
	1.50 *(38.1)*	24210 *(107680)*	24700 *(109860)*	24520 *(109060)*	20620 *(91710)*	19280 *(85750)*	17200 *(76500)*	16380 *(72850)*	15010 *(66760)*	13430 *(59730)*	12210 *(54310)*
	1.75 *(44.5)*	24370 *(108390)*	24370 *(108390)*	24120 *(107280)*	20300 *(90290)*	18950 *(84280)*	16900 *(75170)*	16100 *(71610)*	14760 *(65650)*	13210 *(58750)*	12010 *(53420)*
	1.88 *(47.6)*	22920 *(101940)*	24070 *(107060)*	23720 *(105500)*	19980 *(88870)*	18650 *(82950)*	16650 *(74050)*	15850 *(70500)*	14510 *(64540)*	12980 *(57730)*	11810 *(52530)*
4E170 **4E175**	2.00 *(50.8)*	21720 *(96610)*	23750 *(105640)*	23350 *(103860)*	19650 *(87400)*	18380 *(81750)*	16380 *(72850)*	15600 *(69380)*	14280 *(63510)*	12780 *(56840)*	11630 *(51730)*
4E180 **4E185**	2.50 *(63.5)*	22070 *(98160)*	23170 *(103060)*	22650 *(100740)*	19050 *(84730)*	17800 *(79170)*	15880 *(70630)*	15130 *(67290)*	13860 *(61640)*	12410 *(55190)*	11280 *(50170)*
4E190 **4E195**	3.00 *(76.2)*	22150 *(98520)*	22600 *(100520)*	21970 *(97720)*	18500 *(82280)*	17280 *(76860)*	15400 *(68490)*	14680 *(65290)*	13430 *(59730)*	12030 *(53500)*	10930 *(48610)*
	3.50 *(88.9)*	22070 *(98160)*	22070 *(98160)*	21350 *(94960)*	17950 *(79840)*	16780 *(74630)*	14960 *(66540)*	14260 *(63420)*	13060 *(58090)*	11680 *(51950)*	10630 *(47280)*
	4.00 *(102)*	21900 *(97410)*	21550 *(95850)*	20750 *(92290)*	17450 *(77610)*	16300 *(72500)*	14560 *(64760)*	13860 *(61640)*	12680 *(56400)*	11360 *(50520)*	10330 *(45940)*
	4.50 *(114)*	21680 *(96430)*	21070 *(93710)*	20180 *(89760)*	16980 *(75520)*	15850 *(70500)*	14160 *(62980)*	13480 *(59950)*	12330 *(54840)*	11030 *(49060)*	10040 *(44650)*
	5.00 *(127)*	19190 *(85350)*	20150 *(89620)*	19130 *(85090)*	16100 *(71610)*	15060 *(66980)*	13430 *(59730)*	12780 *(56840)*	11710 *(52080)*	10480 *(46610)*	9540 *(42430)*
	6.00 *(152)*	18940 *(84240)*	19330 *(85970)*	18200 *(80950)*	15300 *(68050)*	14310 *(63650)*	12760 *(56750)*	12160 *(54080)*	11130 *(49500)*	9960 *(44300)*	9060 *(40290)*
	7.00 *(178)*	18550 *(82510)*	18550 *(82510)*	17350 *(77170)*	14610 *(64980)*	13630 *(60620)*	12160 *(54080)*	11580 *(51500)*	10610 *(47190)*	9490 *(42210)*	8640 *(38430)*
	0.75 *(19.1)*	28700 *(127650)*	33460 *(148830)*	33460 *(148830)*	33460 *(148830)*	32960 *(146600)*	29470 *(131080)*	28220 *(125520)*	25720 *(114400)*	23150 *(102970)*	21100 *(93850)*
	1.00 *(25.4)*	30370 *(135080)*	33210 *(147710)*	33210 *(147710)*	33210 *(147710)*	32460 *(144380)*	29220 *(129970)*	27720 *(123290)*	25470 *(113290)*	22820 *(101500)*	20800 *(92510)*
	1.25 *(31.8)*	31150 *(138550)*	32710 *(145490)*	32710 *(145490)*	32710 *(145490)*	32210 *(143270)*	28720 *(127740)*	27220 *(121070)*	24970 *(111060)*	22500 *(100080)*	20500 *(91180)*
	1.50 *(38.1)*	31820 *(141530)*	32460 *(144380)*	32460 *(144380)*	32460 *(144380)*	31710 *(141040)*	28220 *(125520)*	26970 *(119960)*	24750 *(110080)*	22170 *(98610)*	20220 *(89930)*
	1.75 *(44.5)*	31960 *(142150)*	31960 *(142150)*	31960 *(142150)*	31960 *(142150)*	31210 *(138820)*	27970 *(124410)*	26470 *(117730)*	24400 *(108530)*	21870 *(97270)*	19950 *(88730)*
	1.88 (47.6)	30200 (134320)	31710 (141040)	31710 (141040)	31710 (141040)	30710 (136590)	27470 (122180)	26220 (116620)	24070 (107060)	21570 (95940)	19680 (87530)
4F180	2.00 *(50.8)*	28770 *(127960)*	31460 *(139930)*	31460 *(139930)*	31460 *(139930)*	30460 *(135480)*	27220 *(121070)*	25970 *(115510)*	23750 *(105640)*	21270 *(94600)*	19400 *(86290)*
4F185 **4F190**	2.50 *(63.5)*	29250 *(130100)*	30710 *(136590)*	30710 *(136590)*	30710 *(136590)*	29470 *(131080)*	26470 *(117730)*	25220 *(112170)*	23120 *(102830)*	20720 *(92160)*	18900 *(84060)*
4F195	3.00 *(76.2)*	29620 *(131740)*	30220 *(134410)*	30220 *(134410)*	30220 *(134410)*	28720 *(127740)*	25720 *(114400)*	24550 *(109190)*	22520 *(100160)*	20200 *(89840)*	18400 *(81840)*
	3.50 *(88.9)*	29470 *(131080)*	29470 *(131080)*	29470 *(131080)*	29470 *(131080)*	28220 *(125520)*	25220 *(112170)*	23920 *(106390)*	21970 *(97720)*	19700 *(87620)*	17950 *(79840)*
	4.00 *(102)*	29440 *(130940)*	28970 *(128850)*	28970 *(128850)*	28970 *(128850)*	27470 *(122180)*	24500 *(108970)*	23350 *(103860)*	21420 *(95270)*	19230 *(85530)*	17500 *(77840)*
	4.50 *(114)*	29800 *(132550)*	28970 *(128850)*	28970 *(128850)*	28720 *(127740)*	26720 *(118850)*	23920 *(106390)*	22800 *(101410)*	20920 *(93050)*	18750 *(83400)*	17100 *(76060)*
	5.00 *(127)*	27110 *(120580)*	28470 *(126630)*	28470 *(126630)*	27220 *(121070)*	25470 *(113290)*	22850 *(101630)*	21750 *(96740)*	19980 *(88870)*	17900 *(79610)*	16330 *(72630)*
	6.00 *(152)*	25700 *(114310)*	26220 *(116620)*	26220 *(116620)*	26220 *(116620)*	24450 *(108750)*	21850 *(97180)*	20820 *(92600)*	19100 *(84950)*	17130 *(76190)*	15600 *(69380)*
	7.00 *(178)*	25470 *(113290)*	25470 *(113290)*	25470 *(113290)*	24970 *(111060)*	23450 *(104300)*	20950 *(93180)*	19950 *(88730)*	18300 *(81390)*	16430 *(73080)*	14960 *(66540)*

Special Load Guidelines Input Shaft Overhung Load continued

Allowable Axial Load for Hollow and Solid Shafts

Table 4.8 Allowable Axial Load (Common to Hollow and Solid Shafts)

[Units] Upper line: lbs; lower line: *(N)*

Frame Size	Output Shaft Speed r/min									
	5	10	20	30	35	45	50	60	75	90
4A10 ☐, 4A11 ☐, 4A12 ☐, 4A14 ☐	4968 *(22100)*	4968 *(22100)*	4968 *(22100)*	4586 *(20400)*	4249 *(18900)*	3709 *(16500)*	3507 *(15600)*	3147 *(14000)*	2743 *(12200)*	2428 *(10800)*
4B12 ☐, 4B14 ☐, 4B16 ☐	9329 *(41500)*	8835 *(39300)*	6227 *(27700)*	4923 *(21900)*	4474 *(19900)*	3754 *(16700)*	3462 *(15400)*	2990 *(13300)*	2450 *(10900)*	2025 *(9010)*
4C14 ☐, 4C16 ☐, 4C17 ☐	14567 *(64800)*	10903 *(48500)*	7373 *(32800)*	5620 *(25000)*	4991 *(22200)*	4024 *(17900)*	3642 *(16200)*	2990 *(13300)*	2248 *(10000)*	1675 *(7450)*
4D16 ☐, 4D17 ☐, 4D18 ☐	20816 *(92600)*	14859 *(66100)*	9981 *(44400)*	7531 *(33500)*	6677 *(29700)*	5328 *(23700)*	4811 *(21400)*	3912 *(17400)*	2877 *(12800)*	2070 *(9210)*
4E17 ☐, 4E18 ☐, 4E19 ☐	20974 *(93300)*	20569 *(91500)*	14297 *(63600)*	11150 *(49600)*	10049 *(44700)*	8340 *(37100)*	7666 *(34100)*	6542 *(29100)*	5215 *(23200)*	4204 *(18700)*
4F18 ☐, 4F19 ☐	33720 *(150000)*	33720 *(150000)*	24503 *(109000)*	19670 *(87500)*	17962 *(79900)*	15331 *(68200)*	14297 *(63600)*	12544 *(55800)*	10521 *(46800)*	8947 *(39800)*

*The ☐ mark of each frame size represents 0, 5, DA, DB, or DC.
Above values are valid when no radial load is applied on the shaft, and 12.9 grade mounting bolts are used.

Reducer Input Shaft Allowable Overhung Load

The radial load acting on the high speed shaft (ie: unit supplied as a reducer) may be calculated with the following formula:

$$Pr \leq \frac{Pro}{Lf \cdot Cf \cdot Sf}$$

LEGEND

- **Pr** = Actual radial load (lbs, *N*)
- **Pro** = Allowable radial load (lbs, *N*)
- **Lf** = Load Location factor (Table 4.6a)
- **Cf** = Coupling Factor (Table 4.4)
- **Sf** = Service factor (Table 4.5)

Figure 4.1 Input Shaft Load Location Factor (Lf)

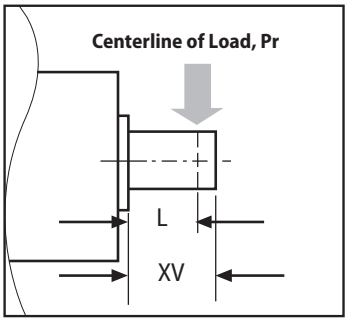


Table 4.9 Input Shaft Load Location Factor (Lf)

Model	L inch/*(mm)*											
	0.25 *(6.35)*	0.50 *(12.7)*	0.75 *(19.05)*	1.00 *(25.4)*	1.25 *(31.75)*	1.50 *(38.1)*	1.75 *(44.45)*	2.00 *(50.8)*	2.50 *(63.5)*	3.00 *(76.2)*	3.50 *(88.9)*	4.00 *(101.6)*
4A10DA, 4A12DA, 4B12DA, 4B14DA, 4C14DA	0.78	1.07	1.52	2.02	—	—	—	—	—	—	—	—
4A12DB, 4B12DB, 4B14DB, 4C14DB, 4C16DA, 4D16DA, 4D17DA, 4E17DA	0.90	1.09	1.52	2.03	2.53	—	—	—	—	—	—	—
4A100, 4A105, 4C14DC, 4D16DB, 4D17DB, 4D18DA, 4E17DB, 4E18DA, 4F18DA	0.93	1.09	1.52	2.03	2.53	—	—	—	—	—	—	—
4A110, 4A115	0.93	1.09	1.52	2.03	2.53	—	—	—	—	—	—	—
4A120, 4A125, 4B120, 4B125, 4D17DC, 4E17DC, 4E19DA, 4F19DA	0.68	0.87	1.10	1.43	1.77	2.12	2.46	—	—	—	—	—
4C145, 4D18DB, 4E18DB, 4E19DB, 4F18DB, 4F19DB	0.70	0.84	0.98	1.25	1.53	1.83	2.11	—	—	—	—	—
4B160, 4B165, 4C160, 4C165, 4D160, 4D165	0.90	0.94	0.97	1.06	1.22	1.36	1.51	1.66	1.94	—	—	—
4C170, 4C175, 4D170, 4D175, 4E170, 4E175	—	0.91	0.95	0.99	1.09	1.23	1.38	1.51	1.79	2.08	—	—
4D180, 4D185, 4E180, 4E185, 4F180, 4F185	—	—	0.92	0.96	1.01	1.11	1.24	1.37	1.63	1.88	2.15	2.40
4E190, 4E195, 4F190, 4F195	—	—	0.92	0.95	0.99	1.06	1.15	1.26	1.47	1.69	1.90	2.12

