



**Browning**<sup>®</sup>

## Roller Bearing Family of Products

# ROLLER BEARINGS

**BROWNING** offers a broad and complete line of mounted roller bearing products to satisfy a large variety of rugged, industrial applications.

Browning roller bearings are completely assembled, adjusted and lubricated at the factory ready for use. Great for bulk material handling applications that require rugged quality bearings with reliable sealing. Installation is simple and instructions are included with each unit. Most Browning roller bearings can be dropped right in to replace competitive units.

**Call your Browning distributor today...the power transmission specialist. Ask about Browning bearing engineered solutions and technical support services that are available and about information for other world class Browning and EPT products.**

### ROLLING ELEMENTS

Browning manufactures two types of roller bearings. High capacity double row tapered roller bearings are capable of combined radial and thrust loads within the bearing capacity. General purpose, double row spherical roller bearings are designed to accommodate increased rotational speeds and dynamic alignment.

### LOCKING

Browning offers three types of shaft locking devices. Single set screw locking and dual set screw locking have one or two rugged lock collars to reduce inner race distortion. Browning also offers eccentric locking.

### HOUSINGS

Roller bearing housings are segmented by style and available as pillow blocks, three and four bolt flanges, flange cartridges, and take-up units. General purpose cast iron housings are offered as well as high strength ductile units. 900, E920, 1000, and 1100 series are solid one piece units. 950, 970, 22200 and 22500 series have split housings for quick replacement and fast mounting.

### EXPANSION UNITS

For applications with shaft expansion due to temperature differentials, 950, 970, 1000, 1100, 22200 and 22500 series roller bearings are all offered with an expansion design to accommodate shaft growth.

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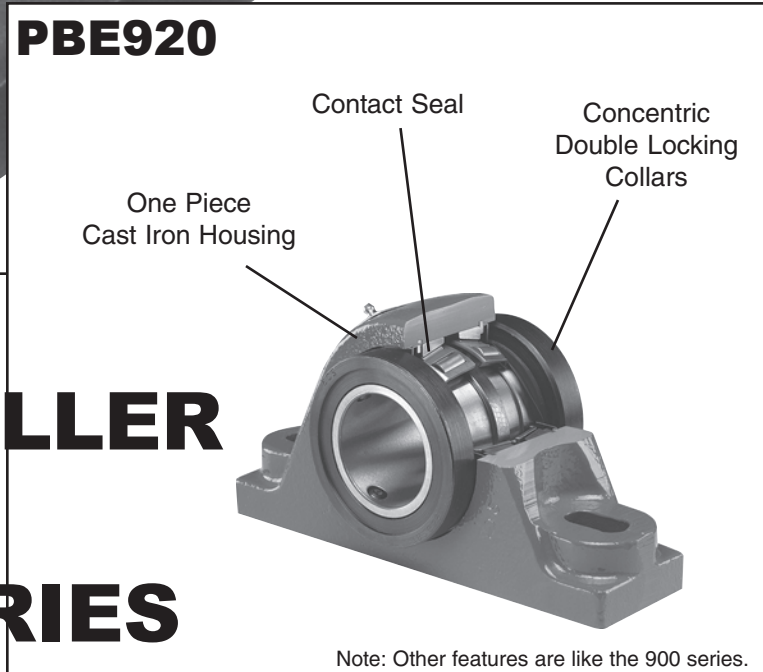
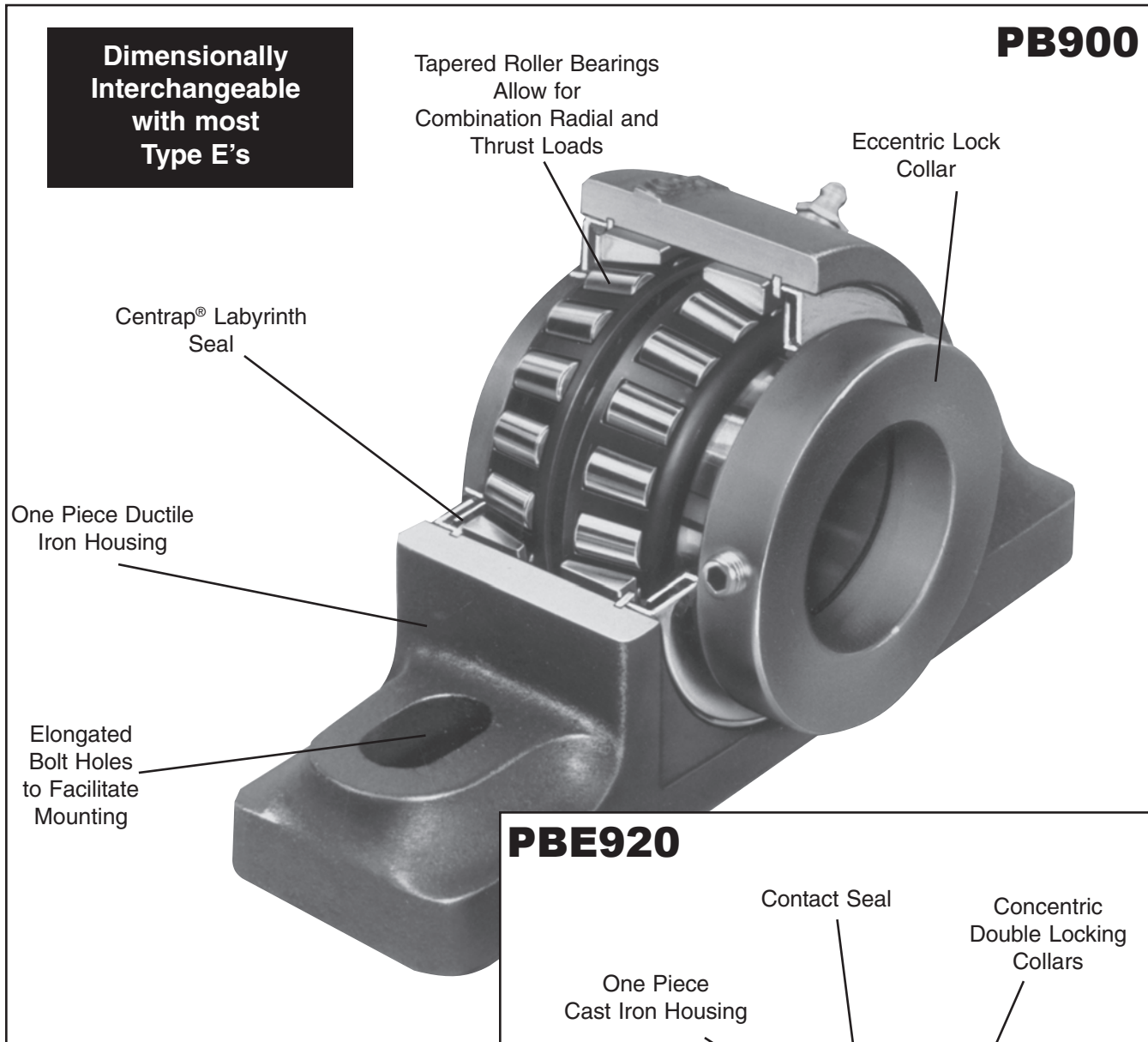
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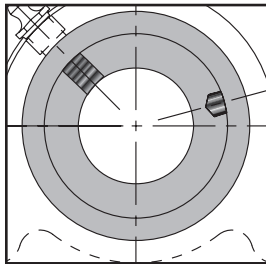


# Tapered Roller Bearings



## BROWNING TAPERED ROLLER BEARINGS 900/E920 SERIES FEATURES/BENEFITS

## LOCKING

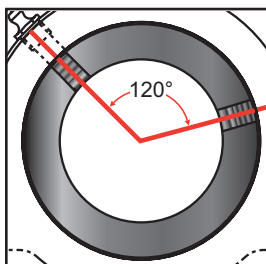


### 900 ECCENTRIC LOCK

Browning roller bearings have an eccentric locking collar that mates with the inner race for shaft hold. One end of the inner race is machined to a cam form and the mating lock collar has an off center counterbore. The wedge action of the collar on the

inner race secures the inner race to the shaft. This locking method tends to tighten and grip the shaft and not leave burrs as with setscrew collars.

**NOTE: Eccentric collars are not recommended for reversing applications.**

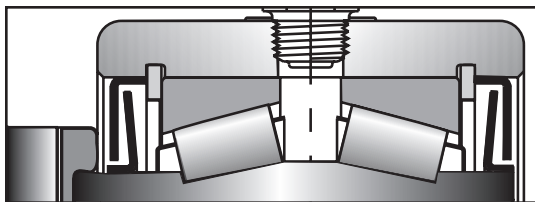


### E920 SETSCREW LOCK

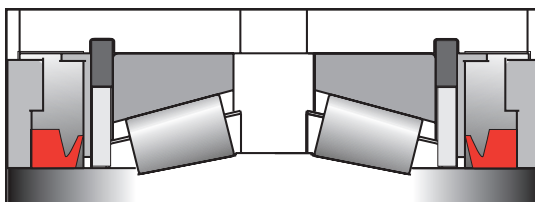
This locking device has two lock collars with two setscrews to anchor the bearing to the inner race. The elastic deflection of the collar serves to help retain the bearing hold to the shaft. Double locking collars with setscrews at 120° provide improved holding power and shaft lock especially in applications with heavy vibration or unidirectional loads. Browning lock collars are black oxide coated for corrosion resistance.

holding power and shaft lock especially in applications with heavy vibration or unidirectional loads. Browning lock collars are black oxide coated for corrosion resistance.

## SEALS



**900 SEALS - CENTRAP** labyrinth seals contain an angled flinger that rotates with the shaft, creating a centrifugal force to help keep out contamination. Excess grease purges from the seal to help remove contaminants caught in the lubricant and prevent seal damage from over lubrication. The non-contact labyrinth design reduces drag, saves energy and normally cannot be blown by overgreasing.



**E920 SEALS** - Rubber contact face seals are designed to retain lubricant and help exclude contaminants. The seal is designed with a long flexible face that seals axially against the counterface. The contact seal is self purging. It retains low torque characteristics and rotates with the shaft to help reduce contaminant build-up on the seal. Its low friction reduces heat generation and wear.

See page 156 for trademark acknowledgments.

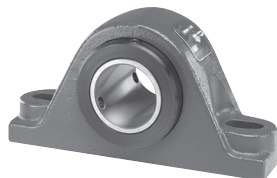
# BROWNING TAPERED ROLLER BEARINGS 900/E920 SERIES FEATURES/BENEFITS

## HOUSING



**DUCTILE**

**900 HOUSING** - 900 Series ductile iron housings are approximately twice as strong as cast iron. This is an important feature in applications such as sawmills where heavy loads and shock conditions are normally experienced. Elongated bolt holes in the housing base permit easy replacement of competitive pillow blocks and more adjustment capability.



