

Sumitomo Drive Technologies

TGB-XL BUSHING

FOR THE SUMITOMO BBB-4

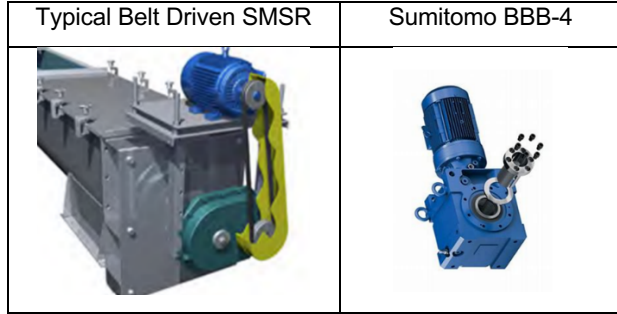
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WHITE PAPER

**TGB-XL Bushing for the Sumitomo BBB-4
by Sam Hancock, Product Manager**

The BBB-4 is a Simpler, Reliable, and Safer Solution for your Shaft Mounted Speed Reducers (SMSR). The new TGB-XL makes the switch easy and cost effective.



Replacing your belt driven Shaft Mounted Speed Reducer with a direct drive Sumitomo BBB-4 is a reliable, efficient solution that can improve uptime and reduce opportunities for injuries.

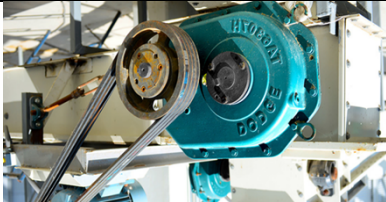
The change from a helical offset reducer to a ductile iron Cyclo based BBB results in a beneficial total cost of ownership. The TGB-XL makes it easier to install an extremely rugged gearbox, perfectly suited for harsh applications such as those found in cement, sand, and aggregate with minimal disruption to their existing set up.

The different brands of SMSR's offer varying methods of securing or locking the unit to the driven shaft. Either by way of a keyed connection, taper or straight bushing(s), or shrink discs, the reducers are supported and affixed to the driven shaft to transmit torque.

Each manufacturer will specify key installation requirements such as; minimum driven shaft engagement length, dimensional tolerances, tool, and part clearances, to assure proper installation and removal.

The TGB-XL was designed to allow for the BBB-4 to be mounted on the existing shaft by minimizing the required engagement distance. The TGB-XL can be installed on the existing shafts even if there is a keyway.

Example of a belt driven SMSR



Example where 8 inch of shaft is available



Example of the Minimum Installation Dimensions for a SMSR

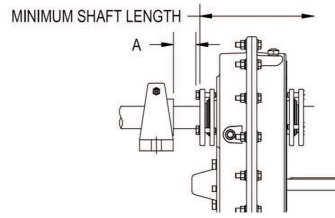


Table 1 - Minimum Required Shaft Lengths			
Reducer Size	Standard Taper Bushing	Short Shaft Bushing	Bushing Screw Clearance "A"
TA0107L	6.83	4.32	1.08
TA1107H	6.95	4.43	1.20
TA2115H	7.80	4.80	1.20
TA3203H	8.55	5.46	1.20
TA4207H	8.94	5.66	1.48
TA5215H	10.33	6.35	1.81
TA6307H	10.82	6.72	1.81
TA7315H	11.87	7.62	2.06
TA8407H	12.82	8.10	2.06
TA9415H	13.74	8.56	2.39
TA10507H	15.46	9.67	2.39
TA12608H	18.32	11.60	2.39

SUMITOMO TAPER-GRIP® BUSHING OUTPUT OPTION

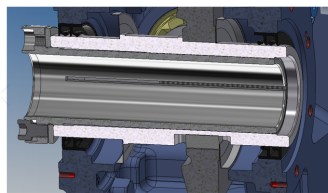
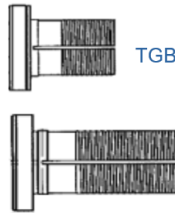
The patented Sumitomo Taper-Grip® bushing system provides a simple shaft-mounting device that provides self-aligning, backlash-free torque transmission to the driven shaft. The unique design provides easy unit mounting and removal from the driven shaft, and resistance to fretting and corrosion. The TGB and TGB-XL are installed from the outboard side eliminating the screw clearance required by other brands. Multiple stock bore sizes available for quick delivery.

Minimum Installation Dimensions for a Sumitomo TGB and TGB-XL

Size	TT		TT XL	
	mm	in	mm	in
4A	208	8.19	110	4.33
4B	242	9.53	120	4.72
4C	279	10.98	150	5.91
4D	326	12.83	175	6.89
4E	359	14.13	190	7.48

-TT & TT XL is the minimum required shaft length for proper TGB engagement
-TT XL = Order Code SSC: YB4Z

Use the BBB-4 TGB-XL when the Standard TGB TT is > than available shaft



The TGB-XL makes it easy to gain the many benefits of the Sumitomo BBB-4 direct drive unit without requiring any changes to the existing driven shaft.

Our Regional Salesforce stands by ready to assist you make the proper selection. Or visit www.SumitomoDrive.com and try our Configurator to view the TGB and TGB-XL options for the BBB-4 units.