Special Load Guidelines Input Shaft Overhung Load continued

Table 4.10 Input Shaft Overhung Load Capacity Pro (Lf, Cf, Sf =1)

Force Units: lbs, (*N*)

Model	Reduction Ratio	Input Speed (RPM)						
		1750	1450	1165	980	870	720	580
4A10DA, 4A12DA, 4B12DA, 4B14DA, 4C14DA	364 - 5177, 7228, 10658	44 *(196)*	33 *(147)*	33 *(147)*	44 *(196)*	44 *(196)*	44 *(196)*	44 *(196)*
	1849, 2537	11 *(49.1)*	11 *(49.1)*	11 *(49.1)*	11 *(49.1)*	11 *(49.1)*	33 *(147)*	44 *(196)*
4A12DB, 4B12DB, 4B14DB, 4C14DB, 4C16DA, 4D16DA, 4D17DA, 4E17DA	All Ratios	44 *(196)*	44 *(196)*	44 *(196)*	44 *(196)*	55 *(245)*	55 *(245)*	66 *(294)*
4A100, 4A105, 4C14DC, 4D16DB, 4D17DB, 4D18DA, 4E17DB, 4E18DA, 4F18DA	11 - 39 , 54 - 578 , 809, 1117, 1656 , 2272 - 10658	99 *(441)*	99 *(441)*	110 *(491)*	121 *(540)*	132 *(589)*	132 *(589)*	132 *(589)*
	42, 46, 48, 53, 683, 956, 1320, 1957	99 *(441)*	77 *(343)*	99 *(441)*	110 *(491)*	110 *(491)*	121 *(540)*	132 *(589)*
4A110, 4A115	19 - 28 , 67 - 305	99 *(441)*	77 *(343)*	99 *(441)*	110 *(491)*	110 *(491)*	121 *(540)*	132 *(589)*
	35 - 60	44 *(196)*	44 *(196)*	44 *(196)*	44 *(196)*	55 *(245)*	55 *(245)*	66 *(294)*
4A120, 4A125, 4B120, 4B125, 4D17DC, 4E17DC, 4E19DA, 4F19DA	11 - 60 , 364 - 2559 , 3511 , 5177	133 *(590)*	155 *(690)*	166 *(740)*	175 *(780)*	198 *(880)*	198 *(880)*	198 *(880)*
	67 - 305, 2944, 4365, 6472 - 10658	121 *(540)*	99 *(440)*	110 *(490)*	121 *(540)*	133 *(590)*	198 *(880)*	198 *(880)*
4D18DB, 4E18DB, 4E19DB, 4F18DB, 4F19DB	11 - 74	308 *(1370)*	308 *(1370)*	308 *(1370)*	342 *(1520)*	364 *(1620)*	387 *(1720)*	418 *(1860)*
	80 - 305	288 *(1280)*	288 *(1280)*	288 *(1280)*	308 *(1370)*	330 *(1470)*	353 *(1570)*	398 *(1770)*
4A140, 4A145, 4B140, 4B145, 4C140, 4C145	11 - 28	308 *(1370)*	308 *(1370)*	308 *(1370)*	342 *(1520)*	364 *(1620)*	387 *(1720)*	418 *(1860)*
	35 - 74	277 *(1230)*	220 *(980)*	243 *(1080)*	265 *(1180)*	277 *(1230)*	297 *(1320)*	330 *(1470)*
	80 , 88	243 *(1080)*	254 *(1130)*	265 *(1180)*	288 *(1280)*	297 *(1320)*	308 *(1370)*	330 *(1470)*
	93 - 305	121 *(540)*	133 *(590)*	133 *(590)*	155 *(690)*	155 *(690)*	155 *(690)*	243 *(1080)*
4B160, 4B165, 4C160, 4C165, 4D160, 4D165	11 - 88 , 163 - 207	398 *(1770)*	398 *(1770)*	441 *(1960)*	463 *(2060)*	486 *(2160)*	486 *(2160)*	486 *(2160)*
	93 - 151 , 227 - 305	243 *(1080)*	265 *(1180)*	288 *(1280)*	308 *(1370)*	308 *(1370)*	353 *(1570)*	398 *(1770)*
4C170, 4C175, 4D170, 4D175, 4E170, 4E175	All Ratios	463 *(2060)*	463 *(2060)*	508 *(2260)*	508 *(2260)*	528 *(2350)*	551 *(2450)*	596 *(2650)*
4D180, 4D185, 4E180, 4E185, 4F180, 4F185	All Ratios	618 *(2750)*	573 *(2550)*	618 *(2750)*	661 *(2940)*	683 *(3040)*	751 *(3340)*	771 *(3430)*
4E190, 4E195, 4F190, 4F195	35 - 88	683 *(3040)*	683 *(3040)*	728 *(3240)*	794 *(3530)*	816 *(3630)*	881 *(3920)*	881 *(3920)*
	93 - 305	596 *(2650)*	573 *(2550)*	638 *(2840)*	661 *(2940)*	706 *(3140)*	751 *(3340)*	816 *(3630)*

Special Load Guidelines **Inertia**

Table 4.11 Reducer Moment of Inertia on reducer input shaft: Hollow Output Shaft, Ratios 11 - 53[1]
Units: lb•inch^2 *(x 10^{-4} kg•m^2)*

Model	Nominal Reduction Ratio												
	11	13	14	16	18	21	22	25	28	35	39	46	53
4A100	1.57	0.978	0.904	0.608	0.586	0.462	—	—	0.302	0.186	0.176	0.162	0.141
4A105	*(4.60)*	*(2.86)*	*(2.64)*	*(1.78)*	*(1.72)*	*(1.35)*	—	—	*(0.884)*	*(0.544)*	*(0.514)*	*(0.475)*	*(0.414)*
4A110	—	—	—	—	—	0.710	—	—	0.491	0.358	0.348	0.304	0.278
4A115	—	—	—	—	—	*(2.08)*	—	—	*(1.44)*	*(1.05)*	*(1.02)*	*(0.891)*	*(0.813)*
4A120	3.86	2.35	2.28	1.70	1.65	1.28	1.44	1.42	0.986	0.608	0.598	0.631	0.589
4A125	*(11.3)*	*(6.89)*	*(6.67)*	*(4.99)*	*(4.84)*	*(3.74)*	*(4.21)*	*(4.14)*	*(2.89)*	*(1.78)*	*(1.75)*	*(1.85)*	*(1.72)*
4A140	8.32	5.30	5.22	3.77	3.72	3.37	3.47	3.45	2.27	1.61	1.60	1.29	1.16
4A145	*(24.4)*	*(15.5)*	*(15.3)*	*(11.0)*	*(10.9)*	*(9.87)*	*(10.2)*	*(10.1)*	*(6.65)*	*(4.71)*	*(4.68)*	*(3.77)*	*(3.40)*
4B120	5.24	3.24	3.05	2.30	1.47	1.62	1.73	1.67	1.18	0.726	0.700	0.704	0.644
4B125	*(15.3)*	*(9.48)*	*(8.93)*	*(6.72)*	*(4.31)*	*(4.75)*	*(5.06)*	*(4.88)*	*(3.45)*	*(2.12)*	*(2.05)*	*(2.06)*	*(1.88)*
4B140	9.69	6.22	6.03	4.37	4.25	3.75	3.79	3.72	2.48	1.74	1.71	1.37	1.22
4B145	*(28.4)*	*(18.2)*	*(17.7)*	*(12.8)*	*(12.4)*	*(11.0)*	*(11.1)*	*(10.9)*	*(7.27)*	*(5.08)*	*(5.01)*	*(4.01)*	*(3.58)*
4B160	27.7	17.8	17.6	12.1	12.0	8.93	10.1	10.0	6.17	4.41	4.39	3.87	3.46
4B165	*(81.0)*	*(52.1)*	*(51.6)*	*(35.5)*	*(35.1)*	*(26.1)*	*(29.5)*	*(29.3)*	*(18.0)*	*(12.9)*	*(12.8)*	*(11.3)*	*(10.1)*
4C140	13.7	9.01	8.40	6.20	3.96	4.84	4.73	4.52	3.10	2.12	2.04	1.60	1.40
4C145	*(40.1)*	*(26.4)*	*(24.6)*	*(18.1)*	*(11.6)*	*(14.2)*	*(13.8)*	*(13.2)*	*(9.06)*	*(6.20)*	*(5.96)*	*(4.69)*	*(4.09)*
4C160	31.9	20.8	20.1	14.0	13.6	10.0	11.0	10.8	6.75	4.78	4.69	4.09	3.63
4C165	*(93.4)*	*(60.8)*	*(59.0)*	*(40.9)*	*(39.7)*	*(29.2)*	*(32.1)*	*(31.6)*	*(19.8)*	*(14.0)*	*(13.7)*	*(12.0)*	*(10.6)*
4C170	55.0	35.0	34.4	26.4	26.0	23.8	23.4	23.1	17.6	13.3	13.2	12.3	10.9
4C175	*(161)*	*(102)*	*(101)*	*(77.2)*	*(76.0)*	*(69.8)*	*(68.3)*	*(67.7)*	*(51.4)*	*(38.9)*	*(38.6)*	*(36.1)*	*(31.9)*
4D160	—	—	—	—	—	12.6	13.3	12.7	8.21	5.73	5.47	4.64	4.04
4D165	—	—	—	—	—	*(36.8)*	*(39.0)*	*(37.1)*	*(24.0)*	*(16.8)*	*(16.0)*	*(13.6)*	*(11.8)*
4D170	68.5	44.1	42.2	32.3	31.1	26.5	25.7	25.1	19.0	14.2	14.0	12.9	11.3
4D175	*(200)*	*(129)*	*(123)*	*(94.5)*	*(90.9)*	*(77.5)*	*(75.3)*	*(73.4)*	*(55.7)*	*(41.7)*	*(40.9)*	*(37.7)*	*(33.1)*
4D180	104	52.8	50.9	36.4	35.1	36.6	31.5	30.9	26.5	21.5	21.2	18.9	16.6
4D185	*(304)*	*(155)*	*(149)*	*(107)*	*(103)*	*(107)*	*(92.2)*	*(90.3)*	*(77.5)*	*(62.8)*	*(62.1)*	*(55.4)*	*(48.7)*
4E170	—	—	—	—	—	30.5	29.0	28.0	21.3	15.6	15.2	13.7	12.0
4E175	—	—	—	—	—	*(89.2)*	*(84.7)*	*(82.0)*	*(62.3)*	*(45.5)*	*(44.4)*	*(40.2)*	*(35.0)*
4E180	120	62.3	59.5	43.0	41.1	40.6	34.7	33.8	28.7	22.8	22.4	19.8	17.3
4E185	*(351)*	*(182)*	*(174)*	*(126)*	*(120)*	*(119)*	*(102)*	*(98.9)*	*(84.0)*	*(66.7)*	*(65.5)*	*(57.8)*	*(50.6)*
4E190	188	102	99.6	70.7	68.8	77.0	64.9	64.0	56.7	48.5	48.1	44.2	41.9
4E195	*(551)*	*(300)*	*(291)*	*(207)*	*(201)*	*(225)*	*(190)*	*(187)*	*(166)*	*(142)*	*(141)*	*(129)*	*(123)*
4F180	178	97.6	92.8	68.4	65.1	52.8	44.4	42.7	35.6	26.7	26.0	22.4	19.2
4F185	*(522)*	*(286)*	*(272)*	*(200)*	*(190)*	*(155)*	*(130)*	*(125)*	*(104)*	*(78.1)*	*(76.2)*	*(65.4)*	*(56.3)*
4F190	234	131	126	91.0	87.7	90.0	75.2	73.6	64.1	52.7	52.0	47.0	44.0
4F195	*(686)*	*(383)*	*(369)*	*(266)*	*(257)*	*(263)*	*(220)*	*(215)*	*(187)*	*(154)*	*(152)*	*(138)*	*(129)*

Note: [1] The inertia tables does not include the inertia of the integral motors. Total unit inertia is obtained by adding the reducer inertia to the motor inertia.