**CAST IRON**

**E920 HOUSING**- Browning compact solid one piece cast iron housings provide strength and load support in a wide variety of applications. Elongated bolt holes in the housing base permit easy replacement of competitive pillow blocks and more adjustment capability.

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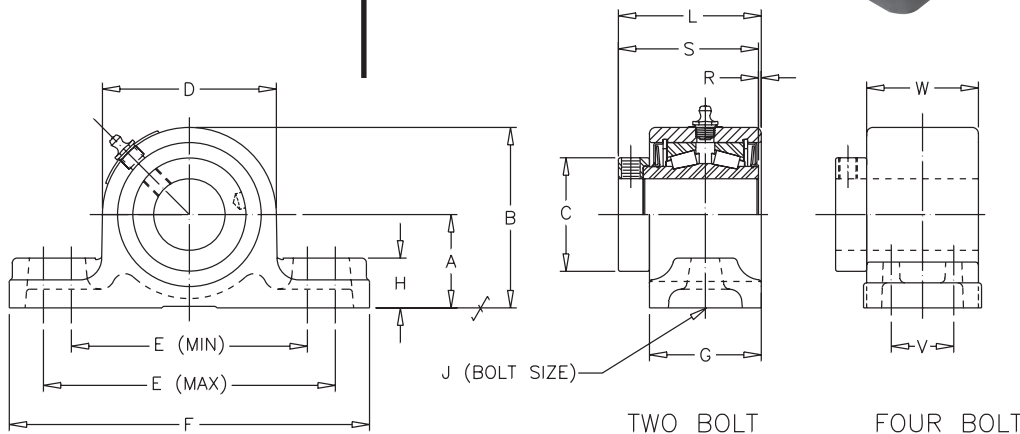
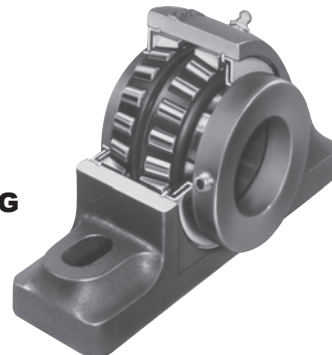
### PB900

Lock: Eccentric  
 Seal: CENTRAP® Labyrinth  
 Housing: Ductile Iron  
 Temperatures: -20°F to 200°F  
 Fitting: 1/8" NPT  
 Bearing Insert: Tapered Roller

Load Rating Tables: Page 114  
 Interchange Tables: Page 166

**P PILLOW**  
**B BLOCK**  
**9 900 SERIES**  
**0 ECCENTRIC**  
**0 TAPERED ROLLER BEARING**

**Dimensional Interchange with most Type E's**



| SHAFT DIA. IN         | Dimensions In Inches |         |         |         |         |          |        |         |       |     |         |      |         |       |       | UNIT WT. |
|-----------------------|----------------------|---------|---------|---------|---------|----------|--------|---------|-------|-----|---------|------|---------|-------|-------|----------|
|                       | A                    | B       | C       | D       | E       |          | F      | G       | H     | J   | L       | R    | S       | V     | W     |          |
|                       |                      |         |         |         | MIN.    | MAX.     |        |         |       |     |         |      |         |       |       |          |
| <b>TWO BOLT BASE</b>  |                      |         |         |         |         |          |        |         |       |     |         |      |         |       |       |          |
| 1                     | 1 9/16               | 3 1/32  | 1 15/16 | 2 15/16 | 4 1/8   | 4 5/8    | 5 7/8  | 2 1/8   | 3/4   | 1/2 | 2 21/32 | 5/64 | 2 35/64 | -     | -     | 4.4      |
| 1 3/16                |                      |         |         |         |         |          |        |         |       |     |         |      |         |       |       |          |
| 1 1/4                 | 1 3/4                | 3 13/32 | 2 3/16  | 3 5/16  | 4 1/2   | 5        | 6 3/8  | 2 1/4   | 3/4   | 1/2 | 2 13/16 | 1/16 | 2 3/4   | -     | -     | 5.7      |
| 1 3/8                 |                      |         |         |         |         |          |        |         |       |     |         |      |         |       |       |          |
| 1 7/16                | 1 7/8                | 3 5/8   | 2 3/16  | 3 1/2   | 4 3/4   | 5 7/8    | 7 1/4  | 2 1/4   | 1     | 1/2 | 2 7/8   | 1/16 | 2 13/16 | -     | -     | 6.3      |
| 1 1/2                 |                      |         |         |         |         |          |        |         |       |     |         |      |         |       |       |          |
| 1 5/8                 |                      |         |         |         |         |          |        |         |       |     |         |      |         |       |       |          |
| 1 15/16               | 2 1/8                | 4       | 2 1/2   | 3 3/4   | 5 1/4   | 6 3/8    | 7 3/4  | 2 3/8   | 1 1/8 | 1/2 | 2 15/16 | 1/8  | 2 13/16 | -     | -     | 7.7      |
| 1 3/4                 |                      |         |         |         |         |          |        |         |       |     |         |      |         |       |       |          |
| 1 7/8                 |                      |         |         |         |         |          |        |         |       |     |         |      |         |       |       |          |
| 1 15/16               | 2 1/4                | 4 17/32 | 3       | 4 9/16  | 6       | 7 1/8    | 8 7/8  | 2 7/16  | 1 1/4 | 5/8 | 3 5/32  | 3/32 | 3 1/16  | -     | -     | 11.2     |
| 2                     |                      |         |         |         |         |          |        |         |       |     |         |      |         |       |       |          |
| 2 1/8                 |                      |         |         |         |         |          |        |         |       |     |         |      |         |       |       |          |
| 2 3/16                | 2 1/2                | 4 31/32 | 3 3/8   | 4 15/16 | 6 1/2   | 7 7/8    | 9 5/8  | 2 1/2   | 1 1/4 | 5/8 | 3 7/32  | 3/32 | 3 1/8   | -     | -     | 13.1     |
| 2 1/4                 |                      |         |         |         |         |          |        |         |       |     |         |      |         |       |       |          |
| 2 7/16                | 2 3/4                | 5 5/8   | 3 3/8   | 5 1/4   | 6 7/8   | 8 5/8    | 10 3/8 | 2 13/16 | 1 3/8 | 5/8 | 3 29/64 | 5/32 | 3 1/4   | -     | -     | 16.3     |
| 2 1/2                 |                      |         |         |         |         |          |        |         |       |     |         |      |         |       |       |          |
| 2 11/16               |                      |         |         |         |         |          |        |         |       |     |         |      |         |       |       |          |
| 2 3/4                 | 3 1/8                | 6 1/16  | 4       | 5 7/8   | 7 7/8   | 9 5/8    | 11 5/8 | 2 5/8   | 1 3/8 | 3/4 | 3 15/32 | 3/32 | 3 3/8   | -     | -     | 19.9     |
| 2 15/16               |                      |         |         |         |         |          |        |         |       |     |         |      |         |       |       |          |
| 3                     |                      |         |         |         |         |          |        |         |       |     |         |      |         |       |       |          |
| 3 3/16                | 3 5/16               | 6 9/16  | 4 1/4   | 6 1/2   | 8 3/8   | 9 3/4    | 11 3/4 | 3 1/8   | 1 5/8 | 3/4 | 3 31/32 | 3/32 | 3 7/8   | -     | -     | 26.8     |
| 3 7/16                |                      |         |         |         |         |          |        |         |       |     |         |      |         |       |       |          |
| 3 1/2                 | 3 3/4                | 7 3/8   | 4 11/16 | 7 1/4   | 9 3/8   | 11 1/4   | 13 1/2 | 3 1/8   | 1 7/8 | 7/8 | 4 5/64  | 1/16 | 4       | -     | -     | 34.1     |
| 3 15/16               |                      |         |         |         |         |          |        |         |       |     |         |      |         |       |       |          |
| 4                     | 4 1/8                | 8       | 5 1/4   | 7 3/4   | 10 1/16 | 11 11/16 | 14 1/4 | 3 7/8   | 2     | 1   | 4 29/32 | 5/32 | 4 3/4   | -     | -     | 47.7     |
| <b>FOUR BOLT BASE</b> |                      |         |         |         |         |          |        |         |       |     |         |      |         |       |       |          |
| 4 7/16                | 4 3/4                | 9 1/8   | 6 1/8   | 8 3/4   | 11 3/4  | 13 3/4   | 15 7/8 | 4 1/2   | 2 1/4 | 3/4 | 5 7/16  | 1/16 | 5 3/16  | 2 1/2 | 4 1/8 | 65.0     |
| 4 1/2                 |                      |         |         |         |         |          |        |         |       |     |         |      |         |       |       |          |
| 4 15/16               | 5 1/2                | 10 1/16 | 6 5/8   | 9 1/8   | 13 3/4  | 15 3/4   | 18 1/8 | 5       | 2 1/2 | 7/8 | 5 27/32 | 3/32 | 5 3/8   | 2 3/4 | 4 1/4 | 77.0     |
| 5                     |                      |         |         |         |         |          |        |         |       |     |         |      |         |       |       |          |

Part Numbers are specified by "PB900" and bore size: Example **PB900x 1 3/16"**.  
 Bearings with Eccentric Locking Collars are not recommended for reversing applications.

