

## Precision Reducer Application Data Sheet

Certain application information is critical to insure proper selection of a precision speed reducer. Please complete the following data sheet so that we may provide timely service. Thank you.

### 1. Move Profile: (Please fill in the blanks in the diagrams below.)

<p>Speed <input type="text"/> RPM</p> <p>Speed (RPM)</p> <p>Time (S)</p> <p><math>t_A</math> <math>t_R</math> <math>t_B</math> <math>t_P</math></p> <p><math>t_M</math> <math>t_C</math></p>	<p>Where: (times in seconds)</p> <p><math>t_A</math> = Acceleration time</p> <p><math>t_R</math> = Run time at constant speed</p> <p><math>t_B</math> = Braking time (deceleration time)</p> <p><math>t_P</math> = Pause (rest) time between moves</p> <p><math>t_M</math> = Move time (<math>t_A + t_R + t_B</math>)</p> <p><math>t_C</math> = Cycle Time (<math>t_M + t_P</math>)</p>
<p>Check One:</p> <p><input type="checkbox"/> Data is in lb-in</p> <p><input type="checkbox"/> Data is in Nm</p> <p>Torque (lb-in) or (Nm)</p> <p>Time (S)</p> <p><math>T_A</math> <math>T_R</math> <math>T_B</math> <math>T_P</math></p>	<p>Where:</p> <p><math>T_A</math> = Acceleration torque</p> <p><math>T_R</math> = Running torque at constant speed</p> <p><math>T_B</math> = Braking torque (deceleration torque)</p> <p><math>T_P</math> = Pause (rest) torque (if required to maintain position between moves)</p>

## Precision Reducer Application Data Sheet (page 2)

2. How many hours per day does the application operate? \_\_\_\_\_

3. What is the required reduction ratio? \_\_\_\_\_ :1

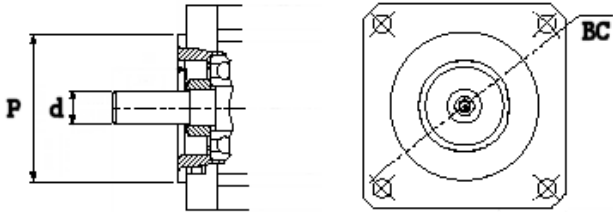
4. Please provide the following motor performance data:

1. Motor Rated Speed \_\_\_\_\_ RPM
2. Motor Continuous Stall Torque \_\_\_\_\_ (Nm) (lb-in)
3. Motor Peak Torque \_\_\_\_\_ (Nm) (lb-in)
4. Manufacturer \_\_\_\_\_
5. Model Number \_\_\_\_\_

5. Should Sumitomo include a motor adapter?

- Yes  
 No

If Yes is selected above, please provide the following motor dimensions or provide a copy of a motor drawing.

Shaft diameter (d) _____ (mm) (in) Pilot diameter (P) _____ (mm) (in) Bolt Circle dia. (BC) _____ (mm) (in)	
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Is the motor shaft keyed or keyless?

- Keyed  
 Keyless

6. How is the reducer coupled to the final load?

- Direct Coupled  
 Timing Belt or Chain Drive (see number 8 on the following page)  
 V-Belt (see number 8 on the following page)  
 Pinion Gear driving rack or other gear (see number 8 on the following page)  
 Other (see number 8 on the following page)

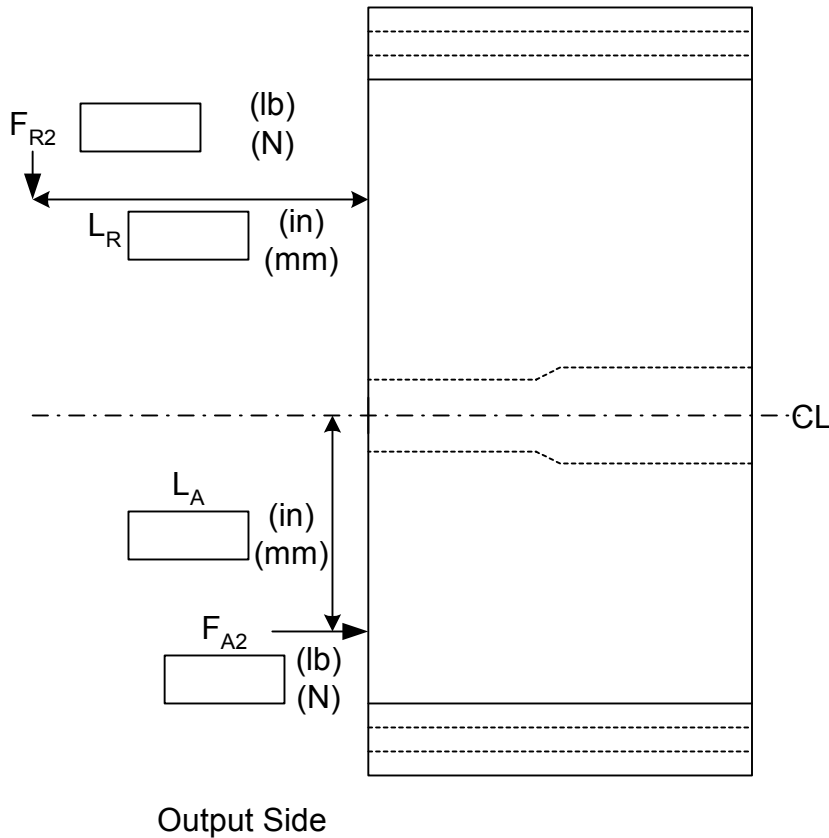
7. Please select one of the following load characteristics

- Uniform Load  
 Moderate Shock Load  
 Heavy Shock Load

## 8. Radial and Axial Loading

**Is there any radial and/or axial loading on the reducer output?**

- Yes (Please fill in the appropriate blanks in the diagram below)  
 No



**Where:**  $F_R$  = Radial Force (specify units)  
 $L_R$  = Radial Force distance from face (specify units)  
 $F_A$  = Axial Force (specify units)  
 $L_A$  = Axial Force distance from center line (specify units)

9. Please include any other information that you feel may be useful to insure a proper selection.