Special Load Guidelines **Inertia** continued

Table 4.12 Reducer Moment of Inertia on reducer input shaft: Hollow Output Shaft, Ratios 11 - 53[1]
Units: lb•inch^2 *(x 10^{-4} kg•m^2)*

Model	Nominal Reduction Ratio												
	60	67	74	80	88	102	112	123	151	179	207	249	305
4A100	0.101	0.107	0.104	0.094	0.092	0.064	0.059	0.058	0.053	0.070	0.047	0.067	0.045
4A105	*(0.297)*	*(0.314)*	*(0.306)*	*(0.275)*	*(0.270)*	*(0.188)*	*(0.172)*	*(0.169)*	*(0.154)*	*(0.206)*	*(0.138)*	*(0.196)*	*(0.131)*
4A110	0.260	0.227	0.225	0.217	0.215	0.207	0.197	0.196	0.191	0.185	0.183	0.181	0.179
4A115	*(0.760)*	*(0.665)*	*(0.657)*	*(0.634)*	*(0.628)*	*(0.605)*	*(0.577)*	*(0.575)*	*(0.559)*	*(0.541)*	*(0.536)*	*(0.529)*	*(0.525)*
4A120	0.441	0.496	0.493	0.455	0.453	0.320	0.303	0.302	0.286	0.396	0.272	0.384	0.261
4A125	*(1.29)*	*(1.45)*	*(1.44)*	*(1.33)*	*(1.33)*	*(0.935)*	*(0.887)*	*(0.884)*	*(0.838)*	*(1.16)*	*(0.795)*	*(1.12)*	*(0.763)*
4A140	1.03	0.876	0.873	0.814	0.812	0.745	0.720	0.719	0.673	0.655	0.654	0.637	0.633
4A145	*(3.01)*	*(2.56)*	*(2.56)*	*(2.38)*	*(2.38)*	*(2.18)*	*(2.11)*	*(2.10)*	*(1.97)*	*(1.92)*	*(1.91)*	*(1.86)*	*(1.85)*
4B120	0.484	0.528	0.521	0.478	0.473	0.334	0.315	0.312	0.293	0.401	0.275	0.387	0.262
4B125	*(1.42)*	*(1.54)*	*(1.52)*	*(1.40)*	*(1.38)*	*(0.978)*	*(0.921)*	*(0.913)*	*(0.857)*	*(1.17)*	*(0.805)*	*(1.13)*	*(0.768)*
4B140	1.07	0.911	0.904	0.838	0.833	0.761	0.732	0.730	0.680	0.660	0.658	0.639	0.635
4B145	*(3.14)*	*(2.67)*	*(2.65)*	*(2.45)*	*(2.44)*	*(2.23)*	*(2.14)*	*(2.14)*	*(1.99)*	*(1.93)*	*(1.93)*	*(1.87)*	*(1.86)*
4B160	2.92	2.66	2.65	2.48	2.47	2.19	2.10	2.10	2.01	1.97	1.98	1.89	1.86
4B165	*(8.53)*	*(7.79)*	*(7.77)*	*(7.25)*	*(7.23)*	*(6.41)*	*(6.15)*	*(6.14)*	*(5.88)*	*(5.77)*	*(5.80)*	*(5.54)*	*(5.46)*
4C140	1.21	1.02	0.993	0.912	0.896	0.807	0.770	0.762	0.701	0.675	0.669	0.647	0.640
4C145	*(3.54)*	*(2.97)*	*(2.91)*	*(2.67)*	*(2.62)*	*(2.36)*	*(2.25)*	*(2.23)*	*(2.05)*	*(1.98)*	*(1.96)*	*(1.89)*	*(1.87)*
4C160	3.04	2.76	2.74	2.55	2.53	2.24	2.14	2.13	2.03	1.99	1.99	1.90	1.87
4C165	*(8.91)*	*(8.08)*	*(8.02)*	*(7.46)*	*(7.41)*	*(6.54)*	*(6.26)*	*(6.23)*	*(5.94)*	*(5.81)*	*(5.83)*	*(5.56)*	*(5.47)*
4C170	10.4	9.70	9.67	9.32	9.30	8.77	8.69	8.68	8.40	8.29	8.18	8.14	8.10
4C175	*(30.5)*	*(28.4)*	*(28.3)*	*(27.3)*	*(27.2)*	*(25.7)*	*(25.4)*	*(25.4)*	*(24.6)*	*(24.3)*	*(23.9)*	*(23.8)*	*(23.7)*
4D160	3.37	3.02	2.95	2.73	2.68	2.35	2.23	2.21	2.08	2.02	2.02	1.92	1.88
4D165	*(9.86)*	*(8.85)*	*(8.64)*	*(8.00)*	*(7.85)*	*(6.87)*	*(6.53)*	*(6.46)*	*(6.09)*	*(5.92)*	*(5.90)*	*(5.62)*	*(5.51)*
4D170	10.7	9.96	9.89	9.50	9.45	8.88	8.79	8.76	8.45	8.32	8.21	8.16	8.12
4D175	*(31.4)*	*(29.1)*	*(28.9)*	*(27.8)*	*(27.7)*	*(26.0)*	*(25.7)*	*(25.6)*	*(24.7)*	*(24.4)*	*(24.0)*	*(23.9)*	*(23.8)*
4D180	15.7	14.9	14.8	13.7	13.7	13.0	12.8	12.8	12.4	12.0	11.9	11.8	11.7
4D185	*(46.0)*	*(43.5)*	*(43.3)*	*(40.1)*	*(40.0)*	*(38.0)*	*(37.4)*	*(37.4)*	*(36.2)*	*(35.2)*	*(34.9)*	*(34.6)*	*(34.4)*
4E170	11.2	10.3	10.21	9.76	9.68	9.05	8.92	8.88	8.53	8.38	8.25	8.19	8.14
4E175	*(32.9)*	*(30.2)*	*(29.9)*	*(28.6)*	*(28.3)*	*(26.5)*	*(26.1)*	*(26.0)*	*(25.0)*	*(24.5)*	*(24.1)*	*(24.0)*	*(23.8)*
4E180	16.2	15.2	15.1	14.0	13.9	13.2	12.9	12.9	12.5	12.1	12.0	11.8	11.8
4E185	*(47.4)*	*(44.5)*	*(44.2)*	*(40.9)*	*(40.7)*	*(38.5)*	*(37.8)*	*(37.7)*	*(36.5)*	*(35.3)*	*(35.0)*	*(34.7)*	*(34.4)*
4E190	40.0	37.1	37.0	35.9	35.9	34.7	33.8	33.8	33.2	32.8	32.5	32.3	32.1
4E195	*(117)*	*(109)*	*(108)*	*(105)*	*(105)*	*(102)*	*(98.9)*	*(98.8)*	*(97.1)*	*(96.0)*	*(95.2)*	*(94.6)*	*(94.1)*
4F180	17.7	16.3	16.1	14.7	14.6	13.7	13.3	13.2	12.7	12.2	12.1	11.9	11.8
4F185	*(51.9)*	*(47.7)*	*(47.1)*	*(43.1)*	*(42.7)*	*(40.0)*	*(38.9)*	*(38.7)*	*(37.2)*	*(35.8)*	*(35.4)*	*(34.9)*	*(34.6)*
4F190	41.6	38.3	38.1	36.7	36.6	35.3	34.2	34.1	33.4	33.0	32.7	32.4	32.2
4F195	*(122)*	*(112)*	*(111)*	*(108)*	*(107)*	*(103)*	*(100)*	*(99.9)*	*(97.9)*	*(96.6)*	*(95.6)*	*(94.9)*	*(94.3)*

Note: [1] The inertia tables does not include the inertia of the integral motors. Total unit inertia is obtained by adding the reducer inertia to the motor inertia.

Special Load Guidelines **Inertia** continued

Table 4.13 Reducer Moment of Inertia on reducer input shaft: Solid Shaft [Left (L) or Right (R)] Output, Ratios 11 - 53[1]
Units: lb•inch^2 *(x 10^{-4} kg•m^2)*

Model	Nominal Reduction Ratio												
	11	13	14	16	18	21	22	25	28	35	39	46	53
4A100	1.58	0.986	0.910	0.614	0.560	0.465	—	—	0.304	0.187	0.177	0.163	0.142
4A105	*(4.64)*	*(2.88)*	*(2.66)*	*(1.80)*	*(1.64)*	*(1.36)*	—	—	*(0.890)*	*(0.547)*	*(0.517)*	*(0.477)*	*(0.415)*
4A100	—	—	—	—	—	0.713	—	—	0.492	0.359	0.349	0.305	0.278
4A115	—	—	—	—	—	*(2.09)*	—	—	*(1.44)*	*(1.05)*	*(1.02)*	*(0.893)*	*(0.814)*
4A120	3.88	2.36	2.29	1.71	1.66	1.28	1.44	1.42	0.988	0.610	0.599	0.632	0.589
4A125	*(11.3)*	*(6.92)*	*(6.69)*	*(5.01)*	*(4.85)*	*(3.75)*	*(4.22)*	*(4.15)*	*(2.89)*	*(1.78)*	*(1.75)*	*(1.85)*	*(1.72)*
4A140	8.34	5.31	5.23	3.77	3.72	3.37	3.48	3.45	2.27	1.61	1.60	1.29	1.16
4A145	*(24.4)*	*(15.5)*	*(15.3)*	*(11.0)*	*(10.9)*	*(9.88)*	*(10.2)*	*(10.1)*	*(6.65)*	*(4.71)*	*(4.68)*	*(3.78)*	*(3.40)*
4B120	5.30	3.28	3.09	2.32	2.19	1.64	1.74	1.68	1.19	0.731	0.705	0.708	0.646
4B125	*(15.5)*	*(9.61)*	*(9.03)*	*(6.80)*	*(6.42)*	*(4.79)*	*(5.10)*	*(4.91)*	*(3.48)*	*(2.14)*	*(2.06)*	*(2.07)*	*(1.89)*
4B120	9.75	3.91	3.72	4.40	4.27	3.76	3.80	3.74	2.49	1.74	1.72	1.37	1.22
4B125	*(28.5)*	*(11.4)*	*(10.9)*	*(12.9)*	*(12.5)*	*(11.0)*	*(11.1)*	*(10.9)*	*(7.29)*	*(5.10)*	*(5.02)*	*(4.02)*	*(3.58)*
4B140	27.7	17.8	17.7	12.2	12.0	8.95	10.1	10.0	6.18	4.42	4.39	3.87	3.47
4B145	*(81.2)*	*(52.2)*	*(51.7)*	*(35.6)*	*(35.2)*	*(26.2)*	*(29.5)*	*(29.4)*	*(18.1)*	*(12.9)*	*(12.8)*	*(11.3)*	*(10.1)*
4B160	13.8	9.10	8.47	6.26	5.85	4.87	4.76	4.55	3.12	2.13	2.05	1.61	1.40
4B165	*(40.5)*	*(26.6)*	*(24.8)*	*(18.3)*	*(17.1)*	*(14.3)*	*(13.9)*	*(13.3)*	*(9.12)*	*(6.23)*	*(5.99)*	*(4.71)*	*(4.10)*
4C160	32.0	12.4	11.8	14.0	13.6	10.0	11.0	10.8	6.77	4.79	4.70	4.09	3.63
4C165	*(93.7)*	*(36.4)*	*(34.5)*	*(41.0)*	*(39.9)*	*(29.3)*	*(32.2)*	*(31.6)*	*(19.8)*	*(14.0)*	*(13.8)*	*(12.0)*	*(10.6)*
4C170	55.1	35.1	34.5	26.4	26.0	23.9	23.4	23.2	17.6	13.3	13.2	12.3	10.9
4C175	*(161)*	*(103)*	*(101)*	*(77.3)*	*(76.1)*	*(69.9)*	*(68.4)*	*(67.8)*	*(51.4)*	*(38.9)*	*(38.7)*	*(36.1)*	*(31.9)*
4D160	—	—	—	—	—	12.6	13.4	12.7	8.25	5.76	5.49	4.65	4.06
4D165	—	—	—	—	—	*(37.0)*	*(39.2)*	*(37.3)*	*(24.1)*	*(16.8)*	*(16.1)*	*(13.6)*	*(11.9)*
4D170	68.7	27.4	25.4	32.4	31.2	26.6	25.8	25.1	19.1	14.3	14.0	12.9	11.3
4D175	*(201)*	*(80.1)*	*(74.4)*	*(94.9)*	*(91.2)*	*(77.7)*	*(75.5)*	*(73.6)*	*(55.8)*	*(41.8)*	*(41.0)*	*(37.8)*	*(33.2)*
4D180	104	53.0	51.1	36.6	35.2	36.7	31.6	30.9	26.5	21.5	21.2	18.9	16.7
4D185	*(305)*	*(155)*	*(150)*	*(107)*	*(103)*	*(107)*	*(92.4)*	*(90.5)*	*(77.6)*	*(62.9)*	*(62.1)*	*(55.4)*	*(48.8)*
4E170	—	—	—	—	—	30.7	29.1	28.2	21.4	15.6	15.2	13.8	12.0
4E175	—	—	—	—	—	*(89.7)*	*(85.2)*	*(82.4)*	*(62.6)*	*(45.7)*	*(44.6)*	*(40.4)*	*(35.1)*
4E180	121	48.3	45.4	43.4	41.4	40.8	34.9	33.9	28.8	22.8	22.5	19.8	17.3
4E185	*(353)*	*(141)*	*(133)*	*(127)*	*(121)*	*(119)*	*(102)*	*(99.3)*	*(84.3)*	*(66.9)*	*(65.7)*	*(58.0)*	*(50.7)*
4E190	189	103	100	71.1	69.1	77.2	65.1	64.1	56.8	48.6	48.2	44.3	41.9
4E195	*(553)*	*(301)*	*(293)*	*(208)*	*(202)*	*(226)*	*(191)*	*(188)*	*(166)*	*(142)*	*(141)*	*(130)*	*(123)*
4F180	180	76.9	71.9	69.4	65.9	53.4	44.8	43.1	35.9	26.9	26.2	22.5	19.3
4F185	*(528)*	*(225)*	*(210)*	*(203)*	*(193)*	*(156)*	*(131)*	*(126)*	*(105)*	*(78.6)*	*(76.6)*	*(65.8)*	*(56.5)*
4F190	236	132	127	92.0	88.5	90.5	75.7	74.0	64.4	52.8	52.2	47.1	44.1
4F195	*(692)*	*(388)*	*(373)*	*(269)*	*(259)*	*(265)*	*(221)*	*(216)*	*(188)*	*(155)*	*(153)*	*(138)*	*(129)*