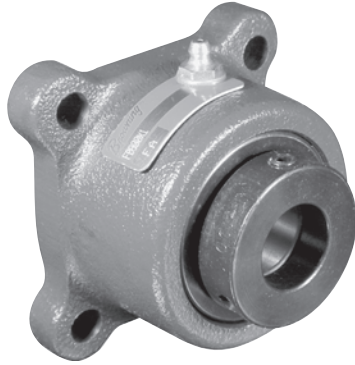
# Browning®

## Tapered Roller Bearings

Eccentric



900



**FLANGE F**  
**BLOCK B**

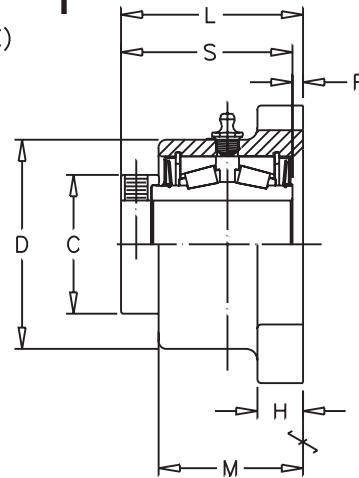
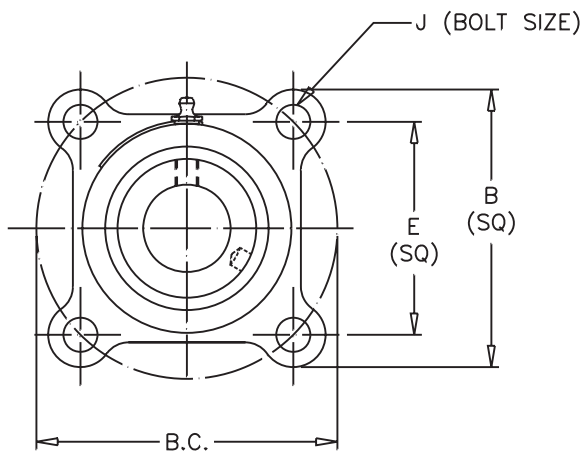
**900 SERIES 9**  
**ECCENTRIC LOCK 0**  
**TAPERED ROLLER BEARING 0**

**Dimensional Interchange  
with most Type E's**

# FB900

**Lock:** Eccentric  
**Seal:** CENTRAP® Labyrinth  
**Housing:** Ductile Iron  
**Temperatures:** -20°F to 200°F  
**Fitting:** 1/8" NPT  
**Bearing Insert:** Tapered Roller

**Load Rating Tables:** Page 114  
**Interchange Tables:** Page 166



| SHAFT DIA. IN. | Dimensions in Inches |          |         |         |       |        |     |         |         |       |         | UNIT WT. |
|----------------|----------------------|----------|---------|---------|-------|--------|-----|---------|---------|-------|---------|----------|
|                | B                    | B.C.     | C       | D       | E     | H      | J   | L       | M       | R     | S       |          |
| 1              | 3 5/8                | 3 7/8    | 1 15/16 | 2 15/16 | 2 3/4 | 9/16   | 3/8 | 2 23/32 | 2 1/8   | 11/64 | 2 35/64 | 3.9      |
| 1 3/16         | 3 7/8                | 4 1/4    | 2 3/16  | 3 1/4   | 3     | 5/8    | 3/8 | 2 15/16 | 2 3/8   | 11/64 | 2 3/4   | 4.9      |
| 1 1/4          |                      |          |         |         |       |        |     |         |         |       |         |          |
| 1 3/8          |                      |          |         |         |       |        |     |         |         |       |         |          |
| 1 7/16         | 4 9/16               | 4 61/64  | 2 3/16  | 3 7/16  | 3 1/2 | 3/4    | 1/2 | 3       | 2 3/8   | 11/64 | 2 13/16 | 5.5      |
| 1 1/12         |                      |          |         |         |       |        |     |         |         |       |         |          |
| 1 5/8          | 5 1/4                | 5 53/64  | 2 1/2   | 3 11/16 | 4 1/8 | 7/8    | 1/2 | 3 1/16  | 2 1/2   | 1/4   | 2 13/16 | 7.0      |
| 1 11/16        |                      |          |         |         |       |        |     |         |         |       |         |          |
| 1 3/4          |                      |          |         |         |       |        |     |         |         |       |         |          |
| 1 7/8          | 5 1/2                | 6 3/16   | 3       | 4 1/2   | 4 3/8 | 7/8    | 1/2 | 3 9/32  | 2 9/16  | 7/32  | 3 1/16  | 10.2     |
| 1 15/16        |                      |          |         |         |       |        |     |         |         |       |         |          |
| 2              |                      |          |         |         |       |        |     |         |         |       |         |          |
| 2 1/8          |                      |          |         |         |       |        |     |         |         |       |         |          |
| 2 3/16         | 6 3/16               | 6 57/64  | 3 3/8   | 4 7/8   | 4 7/8 | 1      | 5/8 | 3 11/32 | 2 5/8   | 7/32  | 3 1/8   | 12.3     |
| 2 1/4          |                      |          |         |         |       |        |     |         |         |       |         |          |
| 2 7/16         |                      |          |         |         |       |        |     |         |         |       |         |          |
| 2 1/2          | 6 3/4                | 7 19/32  | 3 3/8   | 5 3/16  | 5 3/8 | 1      | 5/8 | 3 29/64 | 2 11/16 | 13/64 | 3 1/4   | 14.8     |
| 2 11/16        |                      |          |         |         |       |        |     |         |         |       |         |          |
| 2 3/4          | 7 5/8                | 8 31/64  | 4       | 5 3/4   | 6     | 1 1/16 | 3/4 | 3 19/32 | 2 3/4   | 7/32  | 3 3/8   | 18.7     |
| 2 15/16        |                      |          |         |         |       |        |     |         |         |       |         |          |
| 3              |                      |          |         |         |       |        |     |         |         |       |         |          |
| 3 3/16         | 7 7/8                | 8 53/64  | 4 1/4   | 6 3/8   | 6 1/4 | 1 1/4  | 3/4 | 4 5/32  | 3 5/16  | 9/32  | 3 7/8   | 26.2     |
| 3 7/16         |                      |          |         |         |       |        |     |         |         |       |         |          |
| 3 1/2          |                      |          |         |         |       |        |     |         |         |       |         |          |
| 3 15/16        | 9 7/8                | 10 61/64 | 5 1/4   | 7 11/16 | 7 3/4 | 1 1/2  | 7/8 | 5 3/32  | 4 1/16  | 21/64 | 4 3/4   | 47.1     |
| 4              |                      |          |         |         |       |        |     |         |         |       |         |          |
| 4 7/16         | 10 7/8               | 12 3/8   | 6 1/8   | 8 3/4   | 8 3/4 | 1 1/2  | 7/8 | 5 7/16  | 4 5/16  | 1/4   | 5 3/16  | 64.0     |
| 4 1/2          |                      |          |         |         |       |        |     |         |         |       |         |          |

Part Numbers are specified by "FB900" and bore size: Example **FB900x 1 3/16"**.  
Bearings with Eccentric Locking Collars are not recommended for reversing applications.

See page 156 for trademark acknowledgments.

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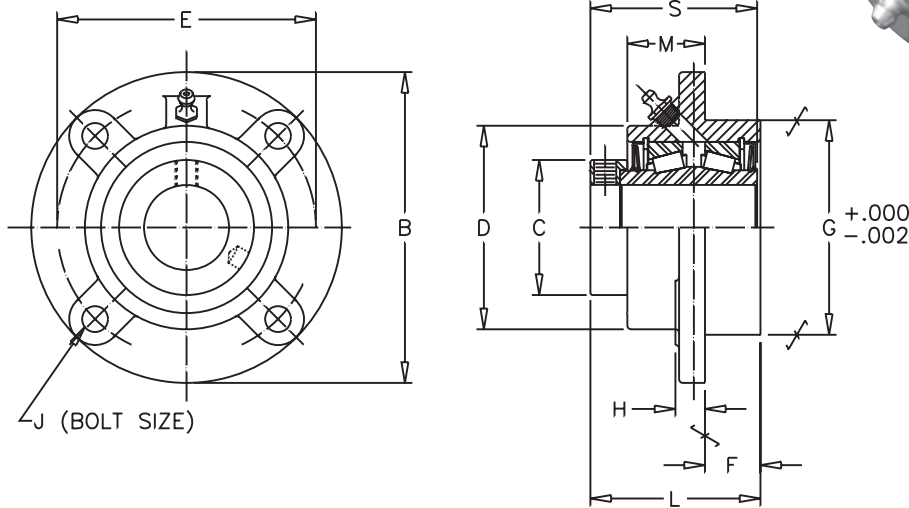
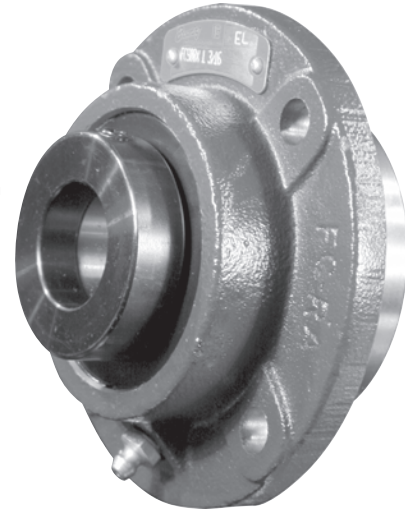
### FC900

**Lock:** Eccentric  
**Seal:** CENTRAP Labyrinth  
**Housing:** Cast Iron  
**Temperatures:** -20°F to 200°F  
**Fitting:** 1/8" NPT  
**Bearing Insert:** Tapered Roller

