

## A487296



### Precision Bearings

Precision, Steel Ball Bushing Bearing, 3.000 , Not Self-Aligning, Closed, Not Corrosion Resistant

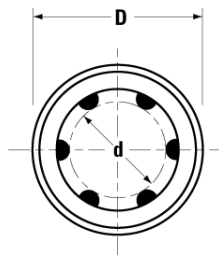
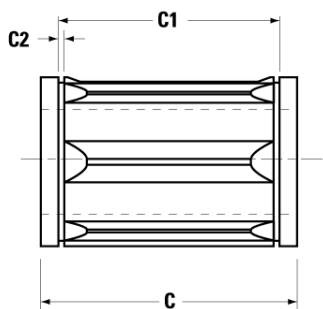
Lead Time: Next Day

**\$828.91** each<sup>†</sup>

- Precision Steel Ball Bushing bearings offer great improvements in efficiency, productivity, and accuracy over high-friction plain bearings flat-ways.
- The all-steel design makes the bearing product line perfect for replacing plain bearings in high temperature applications.
- The steel sleeve anti-friction recirculating ball bushing provides rigid low drag movement – ~100x lower drag coefficient than a plain contact bearing.
- A coefficient of friction as low as .001. When replacing high friction plain bearings, Precision Steel Ball Bushing Bearings dramatically improve machine productivity and efficiency.

<sup>†</sup>The price shown here is the North American List Price for general reference only. Please Contact Thomson for actual net price and current delivery schedule which will vary with geographic region, quantity ordered and distribution channel. Estimated costs for shipping, packaging and import taxes/duty are not included in this list price. Please contact Thomson Customer Support for more information.

### Dimensions



Dimension	Value
C	152.40 mm (6.000 in)
C1	120.09 mm (4.728 in)
C2	3.05 mm (0.120 in)
d	76.20 mm (3.000 in)
D	114.30 mm (4.500 in)

### Specifications

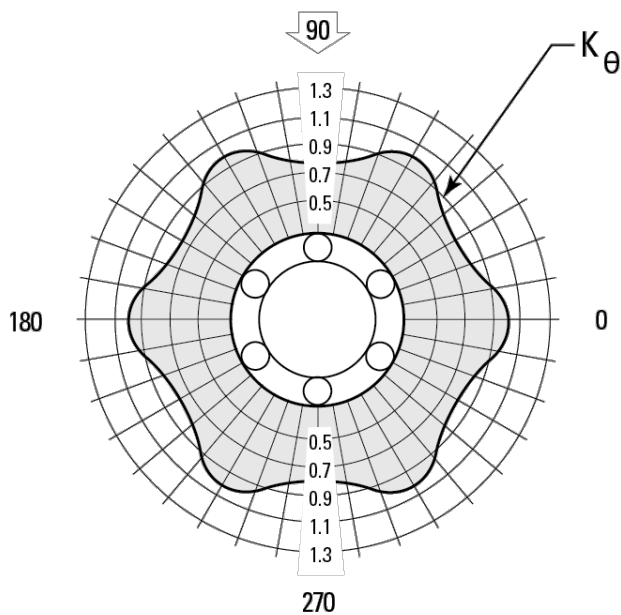
Specifications	Value
Adjustable/Not Adjustable	Not Adjustable
Closed/Open	Closed
Number of Ball Circuits	6

Specifications	Value
Roll Pack	No Roll Pack
Food Grade Rated	Not Food Grade
Self Alignment	Not self-aligning
Single/Twin	Single
Temperature Max	260 °C / 500 °F
Use with shafting class	S
Wipers, Seals	
Weight	4.309 kg / 9.5 lbs
Nominal Diameter	76.200 mm / 3 in
Outer Diameter	114.300 mm / 4.5 in
Length	152.400 mm / 6 in

## Performance

### Load Correction Factor, $K_{\theta}$

Performance	Value
Load Capacity, Dynamic	11,565.376 N / 2600 lbf



The actual dynamic load capacity of a Ball Bushing Bearing is determined by the direction of the applied load relative to the bearing circuits. The load correction factor  $K$  is found by referring to the polar graph. To determine the actual dynamic load capacity, multiply the proper correction factor ( $K$ ) by the dynamic load capacity.

# Travel Life

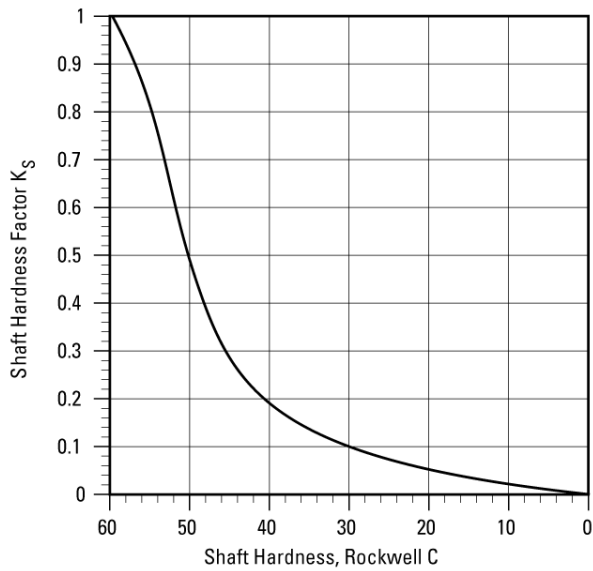
The following formula may be used to determine travel life for bearings with imperial units:

$$L_m = \left( \frac{W}{P} \cdot K_\theta \cdot K_s \right)^3 \cdot 2 \cdot 10^6 \text{ inches}$$

Where:  $L_m$  = travel life (in)  
 $W$  = dynamic load capacity rating (lbf)  
 $P$  = resultant from externally applied loads (lbf)  
 $K_\theta$  = load correction factor  
 $K_s$  = shaft hardness factor

## Shaft Hardness factor, $K_s$

For shafts that do not meet hardness 60 HRC, shaft hardness factor  $K_s$  must be applied.



Order Code

# A162536-DDSP

Type	Description	Size	Nom. Dia.	Seals Options	Ball Options
<b>A</b>	Precision Steel	<b>4812</b>	.250	Blank	Option Description
<b>XA</b>	Extra Precision Steel	<b>61014</b>	.375		No Seals
<b>ADJ</b>	Adjustable Precision Steel	<b>81420</b>	.500	<b>DD</b> Integral Seals	<b>SP</b> Stainless Steel Balls, Black Oxide Retainer and Sleeve
		<b>101824</b>	.625		<b>NB</b> Nylon Balls
		<b>122026</b>	.750		<b>NBA</b> Alternating Nylon Balls
		<b>162536</b>	1.000		
		<b>203242</b>	1.250		
		<b>243848</b>	1.500		
		<b>324864</b>	2.000		
		<b>406080</b>	2.500		
		<b>487296</b>	3.000		
		<b>6496128</b>	4.000		
				<b>Lube Options</b>	
				<b>DP</b> Dry Pack	
				<b>LL</b> Lubricated with Thomson Linear Lube	
				<b>Other Options</b>	
				<b>RP</b> Roll Pack (no box)	
				<b>OH</b> Oil Hole	

## Related Products



3 S CTL

3" Shafting, S Class, Cut to Length

[https://www.thomsonlinear.com/en/product/3 S CTL](https://www.thomsonlinear.com/en/product/3-S-CTL)