Note: [1] The inertia tables does not include the inertia of the integral motors. Total unit inertia is obtained by adding the reducer inertia to the motor inertia.

Special Load Guidelines **Inertia** continued

Table 4.14 Reducer Moment of Inertia on reducer input shaft: Solid Shaft [Left (L) or Right (R)] Output, Ratios 60 - 305[1]
Units: lb•inch^2 *(x 10^{-4} kg•m^2)*

Model	Nominal Reduction Ratio												
	60	67	74	80	88	102	112	123	151	179	207	249	305
4A100	0.102	0.108	0.105	0.094	0.092	0.064	0.060	0.058	0.053	0.070	0.047	0.067	0.045
4A105	*(0.298)*	*(0.315)*	*(0.307)*	*(0.276)*	*(0.270)*	*(0.188)*	*(0.175)*	*(0.169)*	*(0.155)*	*(0.206)*	*(0.138)*	*(0.196)*	*(0.131)*
4A110	0.260	0.228	0.225	0.217	0.215	0.207	0.197	0.196	0.191	0.185	0.183	0.181	0.179
4A115	*(0.761)*	*(0.666)*	*(0.658)*	*(0.635)*	*(0.629)*	*(0.605)*	*(0.578)*	*(0.575)*	*(0.559)*	*(0.541)*	*(0.536)*	*(0.529)*	*(0.525)*
4A120	0.441	0.496	0.493	0.456	0.454	0.320	0.303	0.302	0.286	0.396	0.272	0.384	0.261
4A125	*(1.29)*	*(1.45)*	*(1.44)*	*(1.33)*	*(1.33)*	*(0.936)*	*(0.887)*	*(0.884)*	*(0.838)*	*(1.159)*	*(0.795)*	*(1.125)*	*(0.763)*
4A140	1.03	0.877	0.874	0.814	0.812	0.745	0.720	0.719	0.673	0.655	0.654	0.637	0.633
4A145	*(3.01)*	*(2.57)*	*(2.56)*	*(2.38)*	*(2.38)*	*(2.18)*	*(2.11)*	*(2.10)*	*(1.97)*	*(1.92)*	*(1.91)*	*(1.86)*	*(1.85)*
4B120	0.486	0.529	0.522	0.479	0.474	0.335	0.317	0.313	0.293	0.401	0.275	0.387	0.262
4B125	*(1.42)*	*(1.55)*	*(1.53)*	*(1.40)*	*(1.39)*	*(0.98)*	*(0.93)*	*(0.91)*	*(0.86)*	*(1.17)*	*(0.81)*	*(1.13)*	*(0.768)*
4B140	1.08	0.912	0.905	0.839	0.834	0.761	0.733	0.730	0.680	0.660	0.658	0.639	0.635
4B145	*(3.15)*	*(2.67)*	*(2.65)*	*(2.46)*	*(2.44)*	*(2.23)*	*(2.14)*	*(2.14)*	*(1.99)*	*(1.93)*	*(1.93)*	*(1.87)*	*(1.86)*
4B160	2.92	2.66	2.66	2.48	2.47	2.19	2.10	2.10	2.01	1.97	1.98	1.89	1.86
4B165	*(8.54)*	*(7.79)*	*(7.77)*	*(7.25)*	*(7.24)*	*(6.41)*	*(6.15)*	*(6.14)*	*(5.88)*	*(5.77)*	*(5.80)*	*(5.54)*	*(5.46)*
4C140	1.21	1.02	0.996	0.914	0.898	0.809	0.776	0.763	0.702	0.675	0.670	0.647	0.640
4C145	*(3.55)*	*(2.98)*	*(2.91)*	*(2.68)*	*(2.63)*	*(2.37)*	*(2.27)*	*(2.23)*	*(2.05)*	*(1.98)*	*(1.96)*	*(1.89)*	*(1.87)*
4C160	3.05	2.77	2.74	2.55	2.53	2.24	2.14	2.13	2.03	1.99	1.99	1.90	1.87
4C165	*(8.92)*	*(8.09)*	*(8.03)*	*(7.46)*	*(7.41)*	*(6.55)*	*(6.26)*	*(6.24)*	*(5.94)*	*(5.81)*	*(5.83)*	*(5.56)*	*(5.47)*
4C170	10.4	9.70	9.68	9.32	9.30	8.77	8.69	8.68	8.40	8.29	8.18	8.14	8.10
4C175	*(30.5)*	*(28.4)*	*(28.3)*	*(27.3)*	*(27.2)*	*(25.7)*	*(25.4)*	*(25.4)*	*(24.6)*	*(24.3)*	*(23.9)*	*(23.8)*	*(23.7)*
4D160	3.38	3.03	2.96	2.74	2.69	2.35	2.24	2.21	2.08	2.02	2.02	1.92	1.88
4D165	*(9.88)*	*(8.87)*	*(8.65)*	*(8.01)*	*(7.86)*	*(6.88)*	*(6.56)*	*(6.46)*	*(6.09)*	*(5.92)*	*(5.91)*	*(5.62)*	*(5.51)*
4D170	10.7	9.97	9.89	9.51	9.46	8.88	8.79	8.76	8.45	8.32	8.21	8.16	8.12
4D175	*(31.5)*	*(29.2)*	*(29.0)*	*(27.8)*	*(27.7)*	*(26.0)*	*(25.7)*	*(25.6)*	*(24.7)*	*(24.4)*	*(24.0)*	*(23.9)*	*(23.8)*
4D180	15.7	14.9	14.8	13.7	13.7	13.0	12.8	12.8	12.4	12.0	11.9	11.8	11.7
4D185	*(46.0)*	*(43.5)*	*(43.3)*	*(40.2)*	*(40.0)*	*(38.0)*	*(37.4)*	*(37.4)*	*(36.2)*	*(35.2)*	*(34.9)*	*(34.6)*	*(34.4)*
4E170	11.3	10.3	10.2	9.77	9.69	9.06	8.94	8.88	8.53	8.38	8.25	8.19	8.14
4E175	*(33.0)*	*(30.3)*	*(29.9)*	*(28.6)*	*(28.4)*	*(26.5)*	*(26.2)*	*(26.0)*	*(25.0)*	*(24.5)*	*(24.1)*	*(24.0)*	*(23.8)*
4E180	16.2	15.2	15.1	14.0	13.9	13.2	12.9	12.9	12.5	12.1	12.0	11.8	11.8
4E185	*(47.5)*	*(44.6)*	*(44.3)*	*(40.9)*	*(40.7)*	*(38.5)*	*(37.8)*	*(37.7)*	*(36.5)*	*(35.3)*	*(35.1)*	*(34.7)*	*(34.4)*
4E190	40.0	37.1	37.0	35.9	35.9	34.8	33.8	33.8	33.2	32.8	32.5	32.3	32.1
4E195	*(117)*	*(109)*	*(108)*	*(105)*	*(105)*	*(102)*	*(98.9)*	*(98.8)*	*(97.1)*	*(96.0)*	*(95.2)*	*(94.6)*	*(94.1)*
4F180	17.8	16.3	16.2	14.8	14.6	13.7	13.3	13.3	12.7	12.2	12.1	11.9	11.8
4F185	*(52.1)*	*(47.8)*	*(47.3)*	*(43.2)*	*(42.8)*	*(40.1)*	*(39.0)*	*(38.8)*	*(37.2)*	*(35.8)*	*(35.4)*	*(34.9)*	*(34.6)*
4F190	41.7	38.3	38.1	36.8	36.6	35.3	34.2	34.2	33.4	33.0	32.7	32.4	32.2
4F195	*(122)*	*(112)*	*(112)*	*(108)*	*(107)*	*(103)*	*(100)*	*(99.9)*	*(97.9)*	*(96.6)*	*(95.6)*	*(94.9)*	*(94.3)*

Note: [1] The inertia tables does not include the inertia of the integral motors. Total unit inertia is obtained by adding the reducer inertia to the motor inertia.

Special Load Guidelines **Inertia** continued

Table 4.15 Reducer Moment of Inertia on reducer input shaft: Dual Extended Solid Shaft (T) Output, Ratios 11 - 53[1]
Units: lb•inch^2 *(x 10^{-4} kg•m^2)*