**Load Rating Tables:** Page 114  
**Interchange Tables:** Page 166

**F FLANGE**  
**C CARTRIDGE**  
**9 900 SERIES**  
**0 ECCENTRIC LOCK**  
**0 TAPERED ROLLER BEARING**

**Dimensional Interchange with most Type E's**



| SHAFT DIA. IN. | Dimensions In Inches |         |         |       |        |       |       |      |         |         |         | UNIT WT. |
|----------------|----------------------|---------|---------|-------|--------|-------|-------|------|---------|---------|---------|----------|
|                | B                    | C       | D       | E     | F      | G     | H     | J    | L       | M       | S       |          |
| 1              | 4 3/8                | 1 15/16 | 2 15/16 | 3 5/8 | 15/16  | 3     | 7/16  | 5/16 | 2 19/32 | 1 1/16  | 2 35/64 | 4.0      |
| 1 3/16         | 5                    | 2 3/16  | 3 1/4   | 4 1/8 | 1      | 3 3/8 | 7 16  | 3/8  | 2 13/16 | 1 1/4   | 2 3/4   | 5.3      |
| 1 1/4          |                      |         |         |       |        |       |       |      |         |         |         |          |
| 1 3/8          |                      |         |         |       |        |       |       |      |         |         |         |          |
| 1 7/16         | 5 1/4                | 2 3/16  | 3 7/16  | 4 3/8 | 15/16  | 3 5/8 | 1/2   | 3/8  | 2 7/8   | 1 5/16  | 2 13/16 | 6.0      |
| 1 1/12         |                      |         |         |       |        |       |       |      |         |         |         |          |
| 1 5/8          | 6 1/8                | 2 1/2   | 3 11/16 | 5 1/8 | 1 1/16 | 4 1/4 | 1/2   | 3/8  | 2 15/16 | 1 5/16  | 2 13/16 | 7.9      |
| 1 11/16        |                      |         |         |       |        |       |       |      |         |         |         |          |
| 1 3/4          |                      |         |         |       |        |       |       |      |         |         |         |          |
| 1 7/8          | 6 3/8                | 3       | 4 1/2   | 5 3/8 | 1 1/16 | 4 1/2 | 9/16  | 3/8  | 3 5/32  | 1 3/8   | 3 1/16  | 10.0     |
| 1 15/16        |                      |         |         |       |        |       |       |      |         |         |         |          |
| 2              |                      |         |         |       |        |       |       |      |         |         |         |          |
| 2 18           | 7 1/8                | 3 3/8   | 4 7/8   | 6     | 1 1/8  | 5     | 9/16  | 1/2  | 3 7/32  | 1 3/8   | 3 1/8   | 14.0     |
| 2 3/16         |                      |         |         |       |        |       |       |      |         |         |         |          |
| 2 1/4          |                      |         |         |       |        |       |       |      |         |         |         |          |
| 2 7/16         | 7 5/8                | 3 3/8   | 5 3/16  | 6 1/2 | 1 1/8  | 5 1/2 | 5/8   | 1/2  | 3 21/64 | 17/16   | 3 1/4   | 15.5     |
| 2 1/2          |                      |         |         |       |        |       |       |      |         |         |         |          |
| 2 11/16        |                      |         |         |       |        |       |       |      |         |         |         |          |
| 2 3/4          | 8 3/4                | 3 7/16  | 5 3/4   | 7 1/2 | 1 1/4  | 6 3/8 | 3/4   | 5/8  | 3 15/32 | 1 3/8   | 3 3/8   | 21.6     |
| 2 15/16        |                      |         |         |       |        |       |       |      |         |         |         |          |
| 3              |                      |         |         |       |        |       |       |      |         |         |         |          |
| 3 3/16         | 8 3/4                | 4 1/4   | 6 3/8   | 7 1/2 | 1 7/16 | 6 3/8 | 3/4   | 5/8  | 3 31/32 | 1 11/16 | 3 7/8   | 31.0     |
| 3 7/16         |                      |         |         |       |        |       |       |      |         |         |         |          |
| 3 1/2          |                      |         |         |       |        |       |       |      |         |         |         |          |
|                | 10 1/4               | 4 11/16 | 7 1/8   | 8 5/8 | 1 5/16 | 7 3/8 | 15/16 | 3/4  | 4 5/64  | 1 13/16 | 4       | 40.0     |

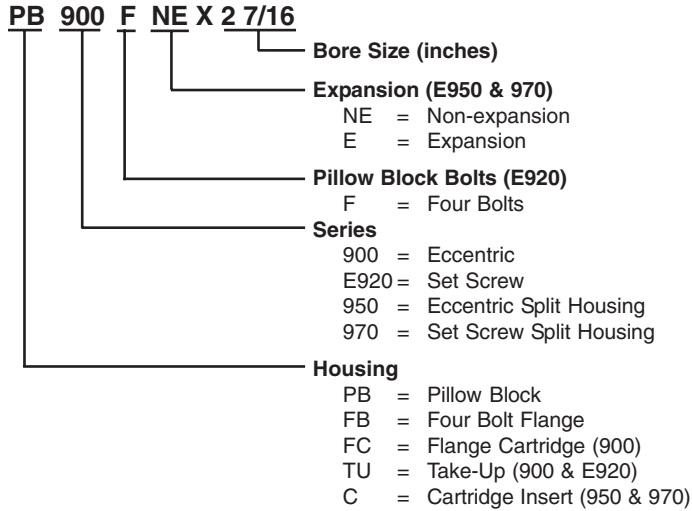
Part Numbers are specified by "FC900" and bore size: Example **FC900x 1 3/16"**. Bearings with Eccentric Locking Collars are not recommended for reversing applications.

# Browning<sup>®</sup>

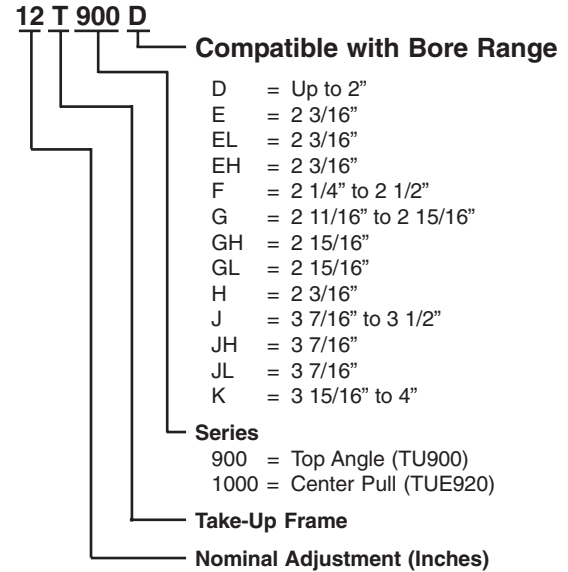
## Roller Bearings

# Part Number Explanation

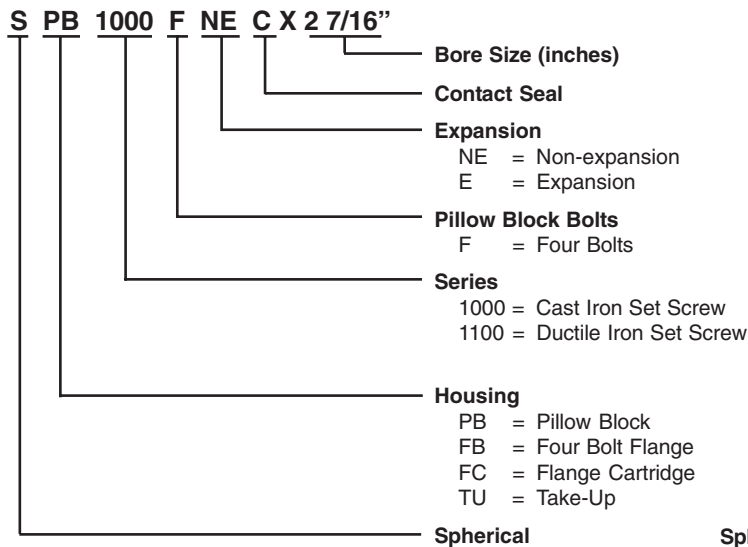
### Tapered Roller Bearings Series (900, E920, 970, 950)



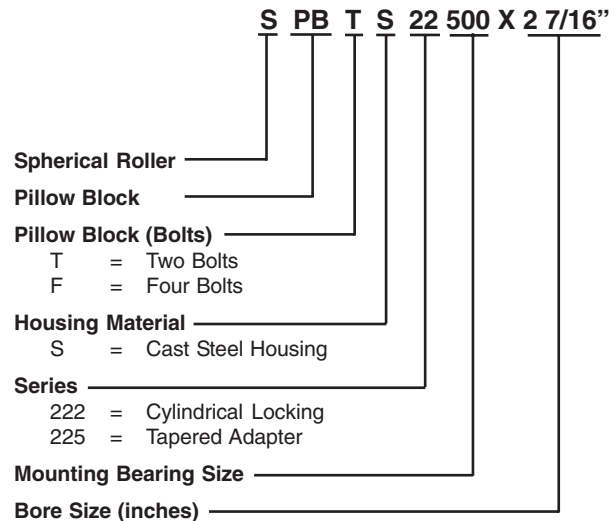
### Take-Up Frames



### Spherical Roller Bearings Series (1000, 1100)



### Spherical Roller Bearings Series (22500, 22200)



See page 156 for trademark acknowledgments.



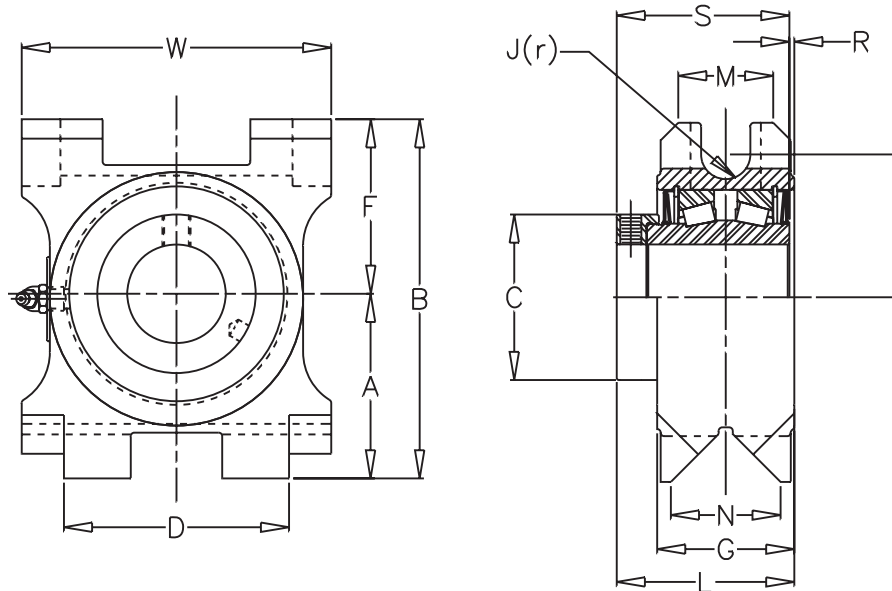
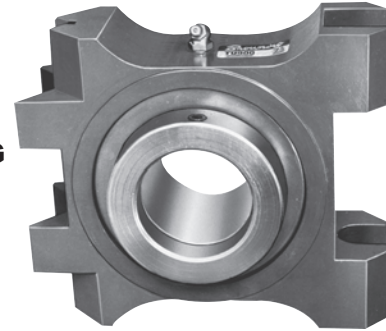


**TU900**

Lock: Eccentric  
 Seal: CENTRAP Labyrinth  
 Housing: Ductile Iron  
 Temperatures: - 20°F to 200°F  
 Fitting: 1/8" NPT  
 Bearing Insert: Tapered Roller