Model	Nominal Reduction Ratio												
	11	13	14	16	18	21	22	25	28	35	39	46	53
4A100 4A105	1.65 *(4.83)*	1.03 *(3.01)*	0.947 *(2.77)*	0.645 *(1.89)*	0.586 *(1.72)*	0.482 *(1.41)*	— —	— —	0.313 *(0.917)*	0.193 *(0.565)*	0.182 *(0.532)*	0.166 *(0.487)*	0.145 *(0.423)*
4A100 4A115	— —	— —	— —	— —	— —	0.730 *(2.14)*	— —	— —	0.502 *(1.47)*	0.365 *(1.07)*	0.354 *(1.03)*	0.309 *(0.903)*	0.281 *(0.822)*
4A120 4A125	3.47 *(10.2)*	2.41 *(7.05)*	2.32 *(6.80)*	1.74 *(5.09)*	1.68 *(4.93)*	1.30 *(3.80)*	1.46 *(4.27)*	1.43 *(4.18)*	0.997 *(2.92)*	0.616 *(1.80)*	0.604 *(1.77)*	0.635 *(1.86)*	0.592 *(1.73)*
4A140 4A145	7.29 *(21.3)*	5.35 *(15.7)*	5.27 *(15.4)*	3.80 *(11.1)*	3.75 *(11.0)*	3.39 *(9.93)*	3.48 *(10.2)*	3.46 *(10.1)*	2.28 *(6.68)*	1.62 *(4.73)*	1.61 *(4.70)*	1.29 *(3.79)*	1.17 *(3.41)*
4B120 4B125	5.46 *(16.0)*	3.39 *(9.92)*	3.17 *(9.29)*	2.40 *(7.01)*	2.25 *(6.59)*	1.68 *(4.91)*	1.78 *(5.20)*	1.71 *(5.00)*	1.21 *(3.54)*	0.745 *(2.18)*	0.717 *(2.10)*	0.716 *(2.09)*	0.652 *(1.91)*
4B120 4B125	9.90 *(29.0)*	6.36 *(18.6)*	6.15 *(18.0)*	4.47 *(13.1)*	4.33 *(12.7)*	3.80 *(11.1)*	3.84 *(11.2)*	3.76 *(11.0)*	2.51 *(7.36)*	1.76 *(5.14)*	1.73 *(5.06)*	1.38 *(4.04)*	1.23 *(3.60)*
4B140 4B145	23.9 *(70.0)*	18.0 *(52.5)*	17.7 *(51.9)*	12.2 *(35.8)*	12.1 *(35.4)*	9.0 *(26.3)*	10.1 *(29.6)*	10.1 *(29.4)*	6.20 *(18.1)*	4.43 *(13.0)*	4.40 *(12.9)*	3.88 *(11.3)*	3.47 *(10.2)*
4B160 4B165	14.2 *(41.5)*	9.34 *(27.3)*	8.68 *(25.4)*	6.42 *(18.8)*	5.98 *(17.5)*	4.96 *(14.5)*	4.84 *(14.2)*	4.62 *(13.5)*	3.17 *(9.27)*	2.16 *(6.33)*	2.07 *(6.07)*	1.63 *(4.77)*	1.42 *(4.15)*
4C160 4C165	32.4 *(94.8)*	21.1 *(61.8)*	20.4 *(59.8)*	14.2 *(41.5)*	13.8 *(40.3)*	10.1 *(29.5)*	11.1 *(32.5)*	10.9 *(31.8)*	6.82 *(20.0)*	4.82 *(14.1)*	4.73 *(13.8)*	4.11 *(12.0)*	3.65 *(10.7)*
4C170 4C175	47.8 *(140)*	35.3 *(103)*	34.7 *(102)*	26.6 *(77.8)*	26.2 *(76.5)*	24.0 *(70.2)*	23.5 *(68.7)*	23.2 *(68.0)*	17.6 *(51.6)*	13.3 *(39.0)*	13.2 *(38.7)*	12.4 *(36.2)*	10.9 *(32.0)*
4D160 4D165	— —	— —	— —	— —	— —	12.8 *(37.6)*	13.6 *(39.7)*	12.9 *(37.7)*	8.36 *(24.5)*	5.83 *(17.0)*	5.55 *(16.2)*	4.70 *(13.7)*	4.09 *(12.0)*
4D170 4D175	69.5 *(203)*	44.8 *(131)*	42.8 *(125)*	32.8 *(95.9)*	31.4 *(92.0)*	26.8 *(78.3)*	25.8 *(75.6)*	25.3 *(74.0)*	19.2 *(56.2)*	14.3 *(42.0)*	14.1 *(41.2)*	13.0 *(37.9)*	11.4 *(33.3)*
4D180 4D185	82.7 *(242)*	53.5 *(157)*	51.5 *(151)*	36.9 *(108)*	35.5 *(104)*	36.9 *(108)*	31.7 *(92.9)*	31.1 *(90.9)*	26.6 *(77.9)*	21.6 *(63.1)*	21.3 *(62.3)*	19.0 *(55.5)*	16.7 *(48.8)*
4E170 4E175	— —	— —	— —	— —	— —	31.0 *(90.9)*	29.5 *(86.2)*	28.4 *(83.2)*	21.6 *(63.2)*	15.8 *(46.1)*	15.3 *(44.9)*	13.9 *(40.6)*	12.1 *(35.3)*
4E180 4E185	122 *(358)*	63.8 *(187)*	60.7 *(178)*	44.1 *(129)*	42.0 *(123)*	41.2 *(121)*	35.3 *(103)*	34.2 *(100)*	29.0 *(85.0)*	23.0 *(67.3)*	22.6 *(66.0)*	19.9 *(58.2)*	17.4 *(50.9)*
4E190 4E195	153 *(446)*	104 *(304)*	101 *(295)*	71.8 *(210)*	69.7 *(204)*	77.5 *(227)*	65.4 *(192)*	64.4 *(188)*	57.0 *(167)*	48.7 *(143)*	48.3 *1(41)*	44.4 *(130)*	42.0 *(123)*
4F180 4F185	182 *(534)*	100 *(293)*	95.1 *(278)*	70.3 *(206)*	66.6 *(195)*	53.9 *(158)*	46.1 *(135)*	43.5 *(127)*	36.2 *(106)*	27.0 *(79.1)*	26.3 *(77.1)*	22.6 *(66.1)*	19.4 *(56.8)*
4F190 4F195	200 *(587)*	134 *(391)*	129 *(376)*	92.9 *(272)*	89.2 *(261)*	91.0 *(266)*	76.1 *(223)*	74.3 *(218)*	64.6 *(189)*	53.0 *(155)*	52.3 *(153)*	47.2 *(138)*	44.1 *(129)*

Note: [1] The inertia tables does not include the inertia of the integral motors. Total unit inertia is obtained by adding the reducer inertia to the motor inertia.

Special Load Guidelines **Inertia** continued

Table 4.16 Reducer Moment of Inertia on reducer input shaft: Dual Extended Solid Shaft (T) Output, Ratios 60 - 305[1]
Units: lb•inch^2 *(x 10^{-4} kg•m^2)*

Model	Nominal Reduction Ratio												
	60	67	74	80	88	102	112	123	151	179	207	249	305
4A100	0.104	0.109	0.106	0.095	0.093	0.065	0.059	0.058	0.053	0.071	0.047	0.067	0.045
4A105	*(0.304)*	*(0.320)*	*(0.311)*	*(0.279)*	*(0.273)*	*(0.191)*	*(0.174)*	*(0.171)*	*(0.156)*	*(0.207)*	*(0.139)*	*(0.197)*	*(0.131)*
4A110	0.262	0.229	0.226	0.218	0.216	0.208	0.198	0.197	0.191	0.185	0.183	0.181	0.180
4A115	*(0.767)*	*(0.671)*	*(0.662)*	*(0.638)*	*(0.632)*	*(0.607)*	*(0.579)*	*(0.576)*	*(0.560)*	*(0.541)*	*(0.537)*	*(0.530)*	*(0.526)*
4A120	0.443	0.498	0.495	0.457	0.455	0.321	0.304	0.303	0.287	0.396	0.272	0.384	0.261
4A125	*(1.30)*	*(1.46)*	*(1.45)*	*(1.34)*	*(1.33)*	*(0.938)*	*(0.889)*	*(0.886)*	*(0.839)*	*(1.16)*	*(0.795)*	*(1.13)*	*(0.763)*
4A140	1.03	0.878	0.875	0.815	0.813	0.745	0.720	0.719	0.673	0.655	0.654	0.637	0.633
4A145	*(3.01)*	*(2.57)*	*(2.56)*	*(2.39)*	*(2.38)*	*(2.18)*	*(2.11)*	*(2.10)*	*(1.97)*	*(1.92)*	*(1.92)*	*(1.86)*	*(1.85)*
4B120	0.490	0.533	0.525	0.482	0.476	0.337	0.317	0.314	0.294	0.401	0.276	0.387	0.263
4B125	*(1.44)*	*(1.56)*	*(1.54)*	*(1.41)*	*(1.39)*	*(0.985)*	*(0.926)*	*(0.918)*	*(0.860)*	*(1.18)*	*(0.807)*	*(1.13)*	*(0.769)*
4B140	1.08	0.916	0.909	0.842	0.836	0.763	0.734	0.731	0.681	0.661	0.659	0.640	0.635
4B145	*(3.16)*	*(2.68)*	*(2.66)*	*(2.46)*	*(2.45)*	*(2.23)*	*(2.15)*	*(2.14)*	*(1.99)*	*(1.93)*	*(1.93)*	*(1.87)*	*(1.86)*
4B160	2.92	2.67	2.66	2.48	2.48	2.19	2.10	2.10	2.01	1.97	1.98	1.89	1.86
4B165	*(8.55)*	*(7.81)*	*(7.78)*	*(7.26)*	*(7.24)*	*(6.42)*	*(6.16)*	*(6.15)*	*(5.88)*	*(5.77)*	*(5.80)*	*(5.54)*	*(5.46)*
4C140	1.23	1.03	1.00	0.921	0.903	0.813	0.774	0.765	0.704	0.677	0.671	0.648	0.640
4C145	*(3.59)*	*(3.01)*	*(2.94)*	*(2.69)*	*(2.64)*	*(2.38)*	*(2.27)*	*(2.24)*	*(2.06)*	*(1.98)*	*(1.96)*	*(1.90)*	*(1.87)*
4C160	3.06	2.77	2.75	2.56	2.54	2.24	2.14	2.13	2.03	1.99	1.99	1.90	1.87
4C165	*(8.96)*	*(8.12)*	*(8.05)*	*(7.48)*	*(7.43)*	*(6.56)*	*(6.27)*	*(6.24)*	*(5.94)*	*(5.82)*	*(5.83)*	*(5.56)*	*(5.47)*
4C170	10.4	9.71	9.68	9.33	9.31	8.77	8.70	8.69	8.40	8.29	8.18	8.14	8.11
4C175	*(30.5)*	*(28.4)*	*(28.3)*	*(27.3)*	*(27.2)*	*(25.7)*	*(25.4)*	*(25.4)*	*(24.6)*	*(24.3)*	*(23.9)*	*(23.8)*	*(23.7)*
4D160	3.40	3.05	2.97	2.75	2.70	2.36	2.24	2.21	2.08	2.03	2.02	1.92	1.88
4D165	*(9.95)*	*(8.93)*	*(8.70)*	*(8.05)*	*(7.89)*	*(6.90)*	*(6.56)*	*(6.48)*	*(6.10)*	*(5.93)*	*(5.91)*	*(5.62)*	*(5.51)*
4D170	10.8	9.99	9.91	9.52	9.47	8.89	8.80	8.77	8.45	8.33	8.21	8.16	8.12
4D175	*(31.5)*	*(29.2)*	*(29.0)*	*(27.9)*	*(27.7)*	*(26.0)*	*(25.7)*	*(25.7)*	*(24.7)*	*(24.4)*	*(24.0)*	*(23.9)*	*(23.8)*
4D180	15.7	14.9	14.8	13.7	13.7	13.0	12.8	12.8	12.4	12.0	11.9	11.8	11.7
4D185	*(46.1)*	*(43.6)*	*(43.3)*	*(40.2)*	*(40.0)*	*(38.0)*	*(37.5)*	*(37.4)*	*(36.2)*	*(35.2)*	*(34.9)*	*(34.6)*	*(34.4)*
4E170	11.3	10.4	10.3	9.80	9.72	9.08	8.94	8.89	8.54	8.39	8.25	8.19	8.14
4E175	*(33.1)*	*(30.4)*	*(30.0)*	*(28.7)*	*(28.4)*	*(26.6)*	*(26.2)*	*(26.0)*	*(25.0)*	*(24.5)*	*(24.2)*	*(24.0)*	*(23.8)*
4E180	16.3	15.3	15.2	14.0	13.9	13.2	12.9	12.9	12.5	12.1	12.0	11.9	11.8
4E185	*(47.7)*	*(44.7)*	*(44.4)*	*(41.0)*	*(40.8)*	*(38.6)*	*(37.9)*	*(37.7)*	*(36.5)*	*(35.4)*	*(35.1)*	*(34.7)*	*(34.4)*
4E190	40.1	37.2	37.1	36.0	35.9	34.8	33.8	33.8	33.2	32.8	32.5	32.3	32.1
4E195	*(117)*	*(109)*	*(108)*	*(105)*	*(105)*	*(102)*	*(98.9)*	*(98.8)*	*(97.1)*	*(96.0)*	*(95.2)*	*(94.6)*	*(94.1)*
4F180	17.9	16.4	16.2	14.8	14.7	13.7	13.3	13.3	12.7	12.3	12.1	11.9	11.8
4F185	*(52.3)*	*(48.0)*	*(47.4)*	*(43.3)*	*(42.9)*	*(40.2)*	*(39.0)*	*(38.8)*	*(37.2)*	*(35.9)*	*(35.4)*	*(34.9)*	*(34.6)*
4F190	41.7	38.4	38.2	36.8	36.7	35.4	34.2	34.2	33.5	33.0	32.7	32.4	32.2
4F195	*(122)*	*(112)*	*(112)*	*(108)*	*(107)*	*(103)*	*(100)*	*(100.0)*	*(97.9)*	*(96.6)*	*(95.6)*	*(94.9)*	*(94.3)*

Note: [1] The inertia tables does not include the inertia of the integral motors. Total unit inertia is obtained by adding the reducer inertia to the motor inertia.

Special Load Guidelines Misc continued

Table 4.17 Moment of Inertia on Motor Shaft of N-Frame Integral Motor

1 HP *(0.75 kW)* x 4 Pole		1.5 HP *(1.1 kW)* x 4 Pole		2 HP *(1.5 kW)* x 4 Pole		3 HP *(2.2 kW)* x 4 Pole		5 HP *(3.7 kW)* x 4 Pole	
Standard	**w/ Brake**	**Standard**	**w/Brake**	**Standard**	**w/Brake**	**Standard**	**w/Brake**	**Standard**	**w/Brake**
8.03	8.82	11.5	13.5	13.4	15.4	30.1	33.4	66.3	71.4
(23.5)	(25.8)	(33.7)	(39.6)	(39.1)	(45)	(88)	(97.8)	(194)	(209)

7.5 HP *(5.5 kW)* x 4 Pole		10 HP *(7.5 kW)* x 4 Pole		15 HP *(11 kW)* x 4 Pole		20 HP *(15 kW)* x 4 Pole		25 HP *(18.5 kW)* x 4 Pole	
Standard	**w/ Brake**	**Standard**	**w/ Brake**	**Standard**	**w/ Brake**	**Standard**	**w/ Brake**	**Standard**	**w/ Brake**
99.4	105	140	154	192	206	340	393	875	926
(291)	(306)	(409)	(450)	(561)	(602)	(995)	(1150)	(2560)	(2710)

30 HP *(22 kW)* x 4 Pole		40 HP *(30 kW)* x 4 Pole		50 HP *(37 kW)* x 4 Pole		60 HP *(45 kW)* x 4 Pole		75 HP *(55 kW)* x 4 Pole	
Standard	**w/ Brake**	**Standard**	**w/ Brake**	**Standard**	**w/ Brake**	**Standard**	**w/ Brake**	**Standard**	**w/ Brake**
875	926	1110	1170	1330	1380	2500	2550	2950	-
(2560)	(2710)	(3260)	(3420)	(3900)	(4040)	(7310)	(7450)	(8640)	-

Excessive Overloads

Cyclo® BBB4 Speed Reducers provide 200% momentary intermittent shock load capacity and are warranted for two years from date of shipment. Refer to our standard terms and conditions for our complete warranty.

Selection for Applications Involving Shock Loading

For applications involving frequent start-stop, braking or reversing, or quick starting of load having large inertia, consult factory for model selection or recommended modifications.

Allowable Radial and Thrust Loads

The loads imposed on the reducer shafts vary with the method of connecting the shaft to the driven machine. Frequently, in addition to torsional forces, radial and thrust loads are applied to the slow speed shaft at the same time. For example, coupling connections normally involve torsional forces only. However, when power is transmitted through spur gears, belts, pulleys or chains, both torsional and radial forces may be applied to the reducer shafts. When driving through helical or bevel gears, all three conditions (torsional, radial and thrust load) may be referred to the reducer shaft.

The reducer shafts and bearings must have sufficient strength to withstand these loads, and it is, therefore, necessary to determine the allowable limits for each condition. Please consult factory for further information.

Load Centering

The radial load capacities are calculated with the load concentrated at the midpoint of the slow speed shaft extension. Radial load capacities decrease if the center of the load is moved farther from the reducer and the values obtained from the charts must be adjusted accordingly..

Lubrication

Oil lubricated models are not filled with oil prior to shipping.

Before operating, fill the unit with the appropriate amount of the correct lubricant for the mounting position (see Table 4.22 and Table 4.23).
When operating in winter or other relatively low ambient temperatures, use the lower viscosity oil specified for each ambient temperature range.
Please consult the factory if the unit will be operated consistently in ambient temperatures other than 14°F to 104°F (-10° to 40°C).

Grease lubricated models are lubricated with grease prior to shipment from the factory.

NOTE: For units supplied in the Y4 mounting position (input shaft vertical down), the Cyclo® portion is filled at the factory with grease. For these units, the Cyclo® portion does not need to be filled with lubricant before start-up. The Bevel Gear portion of models built for the Y4 mounting configuration still requires filling with gear oil before start-up. Refer to the unit Operating and Maintenance manual for further details.

Adding grease prior to initial start-up is not required. If grease must be replenished or changed avoid using greases other than those shown in the Table 4.20. Please consult the factory when the units will be used in widely fluctuating temperatures, ambient temperatures other than those specified in Table 4.20, or when other special conditions exist for the application. When motors from another manufacturer will be used, please consult and adhere to the associated motor maintenance manual for the appropriate lubrication instructions.

Oil lubricated units are shipped without oil. Prior to initial start-up, the unit must be filled with the correct amount of oil (see Table 4.22 and Table 4.23).

Grease lubricated models are lubricated at the factory. Additional grease does not need to be added prior to initial start-up.

Table 4.18 Lubrication Type

Unit Size	Output (Bevel Gear Portion)	Input (Cyclo® Portion)		
		Motor Horizontal	Motor Vertical Up	Motor Vertical Down
All	Oil	Oil	Oil	Grease

Reccommended Oils:

Gulf Oil:	EP Lubricant HD	**Shell Oil:**	Omala S2 G	**Kluber:**	Kluberoil GEM1
ExxonMobil Oil:	Spartan EP	**Caltex:**	Meropa	**Idemitsu Oil:**	Daphane Mechanic
Mobil Oil:	Mobilgear 600XP	**Castrol:**	Alpha SP	**BP Oil:**	Energol GR-XP

Table 4.19 Ambient Temperatures

°F	14	32	50	68	86	104	122
°C	-10	0	10	20	30	40	50
ISO VG	68* (14° F to 41° F)						
		100 / 150 (32° F to 95° F)					
					220 / 320 / 460 (86° F to 122° F)		

Food Grade Oil: Klüber: Klübersynth UH1 6-460

Table 4.20 Standard Greases

Ambient Temperature °F *(°C)*	Reduction Ratio	Input (Cyclo® Portion)
14° to 122°F *(-10° to 50°C)*	11 through 18:1	N/A**
	19:1 and higher	Exxon Unirex N2

Table 4.21 Food Grade Grease

Ambient Temperature °F *(°C)*	Reduction Ratio	Input (Cyclo® Portion)
14° to 122°F *(-10° to 50°C)*	11 through 18:1	N/A
	19:1 and higher	Ultrachem Omnilube FGM2

Oil Replenishment and Change Interval

A. Maintain proper oil levels at all times.

B. An oil change after the first 500 hours of operation is highly recommended.

C. Sumitomo recommends an oil change every 2500 hours, or six months, whichever comes first. If a proper preventive maintenance program is implemented and maintained, a longer change period may be acceptable.

D. If the unit is running in a high ambient, high humidity, or corrosive environment, the lubricant will have to be changed more frequently. Consult the factory for recommendations.

Grease Replenishment and Change Interval

For units ordered for mounting in the Y4 configuration (motor vertical down), please consult the Operating and Maintenance manual for proper grease replentishment and change interval for the Cyclo® portion.

*VG68 is not available for ExxonMobil Spartan.
**Shell Gadus S2 V220 NLGI 0 can be used for 4A100 and 4A105 sizes only

Lubrication continued

Oil Quantities

Table 4.22 BBB with Single Reduction Cyclo - Approximate Oil Quantity

Units: US liquid gallon *(liter)* **Note: Output =** Bevel Gear Portion **Input =** Cyclo® Portion

Be sure to check the oil level with the oil gauge. Oil quantities are reference values.

Bevel Gear Unit Size	Mounting Configuration						
	Y1	Y3	Y2	Y4		Y5	Y6
4A10	0.43 *(1.62)*		0.85 *(3.17)*	0.30 *(1.13)*	Grease	0.37 *(1.36)*	0.48 *(1.84)*
4A11	0.44 *(1.66)*		0.87 *(3.26)*			0.37 *(1.40)*	0.50 *(1.88)*
4A12	0.45 *(1.71)*		0.90 *(3.35)*			0.40 *(1.45)*	0.50 *(1.93)*
4A14	0.50 *(1.91)*		1.00 *(3.77)*			0.45 *(1.65)*	0.55 *(2.13)*
4B12	0.87 *(3.29)*		1.72 *(6.50)*	0.45 *(1.72)*	Grease	0.87 *(3.34)*	0.85 *(3.23)*
4B14	0.92 *(3.49)*		1.85 *(6.97)*			0.92 *(3.54)*	0.90 *(3.43)*
4B16	1.04 *(3.92)*		2.01 *(7.61)*			1.06 *(3.97)*	1.03 *(3.86)*
4C14	1.46 *(5.52)*		2.93 *(11.1)*	0.72 *(2.72)*	Grease	1.40 *(5.30)*	1.56 *(5.88)*
4C16	1.57 *(5.96)*		3.12 *(11.8)*			1.51 *(5.74)*	1.66 *(6.32)*
4C17	1.68 *(6.34)*		3.30 *(12.5)*			1.61 *(6.12)*	1.77 *(6.70)*
4D16	2.67 *(10.1)*		5.26 *(19.9)*	1.22 *(4.61)*	Grease	2.56 *(9.69)*	2.75 *(10.4)*
4D17	2.75 *(10.4)*		5.42 *(20.5)*			2.64 *(10.0)*	2.85 *(10.8)*
4D18	2.83 *(10.7)*		5.55 *(21.0)*			2.72 *(10.3)*	2.93 *(11.1)*
4E17	3.86 *(14.6)*		7.61 *(28.8)*	1.66 *(6.26)*	Grease	3.46 *(13.1)*	4.25 *(16.1)*
4E18	3.88 *(14.7)*		7.69 *(29.1)*			3.49 *(13.2)*	4.28 *(16.2)*
4E19	4.15 *(15.7)*		8.03 *(30.4)*			3.75 *(14.2)*	4.54 *(17.2)*
4F18	5.28 *(20.0)*		10.4 *(39.4)*	1.93 *(7.28)*	Grease	4.89 *(18.5)*	5.65 *(21.4)*
4F19	5.50 *(20.8)*		10.7 *(40.6)*			5.10 *(19.3)*	5.87 *(22.2)*

Table 4.23 BBB with Double Reduction Cyclo - Approximate Oil Quantity

Units: US liquid gallon *(liter)* **Note: Output =** Bevel Gear Portion **Input =** Cyclo® Portion

Bevel Gear Unit Size	Mounting Configuration						
	Y1	Y3	Y2	Y4		Y5	Y6
4A10DA	0.45 *(1.65)*		0.85 *(3.20)*	0.29 *(1.13)*	Grease	0.37 *(1.39)*	0.50 *(1.87)*
4A12DA	0.45 *(1.74)*		0.90 *(3.38)*			0.40 *(1.48)*	0.53 *(1.96)*
4A12DB	0.48 *(1.78)*		0.90 *(3.43)*			0.40 *(1.52)*	0.53 *(2.00)*
4B12DA	0.87 *(3.32)*		1.72 *(6.53)*	0.45 *(1.72)*	Grease	0.90 *(3.37)*	0.87 *(3.26)*
4B12DB	0.90 *(3.36)*		1.74 *(6.57)*			0.90 *(3.41)*	0.87 *(3.30)*
4B14DA	0.92 *(3.52)*		1.85 *(7.00)*			0.95 *(3.57)*	0.92 *(3.46)*
4B14DB	0.95 *(3.56)*		1.85 *(7.04)*			0.95 *(3.61)*	0.92 *(3.50)*
4B14DC	0.95 *(3.61)*		1.89 *(7.17)*			0.97 *(3.66)*	0.94 *(3.55)*
4C14DA	1.48 *(5.55)*		2.96 *(11.2)*	0.71 *(2.72)*	Grease	1.40 *(5.33)*	1.56 *(5.91)*
4C14DB	1.48 *(5.59)*		2.96 *(11.2)*			1.43 *(5.37)*	1.56 *(5.95)*
4C14DC	1.48 *(5.64)*		2.99 *(11.3)*			1.43 *(5.42)*	1.59 *(6.00)*
4C16DA	1.59 *(6.03)*		3.12 *(11.8)*			1.53 *(5.81)*	1.69 *(5.39)*
4C16DB	1.61 *(6.08)*		3.14 *(11.9)*			1.56 *(5.86)*	1.69 *(6.44)*
4C17DA	1.69 *(6.41)*		3.33 *(12.6)*			1.64 *(6.19)*	1.79 *(6.77)*
4C17DB	1.70 *(6.44)*		3.33 *(12.60)*			1.67 *(6.32)*	1.80 *(6.80)*
4C17DC	1.75 *(6.64)*		3.35 *(12.70)*			1.70 *(6.42)*	1.82 *(6.90)*
4D16DA	2.67 *(10.1)*		5.28 *(20.0)*			1.64 *(6.19)*	1.80 *(6.77)*

Table 4.23 (cont.) BBB with Double Reduction Cyclo - Approximate Oil Quantity
Units: US liquid gallon *(liter)* **Note: Output =** Bevel Gear Portion **Input =** Cyclo® Portion