Load Rating Tables: Page 114  
 Interchange Tables: Page 166

**T TAKE**  
**U UP**  
**9 900 SERIES**  
**0 ECCENTRIC LOCK**  
**0 TAPERED ROLLER BEARING**



| SHAFT DIA. IN. | Dimensions in Inches |         |         |       |         |         |        |       |         |         |         |      |        |       | UNIT WT. |
|----------------|----------------------|---------|---------|-------|---------|---------|--------|-------|---------|---------|---------|------|--------|-------|----------|
|                | A                    | B       | C       | D     | E       | F       | G      | J     | L       | M       | N       | R    | S      | W     |          |
| 1 7/8          |                      |         |         |       |         |         |        |       |         |         |         |      |        |       |          |
| 1 15/16        | 3 9/32               | 6 3/8   | 3       | 4     | 2 17/32 | 3 3/32  | 2 7/16 | 7/16  | 3 5/32  | 1 11/16 | 1 61/64 | 3/32 | 3 1/16 | 5 1/2 | 13.9     |
| 2              |                      |         |         |       |         |         |        |       |         |         |         |      |        |       |          |
| 2 1/8          |                      |         |         |       |         |         |        |       |         |         |         |      |        |       |          |
| 2 3/16         | 3 17/32              | 6 15/16 | 3 3/8   | 4     | 2 27/32 | 3 13/32 | 2 1/2  | 7/16  | 3 7/32  | 1 11/16 | 2 5/64  | 3/32 | 3 1/8  | 6     | 16.6     |
| 2 1/4          |                      |         |         |       |         |         |        |       |         |         |         |      |        |       |          |
| 2 7/16         | 3 23/32              | 7 9/16  | 3 3/8   | 4 5/8 | 3 3/32  | 3 27/32 | 2 9/16 | 9/16  | 3 21/64 | 1 7/8   | 2 9/64  | 5/64 | 3 1/4  | 6 1/2 | 19.6     |
| 2 1/2          |                      |         |         |       |         |         |        |       |         |         |         |      |        |       |          |
| 2 11/16        |                      |         |         |       |         |         |        |       |         |         |         |      |        |       |          |
| 2 3/4          | 4 1/32               | 8 3/16  | 4       | 4 5/8 | 3 7/16  | 4 5/32  | 2 5/8  | 9/16  | 3 15/32 | 1 7/8   | 2 13/64 | 3/32 | 3 3/8  | 7     | 24.0     |
| 2 15/16        |                      |         |         |       |         |         |        |       |         |         |         |      |        |       |          |
| 3 7/16         | 4 49/64              | 9 7/8   | 4 11/16 | 5 3/4 | 4 11/64 | 5 7/64  | 3 1/8  | 11/16 | 4 5/64  | 2 1/4   | 2 11/16 | 5/64 | 4      | 8 1/2 | 41.8     |
| 3 1/2          |                      |         |         |       |         |         |        |       |         |         |         |      |        |       |          |
| 3 15/16        | 5 17/32              | 10 7/8  | 5 1/4   | 5 3/4 | 4 15/32 | 5 11/32 | 3 7/8  | 11/16 | 4 29/32 | 2 1/4   | 3 9/32  | 5/32 | 4 3/4  | 9 1/4 | 61.0     |
| 4              |                      |         |         |       |         |         |        |       |         |         |         |      |        |       |          |

Part Numbers are specified by "TU900" and bore size: Example **TU900x 1 3/16"**.  
 Bearings with Eccentric Locking Collars are not recommended for reversing applications.



# Tapered Roller Bearings

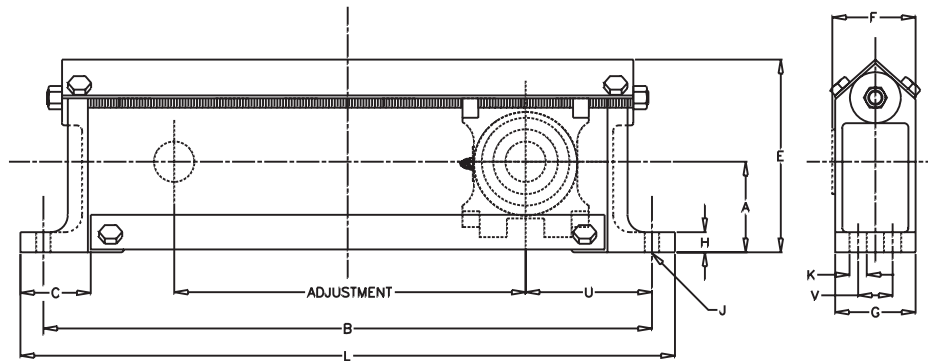
# T900

**TAKE UP FRAME T**

**900 SERIES 9**

**ECCENTRIC LOCK 0**

**TAPERED ROLLER BEARING 0**



| FRAME PART NO. | BORE RANGE      | Adjustment* |        | Dimensions in Inches |        |         |          |         |       |     |     |        |        |       |       | UNIT WT. |
|----------------|-----------------|-------------|--------|----------------------|--------|---------|----------|---------|-------|-----|-----|--------|--------|-------|-------|----------|
|                |                 | Nominal     | Actual | A                    | B      | C       | E        | F       | G     | H   | J   | K      | L      | U     | V     |          |
| 12T900D        | 1 7/8-2         | 12          | 15 1/2 | 3 15/16              | 26 1/2 | 2 15/16 | 8 3/8    | 3 11/16 | 3 1/2 | 7/8 | 5/8 | 1      | 28 1/2 | 5 1/2 | -     | 31.5     |
| 18T900D        | 1 7/8-2         | 18          | 21 1/2 | 3 15/16              | 32 1/2 | 2 15/16 | 8 3/8    | 3 11/16 | 3 1/2 | 7/8 | 5/8 | 1      | 34 1/2 | 5 1/2 | -     | 37.2     |
| 24T900D        | 1 7/8-2         | 24          | 27 1/2 | 3 15/16              | 38 1/2 | 2 15/16 | 8 3/8    | 3 11/16 | 3 1/2 | 7/8 | 5/8 | 1      | 40 1/2 | 5 1/2 | -     | 41.7     |
| 12T900E        | 2 3/16          | 12          | 16 1/2 | 4 3/16               | 27 1/2 | 3 11/32 | 8 15/16  | 3 23/32 | 3 1/2 | 7/8 | 5/8 | 1      | 29 1/2 | 5 1/2 | -     | 32.8     |
| 18T900E        | 2 3/16          | 18          | 22 1/2 | 4 3/16               | 33 1/2 | 3 11/32 | 8 15/16  | 3 23/32 | 3 1/2 | 7/8 | 5/8 | 1      | 35 1/2 | 5 1/2 | -     | 38.6     |
| 24T900E        | 2 3/16          | 24          | 28 1/2 | 4 3/16               | 39 1/2 | 3 11/32 | 8 15/16  | 3 23/32 | 3 1/2 | 7/8 | 5/8 | 1      | 41 1/2 | 5 1/2 | -     | 44.6     |
| 12T900F        | 2 1/4-2 1/2     | 12          | 16     | 4 3/8                | 28 1/2 | 3 7/16  | 9 21/32  | 4 3/64  | 4     | 7/8 | 3/4 | 1 5/16 | 30 1/2 | 6 1/4 | -     | 43.8     |
| 18T900F        | 2 1/4-2 1/2     | 18          | 22     | 4 3/8                | 34 1/2 | 3 7/16  | 9 21/32  | 4 3/64  | 4     | 7/8 | 3/4 | 1 5/16 | 36 1/2 | 6 1/4 | -     | 50.0     |
| 24T900F        | 2 1/4-2 1/2     | 24          | 28     | 4 3/8                | 40 1/2 | 3 7/16  | 9 21/32  | 4 3/64  | 4     | 7/8 | 3/4 | 1 5/16 | 42 1/2 | 6 1/4 | -     | 55.0     |
| 12T900G        | 2 11/16-2 15/16 | 12          | 17 1/2 | 5                    | 30 1/2 | 3 31/32 | 10 11/16 | 4 1/2   | 4 1/2 | 7/8 | 5/8 | 1      | 32 1/2 | 6 1/2 | 2     | 56.5     |
| 18T900G        | 2 11/16-2 15/16 | 18          | 23 1/2 | 5                    | 36 1/2 | 3 31/32 | 10 11/16 | 4 1/2   | 4 1/2 | 7/8 | 5/8 | 1      | 38 1/2 | 6 1/2 | 2     | 63.5     |
| 24T900G        | 2 11/16-2 15/16 | 24          | 29 1/2 | 5                    | 42 1/2 | 3 31/32 | 10 11/16 | 4 1/2   | 4 1/2 | 7/8 | 5/8 | 1      | 44 1/2 | 6 1/2 | 2     | 72.5     |
| 12T900J        | 3 7/16-3 1/2    | 12          | 17 5/8 | 5 1/2                | 32     | 4       | 12 7/32  | 4 49/64 | 4 1/2 | 7/8 | 3/4 | 1      | 34 1/4 | 7 1/8 | 2     | 72.0     |
| 18T900J        | 3 7/16-3 1/2    | 18          | 23 5/8 | 5 1/2                | 38     | 4       | 12 7/32  | 4 49/64 | 4 1/2 | 7/8 | 3/4 | 1      | 40 1/4 | 7 1/8 | 2     | 78.0     |
| 24T900J        | 3 7/16-3 1/2    | 24          | 29 5/8 | 5 1/2                | 44     | 4       | 12 7/32  | 4 49/64 | 4 1/2 | 7/8 | 3/4 | 1      | 46 1/4 | 7 1/8 | 2     | 85.0     |
| 12T900K        | 3 15/16-4       | 12          | 20 1/8 | 7                    | 36     | 4 1/2   | 14 1/16  | 5 23/32 | 5 1/2 | 7/8 | 3/4 | 1      | 38 1/2 | 7 7/8 | 2 1/2 | 76.0     |
| 18T900K        | 3 15/16-4       | 18          | 26 1/8 | 7                    | 42     | 4 1/2   | 14 1/16  | 5 23/32 | 5 1/2 | 7/8 | 3/4 | 1      | 44 1/2 | 7 7/8 | 2 1/2 | 85.0     |
| 24T900K        | 3 15/16-4       | 24          | 32 1/8 | 7                    | 48     | 4 1/2   | 14 1/16  | 5 23/32 | 5 1/2 | 7/8 | 3/4 | 1      | 50 1/2 | 7 7/8 | 2 1/2 | 94.0     |

Part Numbers are specified by "T900" with travel adjustment and bore size: Example, **12T900F** has 12"-16" adjustment and will accommodate a TU900x 2 1/4" - TU900x 2 1/2" bearing unit.

These Take-Up Frames are to be used with Take-Up Units shown on page 108.

Bearing unit and frame must be ordered separately.

See page 156 for trademark acknowledgments.