Bevel Gear Unit Size	Mounting Configuration						
	Y1	Y3	Y2	Y4		Y5	Y6
4D16DB	2.67 *(10.1)*		5.28 *(20.0)*	1.22 *(4.61)*	Grease	2.59 *(9.76)*	2.77 *(10.5)*
4D17DA	2.69 *(10.2)*		5.28 *(20.0)*			2.59 *(9.81)*	2.80 *(10.6)*
4D17DB	2.77 *(10.5)*		5.44 *(20.6)*			2.69 *(10.2)*	2.88 *(10.9)*
4D17DC	2.83 *(10.7)*		5.47 *(20.7)*			2.72 *(10.3)*	2.91 *(11.0)*
4D18DA	2.85 *(10.8)*		5.57 *(21.1)*	1.65 *(6.26)*	Grease	2.77 *(10.5)*	2.96 *(11.2)*
4D18DB	3.09 *(11.7)*		5.65 *(21.4)*			3.01 *(11.4)*	3.20 *(12.1)*
4E17DA	3.86 *(14.6)*		7.61 *(28.8)*			3.46 *(13.1)*	4.25 *(16.1)*
4E17DB	3.88 *(14.7)*		7.63 *(28.9)*			3.49 *(13.2)*	4.28 *(16.2)*
4E17DC	3.91 *(14.8)*		7.66 *(29.0)*			3.51 *(13.3)*	4.31 *(16.3)*
4E18DA	3.91 *(14.8)*		7.74 *(29.3)*			3.51 *(13.3)*	4.31 *(16.3)*
4E18DB	4.15 *(15.7)*		7.82 *(29.6)*			3.75 *(14.2)*	4.54 *(17.2)*
4E19DA	4.62 *(17.5)*		8.19 *(31.0)*			4.23 *(16.0)*	5.02 *(19.0)*
4E19DB	4.68 *(17.7)*		8.19 *(31.0)*			4.28 *(16.2)*	5.07 *(19.2)*
4F18DA	5.31 *(20.1)*		10.46 *(39.6)*	1.92 *(7.28)*	Grease	4.91 *(18.6)*	5.68 *(21.5)*
4F18DB	5.55 *(21.0)*		10.54 *(39.9)*			5.15 *(19.5)*	5.92 *(22.4)*
4F19DA	5.97 *(22.6)*		10.88 *(41.2)*			5.57 *(21.1)*	6.34 *(24.0)*
4F19DB	6.02 *(22.8)*		10.88 *(41.2)*			5.63 *(21.3)*	6.39 *(24.2)*

Additional Mounting Configurations

Figure 5.34 Keyed Hollow Output Bore - Output Flange Left

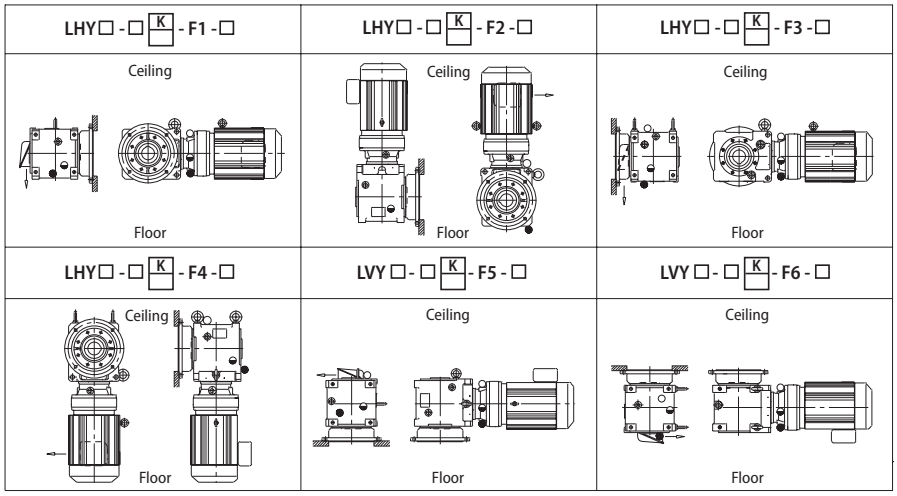


Figure 5.35 Keyed Hollow Output Bore - Output Flange Right

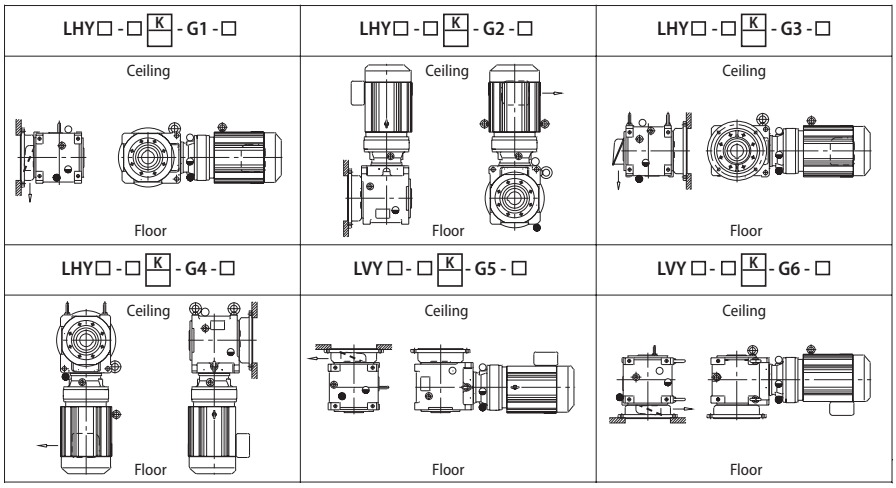
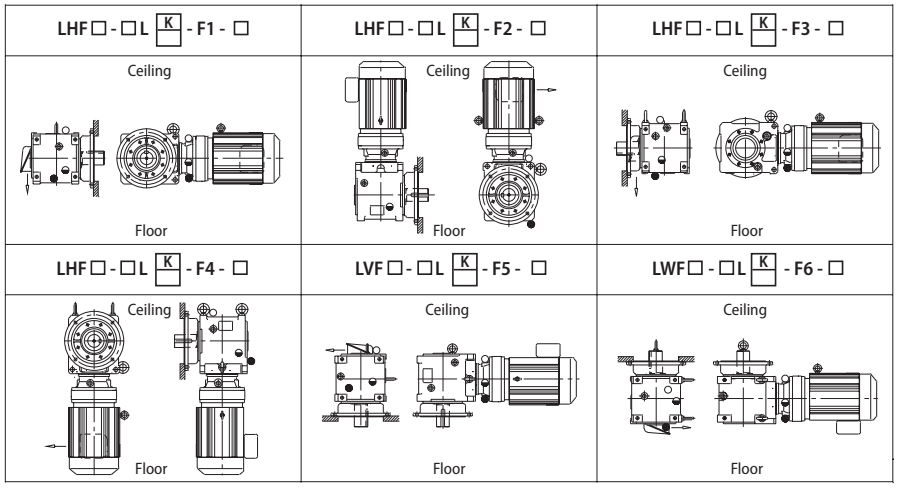


Figure 5.36 Solid Output Shaft (L) - Output Flange Left



Notes: **[1]** K = inch diameter shaft or keyed hollow bore; blank = metric diameter shaft or keyed hollow bore.
[2] ◅— = direction of lead wires out of terminal box.

Additional Mounting Configurations continued

Figure 5.37 Solid Output Shaft Right (R) - Output Flange Right

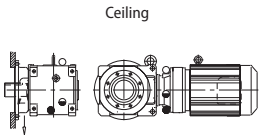
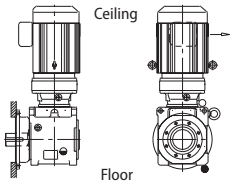
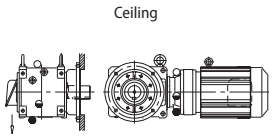
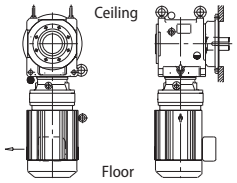
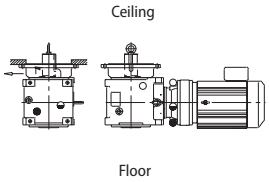
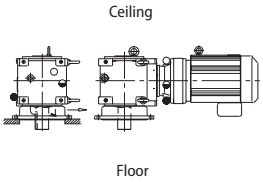
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LHF□ - □R [K] - G4 - □	**LWF□ - □R [K] - G5 - □**	**LVF□ - □R [K] - G6 - □**
		

Figure 5.38 Double Extended Solid Output Shaft (T) - Output Flange Left

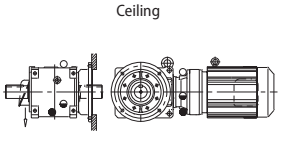
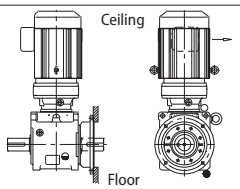
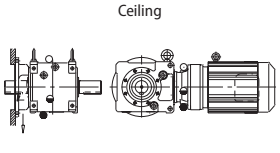
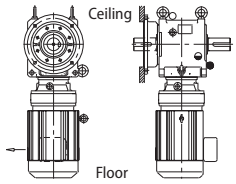
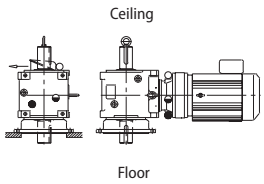
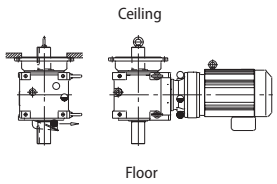
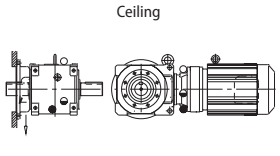
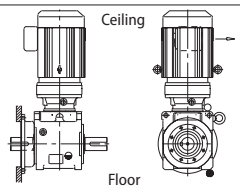
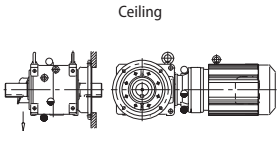
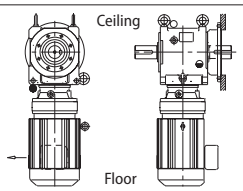
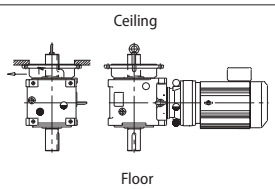
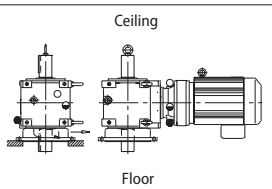
LHF□ - □T [K] - F1 - □	LHF□ - □T [K] - F2 - □	LHF□ - □T [K] - F3 - □
		
LHF□ - □T [K] - F4 - □	**LVF□ - □T [K] - F5 - □**	**LWF□ - □T [K] - F6 - □**
		

Figure 5.39 Double Extended Solid Output Shaft (T) - Output Flange Right

LHF□ - □T [K] - G1 - □	LHF□ - □T [K] - G2 - □	LHF□ - □T [K] - G3 - □
		
LHF□ - □T [K] - G4 - □	**LWF□ - □T [K] - G5 - □**	**LVF□ - □T [K] - G6 - □**
		

Notes: **[1]** K = inch diameter shaft or keyed hollow bore; blank = metric diameter shaft or keyed hollow bore.
[2] ⊸— = direction of lead wires out of terminal box.