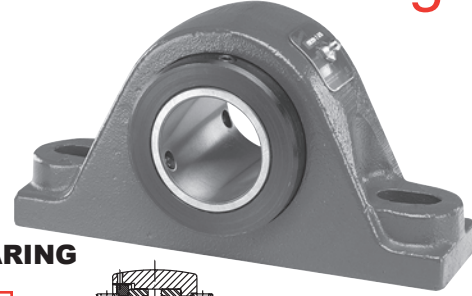
# PBE920

**Lock:** Set Screw  
**Seal:** Contact  
**Housing:** Cast Iron  
**Temperatures:** -20° to 200°F  
**Fitting:** 1/8" NPT  
**Bearing Insert:** Tapered Roller

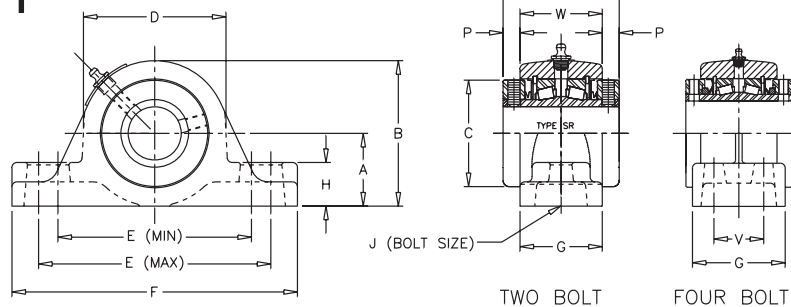
**Load Rating Tables:** Page 115  
**Interchange Tables:** Page 166

**P PILLOW**  
**B BLOCK**  
**E TYPE 'E'**

**9 920**  
**2 SET SCREW LOCK**  
**0 TAPERED ROLLER BEARING**



**Dimensional Interchange with most Type E's**

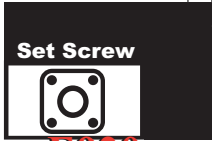


| SHAFT DIA. IN.        | TYPE | Dimensions in Inches |        |         |        |         |         |        |       |        |     |        |         |       |       | UNIT WT. |
|-----------------------|------|----------------------|--------|---------|--------|---------|---------|--------|-------|--------|-----|--------|---------|-------|-------|----------|
|                       |      | A                    | B      | C       | D      | E       |         | F      | G     | H      | J   | P      | S       | V     | W     |          |
|                       |      |                      |        |         |        | MIN     | MAX     |        |       |        |     |        |         |       |       |          |
| <b>TWO BOLT BASE</b>  |      |                      |        |         |        |         |         |        |       |        |     |        |         |       |       |          |
| 1 3/16                | SR   | 1 1/2                | 3      | 2 1/4   | 3      | 4 5/16  | 5       | 6 3/8  | 1 7/8 | 7/8    | 1/2 | 29/64  | 2 25/32 | -     | 1 7/8 | 4.0      |
| 1 1/4                 |      |                      |        |         |        |         |         |        |       |        |     |        |         |       |       |          |
| 1 3/8                 | SR   | 1 7/8                | 3 3/4  | 2 3/4   | 3 5/8  | 5       | 6       | 7 3/8  | 2 1/8 | 1 1/8  | 1/2 | 7/16   | 3       | -     | 2 1/8 | 6.9      |
| 1 7/16                |      |                      |        |         |        |         |         |        |       |        |     |        |         |       |       |          |
| 1 1/2                 | SR   | 2 1/8                | 4 1/4  | 3 3/16  | 4 1/4  | 5 11/16 | 6 1/2   | 7 7/8  | 2 1/2 | 1 1/4  | 1/2 | 15/32  | 3 3/8   | -     | 2 1/2 | 9.5      |
| 1 5/8                 |      |                      |        |         |        |         |         |        |       |        |     |        |         |       |       |          |
| 1 11/16               |      |                      |        |         |        |         |         |        |       |        |     |        |         |       |       |          |
| 1 3/4                 | SR   | 2 1/4                | 4 1/2  | 3 7/16  | 4 1/2  | 6 3/16  | 7 1/4   | 8 7/8  | 2 1/2 | 1 1/4  | 5/8 | 1/2    | 3 1/2   | -     | 2 1/2 | 11.0     |
| 1 15/16               |      |                      |        |         |        |         |         |        |       |        |     |        |         |       |       |          |
| 2                     |      |                      |        |         |        |         |         |        |       |        |     |        |         |       |       |          |
| 2 3/16                | SR   | 2 1/2                | 5      | 3 3/4   | 5      | 6 11/16 | 8       | 9 5/8  | 2 5/8 | 1 7/16 | 5/8 | 9/16   | 3 3/4   | -     | 2 5/8 | 14.0     |
| 2 1/4                 |      |                      |        |         |        |         |         |        |       |        |     |        |         |       |       |          |
| 2 7/16                |      |                      |        |         |        |         |         |        |       |        |     |        |         |       |       |          |
| 2 1/2                 | SR   | 2 3/4                | 5 1/2  | 4 1/16  | 5 3/8  | 7 1/8   | 8 3/4   | 10 1/2 | 2 7/8 | 1 5/8  | 5/8 | 9/16   | 4       | -     | 2 7/8 | 19.0     |
| 2 11/16               |      |                      |        |         |        |         |         |        |       |        |     |        |         |       |       |          |
| 2 3/4                 |      |                      |        |         |        |         |         |        |       |        |     |        |         |       |       |          |
| 2 15/16               | SR   | 3 1/8                | 6 1/4  | 4 23/32 | 6 1/4  | 8 7/16  | 9 3/4   | 12     | 3     | 1 3/4  | 3/4 | 3/4    | 4 1/2   | -     | 3     | 26.0     |
| 3                     |      |                      |        |         |        |         |         |        |       |        |     |        |         |       |       |          |
| 3 3/16                |      |                      |        |         |        |         |         |        |       |        |     |        |         |       |       |          |
| 3 7/16                | LN   | 3 3/4                | 7 1/2  | 5 7/16  | 7 5/8  | 9 3/4   | 11 1/2  | 14     | 3 5/8 | 2 1/8  | 7/8 | 11/16  | 5       | -     | 3 5/8 | 44.0     |
| 3 1/2                 |      |                      |        |         |        |         |         |        |       |        |     |        |         |       |       |          |
| <b>FOUR BOLT BASE</b> |      |                      |        |         |        |         |         |        |       |        |     |        |         |       |       |          |
| 2 1/4                 | SR   | 2 3/4                | 5 1/2  | 4 1/16  | 5 3/8  | 7 1/8   | 8 3/4   | 10 1/2 | 3 1/2 | 1 5/8  | 5/8 | 9/16   | 4       | 1 7/8 | 2 7/8 | 19.0     |
| 2 7/16                |      |                      |        |         |        |         |         |        |       |        |     |        |         |       |       |          |
| 2 1/2                 |      |                      |        |         |        |         |         |        |       |        |     |        |         |       |       |          |
| 2 11/16               | SR   | 3 1/8                | 6 1/4  | 4 23/32 | 6 1/4  | 8       | 9 7/8   | 12     | 4     | 1 3/4  | 5/8 | 3/4    | 4 1/2   | 2 1/8 | 3     | 26.0     |
| 2 3/4                 |      |                      |        |         |        |         |         |        |       |        |     |        |         |       |       |          |
| 2 15/16               |      |                      |        |         |        |         |         |        |       |        |     |        |         |       |       |          |
| 3                     | LN   | 3 3/4                | 7 1/2  | 5 7/16  | 7 1/2  | 9 11/16 | 11 7/16 | 14     | 4 1/2 | 2 1/8  | 3/4 | 11/16  | 5       | 2 3/8 | 3 5/8 | 44.0     |
| 3 3/16                |      |                      |        |         |        |         |         |        |       |        |     |        |         |       |       |          |
| 3 7/16                |      |                      |        |         |        |         |         |        |       |        |     |        |         |       |       |          |
| 3 1/2                 | LN   | 4 1/4                | 8 1/2  | 5 15/16 | 8 1/2  | 10 7/16 | 12 7/8  | 15 1/4 | 4 1/2 | 2 7/16 | 3/4 | 7/8    | 6 1/4   | 2 1/4 | 4 1/2 | 65.0     |
| 3 15/16               |      |                      |        |         |        |         |         |        |       |        |     |        |         |       |       |          |
| 4                     |      |                      |        |         |        |         |         |        |       |        |     |        |         |       |       |          |
| 4 7/16                | LN   | 4 3/4                | 9 3/8  | 6 13/32 | 9 1/8  | 11 1/4  | 13 7/8  | 16 5/8 | 4 5/8 | 2 3/4  | 3/4 | 1 1/16 | 6 3/4   | 2 1/2 | 4 5/8 | 81.0     |
| 4 1/2                 |      |                      |        |         |        |         |         |        |       |        |     |        |         |       |       |          |
| 4 15/16               |      |                      |        |         |        |         |         |        |       |        |     |        |         |       |       |          |
| 5                     | LN   | 5 1/2                | 10 7/8 | 7 13/32 | 10 3/4 | 13      | 15 7/8  | 18 1/2 | 5 1/8 | 3 1/8  | 7/8 | 1 1/16 | 7 1/4   | 2 3/4 | 5 1/8 | 132.0    |

Part Numbers are specified by "PBE920" and bore size: Example, **PBE920x 1 3/16"**.  
 Add "F" for Four Bolt Base: Example, **PBE920Fx 2 7/16"**.

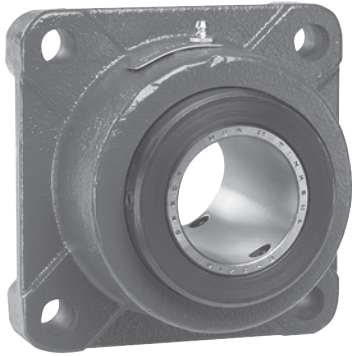


# Tapered Roller Bearings



E920

## FBE920



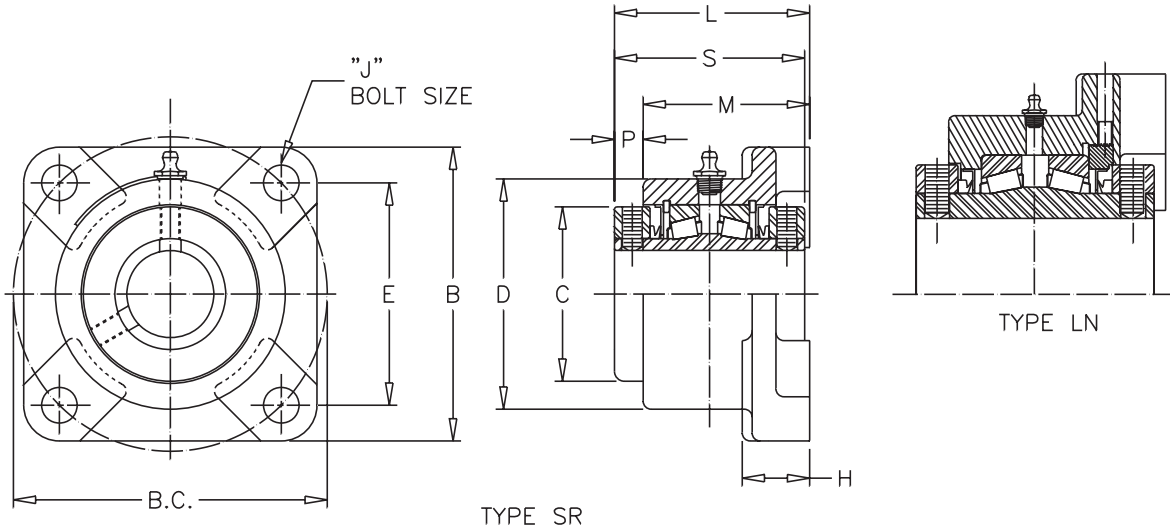
**FLANGE F**  
**BLOCK B**  
**TYPE 'E' E**

**920 9**  
**SET SCREW LOCK 2**  
**TAPERED ROLLER BEARING 0**

**Lock:** Set Screw  
**Seal:** Contact  
**Housing:** Cast Iron  
**Temperatures:** -20° to 200°F  
**Fitting:** 1/8" NPT  
**Bearing Insert:** Tapered Roller

**Dimensional Interchange with most Type E's**

**Load Rating Tables:** Page 115  
**Interchange Tables:** Page 166



| SHAFT DIA. IN.                     | TYPE | Dimensions In Inches |          |         |       |       |        |     |         |         |       |         | UNIT WT. |
|------------------------------------|------|----------------------|----------|---------|-------|-------|--------|-----|---------|---------|-------|---------|----------|
|                                    |      | B                    | B.C      | C       | D     | E     | H      | J   | L       | M       | P     | S       |          |
| 1 3/16<br>1 1/4                    | SR   | 3 3/4                | 4 1/16   | 2 1/4   | 3     | 2 7/8 | 1 1/32 | 3/8 | 2 27/32 | 2 3/8   | 15/32 | 2 25/32 | 4.5      |
| 1 3/8<br>1 7/16                    | SR   | 4 5/8                | 4 61/64  | 2 3/4   | 3 5/8 | 3 1/2 | 1 1/16 | 1/2 | 3 5/64  | 2 5/8   | 29/64 | 3       | 6.7      |
| 1 1/2<br>1 5/8<br>1 11/16          | SR   | 5 3/8                | 5 53/64  | 3 3/16  | 4 1/4 | 4 1/8 | 1 3/16 | 1/2 | 3 29/64 | 3       | 29/64 | 3 3/8   | 10.0     |
| 1 3/4<br>1 15/16<br>2              | SR   | 5 5/8                | 6 3/16   | 3 7/16  | 4 1/2 | 4 3/8 | 1 3/16 | 1/2 | 3 5/8   | 3 1/8   | 1/2   | 3 1/2   | 12.0     |
| 2 3/16<br>2 1/4<br>2 7/16<br>2 1/2 | SR   | 6 1/4                | 6 57/64  | 3 3/4   | 4 7/8 | 4 7/8 | 1 1/4  | 5/8 | 3 7/8   | 3 5/16  | 9/16  | 3 3/4   | 16.0     |
| 2 11/16<br>2 3/4<br>2 15/16<br>3   | SR   | 7 3/4                | 8 31/64  | 4 23/32 | 6 1/8 | 6     | 1 5/8  | 3/4 | 4 11/16 | 3 15/16 | 3/4   | 4 1/2   | 28.0     |
| 3 3/16<br>3 7/16<br>3 1/2          | LN   | 9 1/4                | 9 29/32  | 5 7/16  | 7 1/2 | 7     | 1 7/8  | 3/4 | 5 1/4   | 4 9/16  | 11/16 | 5       | 46.0     |
| 3 15/16<br>4                       | LN   | 10 1/4               | 10 31/32 | 5 15/16 | 8 1/4 | 7 3/4 | 2 3/16 | 7/8 | 6 9/16  | 5 11/16 | 7/8   | 6 1/4   | 64.0     |

Part Numbers are specified by "FBE920" and bore size: Example, **FBE920x 1 3/16"**.

See page 156 for trademark acknowledgments.

Set Screw

E920

**Browning**<sup>®</sup>

**Tapered Roller Bearings**

**TUE920**

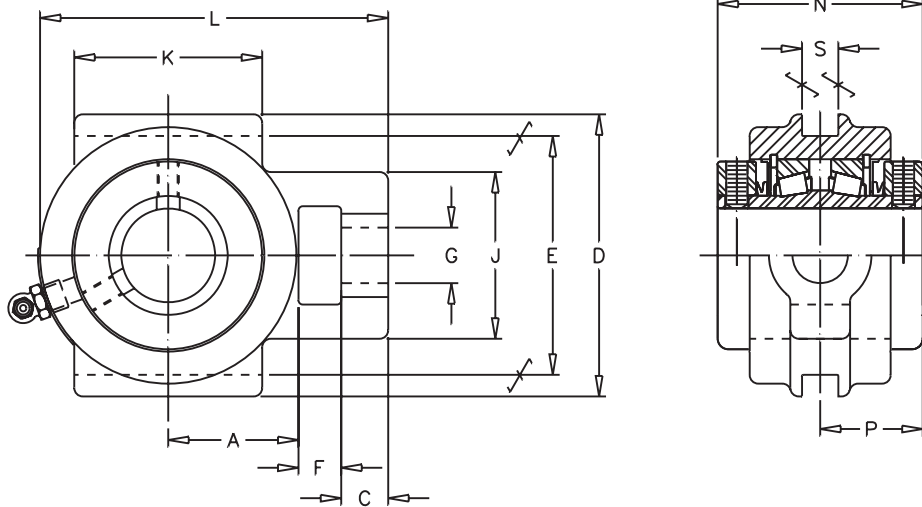
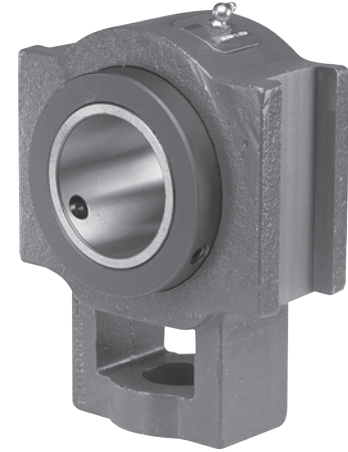
Lock: Set Screw  
 Seal: Contact  
 Housing: Cast Iron  
 Temperatures: -20° to 200°F  
 Fitting: 1/8" NPT  
 Bearing Insert: Tapered Roller

Load Rating Tables: Page 115  
 Interchange Tables: Page 166

**T TAKE**  
**U UP**  
**E TYPE 'E'**

**9 920**  
**2 SET SCREW LOCK**  
**0 TAPERED ROLLER BEARING**

**Dimensional Interchange with most Type E's**



| SHAFT DIA. IN. | Dimensions in Inches |       |        |         |         |         |        |       |          |       |         |         | UNIT WT. |
|----------------|----------------------|-------|--------|---------|---------|---------|--------|-------|----------|-------|---------|---------|----------|
|                | A                    | C     | D      | E       | F       | G       | J      | K     | L        | N     | P       | S       |          |
| *1 3/8         | 1 29/32              | 11/16 | 4 1/8  | 3 1/2   | 5/8     | 13/16   | 2 7/16 | 2 3/4 | 5 3/32   | 3     | 1 1/2   | 17/32   | 6.0      |
| *1 7/16        |                      |       |        |         |         |         |        |       |          |       |         |         |          |
| 1 1/2          | 2 1/8                | 5/8   | 4 3/4  | 4       | 1 1/16  | 1 1/16  | 2 7/8  | 3 1/4 | 6        | 3 3/8 | 1 11/16 | 11/16   | 9.0      |
| 1 11/16        |                      |       |        |         |         |         |        |       |          |       |         |         |          |
| 1 3/4          | 2 1/8                | 3/4   | 4 3/4  | 4       | 1 1/16  | 1 1/16  | 2 7/8  | 3 1/2 | 6 3/16   | 3 1/2 | 1 3/4   | 11/16   | 12.0     |
| 1 15/16        |                      |       |        |         |         |         |        |       |          |       |         |         |          |
| 2              |                      |       |        |         |         |         |        |       |          |       |         |         |          |
| 2 3/16         | 2 3/8                | 3/4   | 5 1/4  | 4 1/2   | 1 3/16  | 1 3/16  | 3 1/2  | 3 3/4 | 6 13/16  | 3 3/4 | 1 7/8   | 13/16   | 16.0     |
| 2 7/16         |                      |       |        |         |         |         |        |       |          |       |         |         |          |
| 2 1/2          | 2 3/4                | 7/8   | 5 7/8  | 5 1/8   | 1 5/16  | 1 5/16  | 3 3/4  | 4 3/4 | 7 15/16  | 4     | 2       | 1 1/16  | 21.0     |
| 2 11/16        |                      |       |        |         |         |         |        |       |          |       |         |         |          |
| 2 3/4          | 3                    | 1     | 6 3/4  | 5 15/16 | 1 9/16  | 1 9/16  | 4 1/4  | 4 3/4 | 8 3/4    | 4 1/2 | 2 1/4   | 1 13/16 | 30.0     |
| 2 15/16        |                      |       |        |         |         |         |        |       |          |       |         |         |          |
| 3 7/16         | 3 5/8                | 1     | 7 5/8  | 6 13/16 | 1 13/16 | 1 13/16 | 4 7/8  | 6 1/4 | 10 7/16  | 5     | 2 1/2   | 1 13/16 | 44.0     |
| 3 15/16        | 4 1/8                | 1 1/8 | 9 7/16 | 8 5/8   | 2 1/8   | 2 3/16  | 5 5/8  | 7     | 11 13/16 | 6 1/4 | 3 1/8   | 2 1/16  | 70.0     |
| 4 7/16         | 4 1/8                | 1 1/8 | 9 7/16 | 8 5/8   | 2 1/8   | 2 3/16  | 5 5/8  | 7     | 11 13/16 | 6 3/4 | 3 3/8   | 2 1/16  | 74.0     |

Part Numbers are specified by "TUE920" and bore size: Example, **TUE920x 1 3/16"**.  
 These Take-Up Bearings are to be used with Take-Up Frames shown on page 113.  
 Bearing unit and frame must be ordered separately.  
 \* Take-Up frames not available in these sizes.