Additional Mounting Configurations continued

Figure 5.40 Solid Ouput Shaft Left (L) - Output Flange Right

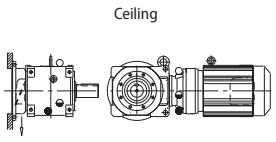
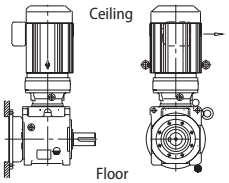
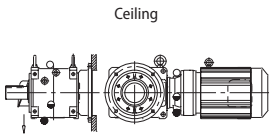
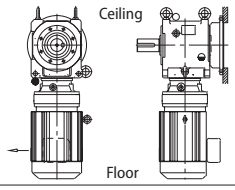
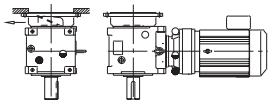
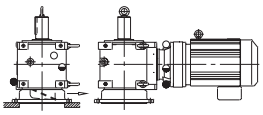
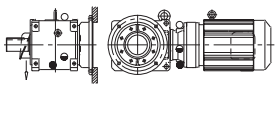
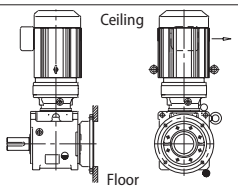
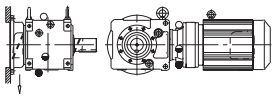
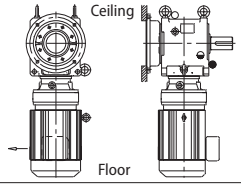
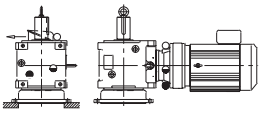
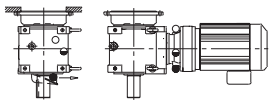
LHF□ - □L [K] - G1 - □	LHF□ - □L [K] - G2 - □	LHF□ - □L [K] - G3 - □
		
LHF□ - □L [K] - G4 - □	**LVF□ - □L [K] - G5 - □**	**LWF□ - □L [K] - G6 - □**
		

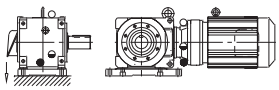
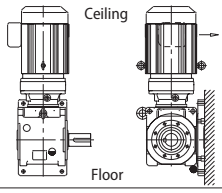
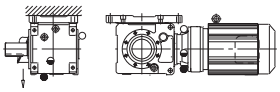
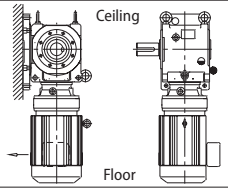
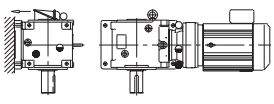
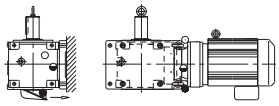
Figure 5.41 Solid Ouput Shaft Right (R) - Output Flange Left

LHF□ - □R [K] - F1 - □	LHF□ - □R [K] - F2 - □	LHF□ - □R [K] - F3 - □
		
LHF□ - □R [K] - F4 - □	**LWF□ - □R [K] - F5 - □**	**LVF□ - □R [K] - F6 - □**
		

Cyclo® BBB4

Appendix

Figure 5.42 Solid Output Shaft Left (L) - Mounting Foot Bottom

LHH□ - □L [K] - K1 - □	LHH□ - □L [K] - K2 - □	LHH□ - □L [K] - K3 - □
		
LHH□ - □L [K] - K4 - □	**LVH □ - □L [K] - K5 - □**	**LWH□ - □L [K] - K6 - □**
		

Notes: **[1]** K = inch diameter shaft or keyed hollow bore; blank = metric diameter shaft or keyed hollow bore.
[2] ⊸— = direction of lead wires out of terminal box.

Additional Mounting Configurations continued

Figure 5.43 Solid Output Shaft Right (R) - Mounting Foot Bottom

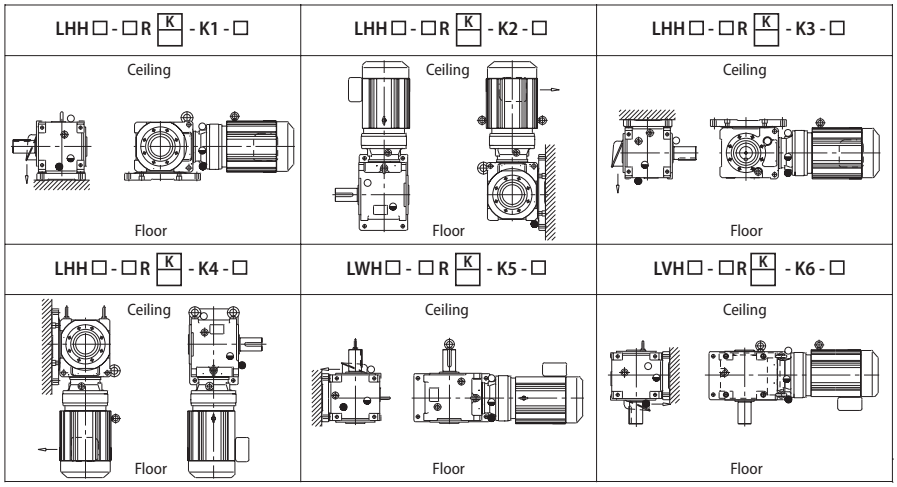


Figure 5.44 Double Extended Solid Output Shaft (T) - Mounting Foot Bottom

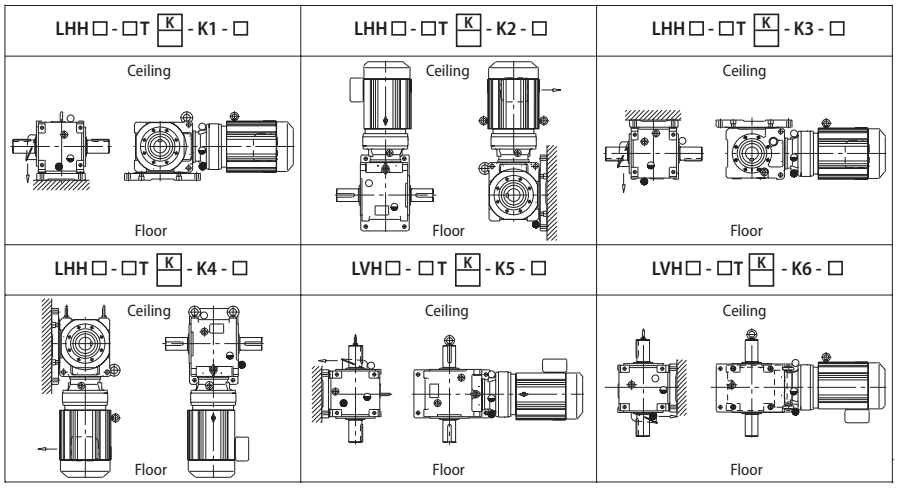
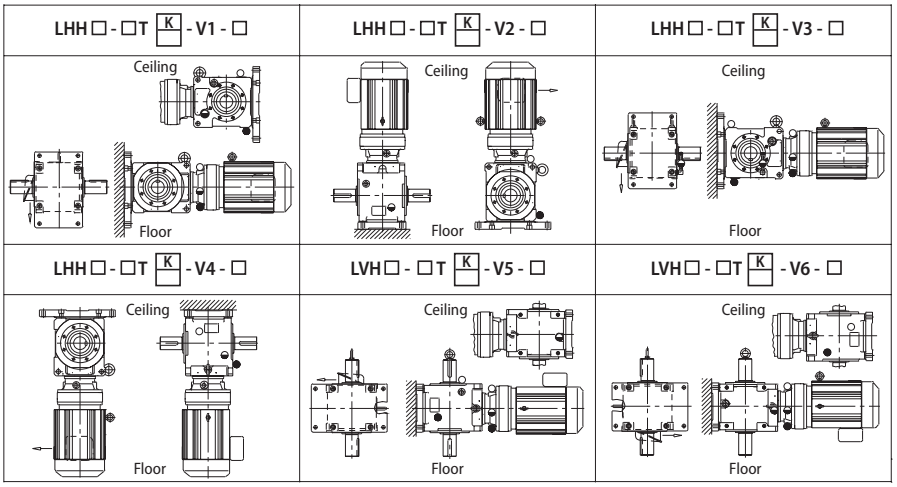


Figure 5.45 Double Extended Solid Output Shaft (T) - Mounting Foot Side



Notes: **[1]** K = inch diameter shaft or keyed hollow bore; blank = metric diameter shaft or keyed hollow bore.
[2] ⊸ = direction of lead wires out of terminal box.

Additional Mounting Configurations continued

Figure 5.46 Solid Output Shaft Left (L) - Mounting Foot Side

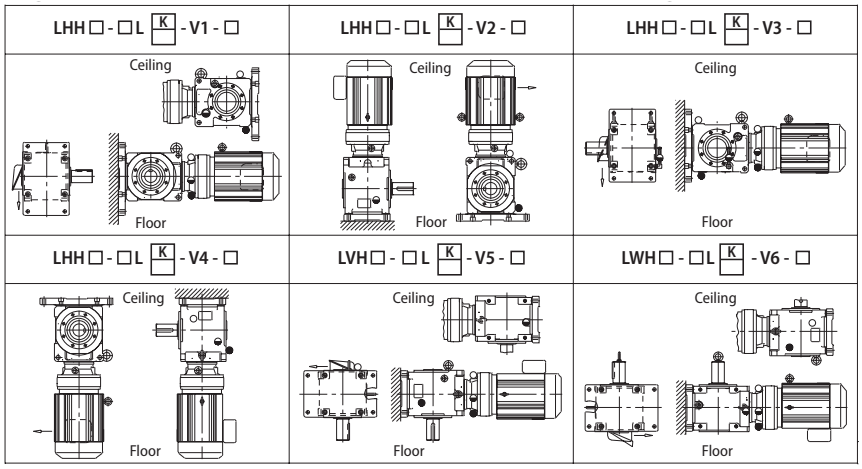


Figure 5.47 Solid Output Shaft Right (R) - Mounting Foot Side

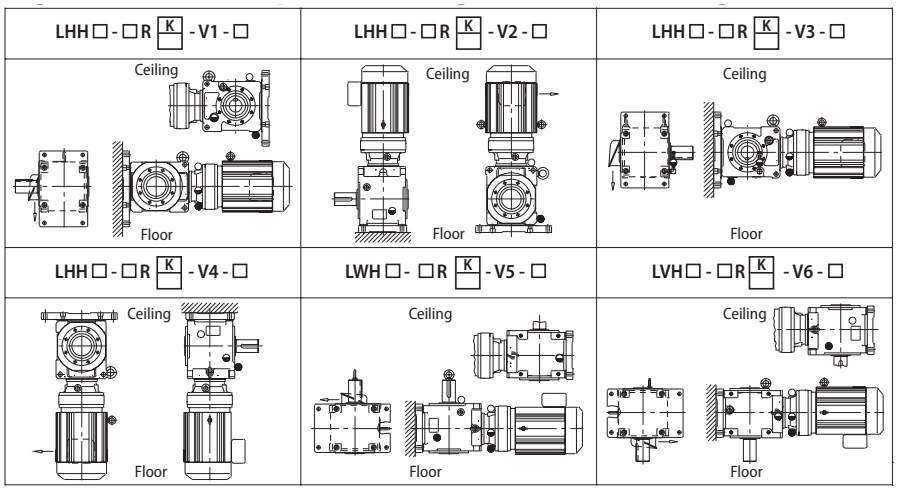
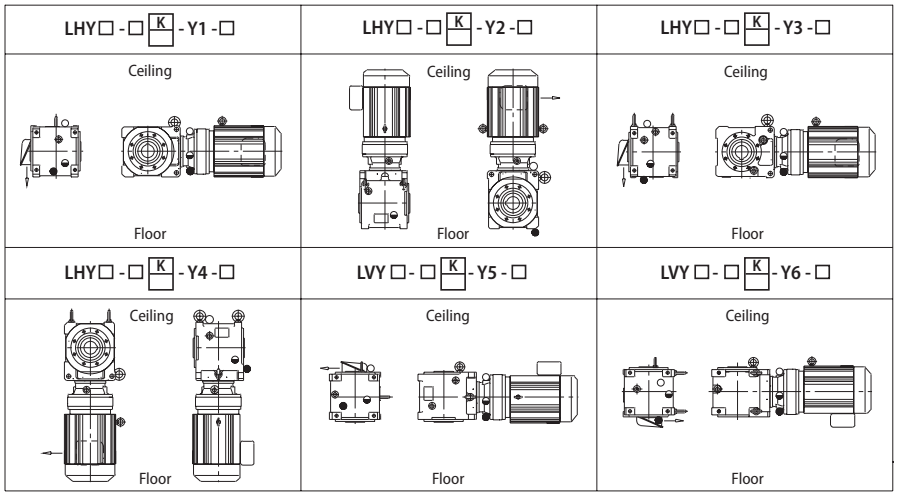


Figure 5.48 Keyed Hollow Bore Output Bore



Notes: **[1]** K = inch diameter shaft or keyed hollow bore; blank = metric diameter shaft or keyed hollow bore.
[2] ⊸ = direction of lead wires out of terminal box.

Warranty

Sumitomo warrants that its Cyclo® BBB4 Speed Reducers will deliver their continuous catalog ratings and up to 200% intermittent SHOCK LOAD CAPACITY, provided they are properly installed, maintained and operated within the limits of speed, torque or other load conditions under which they were sold. Sumitomo further states that Cyclo® BBB4 Speed Reducers are warranted to be free from defects in material or workmanship for a period of two years from the date of shipment. Sumitomo assumes no liability beyond product repair or replacement under this limited warranty.

For construction purposes, be sure to obtain certified dimension sheets or drawings. Although Sumitomo takes every precaution to include accurate data in our catalog, Sumitomo cannot guarantee such accuracy. If performance guarantees are required, they should be obtained in writing from the factory. Full consideration will be given to such requests when complete details are given of the proposed installation.

Notes