# Tapered Roller Bearings

## Tapered Roller Bearing 900 and 950 Series

This chart displays the Browning 900 and 950 Series Tapered Roller Bearing's load capacity for a given L10 life, speed and shaft size. Values in the table represent loads at ideal conditions. The shaded areas indicate the maximum speed for the 950 series only. Select 950 Series where aligning capability is required. For combined load determination, see **THE BEARING SELECTION SECTION**, page 268. Areas designated by “-” exceed maximum speed value.

### Match Bore Size

| SIZE    | "K" FACTOR | 2 ROW RATING | 1 ROW RATING | THRUST RATING* | L10 HOURS | REVOLUTIONS PER MINUTE |       |       |       |       |       |       |      |      |      |      |      |      |
|---------|------------|--------------|--------------|----------------|-----------|------------------------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|
|         |            |              |              |                |           | 50                     | 100   | 150   | 250   | 500   | 750   | 1000  | 1500 | 1750 | 2000 | 2500 | 3000 | 3500 |
| 1       | 1.42       | 3700         | 2130         | 1500           | 5000      | 4179                   | 4179  | 4179  | 3908  | 3174  | 2811  | 2578  | 2283 | 2180 | 2094 | 1959 | 1854 | 1771 |
|         |            |              |              |                | 10000     | 4179                   | 4179  | 3700  | 3174  | 2578  | 2283  | 2094  | 1854 | 1771 | 1591 | 1506 | 1438 |      |
|         |            |              |              |                | 30000     | 3700                   | 3005  | 2611  | 2283  | 1854  | 1642  | 1506  | 1334 | 1273 | 1223 | 1144 | 1083 | 1034 |
|         |            |              |              |                | 50000     | 3174                   | 2578  | 2283  | 1959  | 1591  | 1409  | 1292  | 1144 | 1093 | 1050 | 982  | 929  | 887  |
|         |            |              |              |                | 100000    | 2578                   | 2094  | 1854  | 1591  | 1292  | 1144  | 1050  | 929  | 887  | 853  | 797  | 755  | 721  |
| 1 3/16  | 1.53       | 5130         | 2950         | 1930           | 5000      | 5794                   | 5794  | 5794  | 5418  | 4401  | 3897  | 3575  | 3165 | 3022 | 2904 | 2716 | 2571 | 2455 |
|         |            |              |              |                | 10000     | 5794                   | 5794  | 5130  | 4401  | 3575  | 3165  | 2904  | 2571 | 2455 | 2358 | 2206 | 2088 | 1944 |
|         |            |              |              |                | 30000     | 5130                   | 4167  | 3690  | 3165  | 2571  | 2277  | 2088  | 1849 | 1766 | 1696 | 1586 | 1502 | 1434 |
|         |            |              |              |                | 50000     | 4401                   | 3575  | 3165  | 2716  | 2206  | 1953  | 1792  | 1586 | 1515 | 1455 | 1361 | 1289 | 1230 |
|         |            |              |              |                | 100000    | 3575                   | 2904  | 2571  | 2206  | 1792  | 1586  | 1455  | 1289 | 1230 | 1182 | 1106 | 1047 | 999  |
| 1 7/16  | 1.46       | 5930         | 3410         | 2330           | 5000      | 6697                   | 6697  | 6697  | 6263  | 5087  | 4505  | 4132  | 3659 | 3494 | 3356 | 3139 | 2972 | —    |
|         |            |              |              |                | 10000     | 6697                   | 6697  | 5930  | 5087  | 4132  | 3659  | 3356  | 2972 | 2838 | 2726 | 2550 | 2414 | —    |
|         |            |              |              |                | 30000     | 5930                   | 4817  | 4265  | 3659  | 2972  | 2632  | 2414  | 2138 | 2041 | 1961 | 1834 | 1736 | —    |
|         |            |              |              |                | 50000     | 5087                   | 4132  | 3659  | 3139  | 2550  | 2258  | 2071  | 1834 | 1751 | 1682 | 1573 | 1490 | —    |
|         |            |              |              |                | 100000    | 4132                   | 3356  | 2972  | 2550  | 2071  | 1834  | 1682  | 1490 | 1422 | 1366 | 1278 | 1210 | —    |
| 1 5/8   | 1.37       | 6050         | 3470         | 2540           | 5000      | 6833                   | 6833  | 6833  | 6390  | 5190  | 4596  | 4216  | 3733 | 3564 | 3424 | 3203 | —    | —    |
|         |            |              |              |                | 10000     | 6833                   | 6833  | 6050  | 5190  | 4216  | 3733  | 3424  | 3032 | 2895 | 2781 | 2601 | —    | —    |
|         |            |              |              |                | 30000     | 6050                   | 4914  | 4351  | 3733  | 3032  | 2685  | 2463  | 2181 | 2082 | 2000 | 1871 | —    | —    |
|         |            |              |              |                | 50000     | 5190                   | 4216  | 3733  | 3203  | 2601  | 2303  | 2113  | 1871 | 1786 | 1716 | 1605 | —    | —    |
|         |            |              |              |                | 100000    | 4216                   | 3424  | 3032  | 2601  | 2113  | 1871  | 1716  | 1520 | 1451 | 1394 | 1304 | —    | —    |
| 1 7/8   | 1.65       | 8550         | 4910         | 2980           | 5000      | 9656                   | 9656  | 8656  | 9031  | 7335  | 6495  | 5958  | 5276 | 5037 | 4839 | —    | —    | —    |
|         |            |              |              |                | 10000     | 9656                   | 9656  | 8550  | 7335  | 5958  | 5276  | 4839  | 4285 | 4091 | 3931 | —    | —    | —    |
|         |            |              |              |                | 30000     | 8550                   | 6945  | 6149  | 5276  | 4285  | 3794  | 3481  | 3082 | 2943 | 2827 | —    | —    | —    |
|         |            |              |              |                | 50000     | 7335                   | 5958  | 5276  | 4526  | 3676  | 3255  | 2986  | 2644 | 2525 | 2425 | —    | —    | —    |
|         |            |              |              |                | 100000    | 5958                   | 4839  | 4285  | 3676  | 2986  | 2644  | 2425  | 2148 | 2051 | 1970 | —    | —    | —    |
| 2 3/16  | 1.51       | 9090         | 5220         | 3470           | 5000      | 10266                  | 10266 | 10266 | 9601  | 7798  | 6905  | 6334  | 5609 | 5355 | 5145 | —    | —    | —    |
|         |            |              |              |                | 10000     | 10266                  | 10266 | 9090  | 7798  | 6334  | 5609  | 5145  | 4556 | 4350 | 4179 | —    | —    | —    |
|         |            |              |              |                | 30000     | 9090                   | 7383  | 6538  | 5609  | 4556  | 4034  | 3700  | 3277 | 3129 | 3006 | —    | —    | —    |
|         |            |              |              |                | 50000     | 7798                   | 6334  | 5609  | 4812  | 3908  | 3461  | 3175  | 2811 | 2684 | 2579 | —    | —    | —    |
|         |            |              |              |                | 100000    | 6334                   | 5145  | 4556  | 3908  | 3175  | 2811  | 2579  | 2283 | 2180 | 2095 | —    | —    | —    |
| 2 1/4   | 1.45       | 9290         | 5340         | 3670           | 5000      | 10492                  | 10492 | 10492 | 9812  | 7970  | 7057  | 6474  | 5732 | 5473 | —    | —    | —    | —    |
|         |            |              |              |                | 10000     | 10492                  | 10492 | 9290  | 7970  | 6474  | 5732  | 5258  | 4656 | 4446 | —    | —    | —    | —    |
|         |            |              |              |                | 30000     | 9290                   | 7546  | 6682  | 5732  | 4656  | 4123  | 3782  | 3349 | 3197 | —    | —    | —    | —    |
|         |            |              |              |                | 50000     | 7970                   | 6474  | 5732  | 4918  | 3994  | 3537  | 3245  | 2873 | 2743 | —    | —    | —    | —    |
|         |            |              |              |                | 100000    | 6474                   | 5258  | 4656  | 3994  | 3245  | 2873  | 2635  | 2334 | 2228 | —    | —    | —    | —    |
| 2 11/16 | 1.30       | 9600         | 5510         | 4260           | 5000      | 10842                  | 10842 | 10842 | 10140 | 8236  | 7293  | 6690  | 5924 | —    | —    | —    | —    | —    |
|         |            |              |              |                | 10000     | 10842                  | 10842 | 9600  | 8236  | 6690  | 5924  | 5434  | 4811 | —    | —    | —    | —    | —    |
|         |            |              |              |                | 30000     | 9600                   | 7798  | 6905  | 5924  | 4811  | 4260  | 3908  | 3460 | —    | —    | —    | —    | —    |
|         |            |              |              |                | 50000     | 8236                   | 6690  | 5924  | 5082  | 4128  | 3655  | 3353  | 2969 | —    | —    | —    | —    | —    |
|         |            |              |              |                | 100000    | 6690                   | 5434  | 4811  | 4128  | 3353  | 2969  | 2723  | 2411 | —    | —    | —    | —    | —    |
| 3       | 1.31       | 14500        | 8330         | 6340           | 5000      | 16376                  | 16376 | 16376 | 15315 | 12440 | 11015 | 10104 | —    | —    | —    | —    | —    | —    |
|         |            |              |              |                | 10000     | 16376                  | 16376 | 14500 | 12440 | 10104 | 8947  | 8207  | —    | —    | —    | —    | —    | —    |
|         |            |              |              |                | 30000     | 14500                  | 11778 | 10429 | 8947  | 7267  | 6435  | 5903  | —    | —    | —    | —    | —    | —    |
|         |            |              |              |                | 50000     | 12440                  | 10104 | 8947  | 7676  | 6235  | 5521  | 5064  | —    | —    | —    | —    | —    | —    |
|         |            |              |              |                | 100000    | 10104                  | 8207  | 7267  | 6235  | 5064  | 4484  | 4113  | —    | —    | —    | —    | —    | —    |
| 3 7/16  | 1.19       | 15300        | 8790         | 7410           | 5000      | 17279                  | 17279 | 17279 | 16160 | 13126 | 11623 | 10662 | —    | —    | —    | —    | —    | —    |
|         |            |              |              |                | 10000     | 17279                  | 17279 | 15300 | 13126 | 10662 | 9441  | 8660  | —    | —    | —    | —    | —    | —    |
|         |            |              |              |                | 30000     | 15300                  | 12427 | 11004 | 9441  | 7668  | 6790  | 6228  | —    | —    | —    | —    | —    | —    |
|         |            |              |              |                | 50000     | 13126                  | 10104 | 9441  | 8099  | 6579  | 5825  | 5344  | —    | —    | —    | —    | —    | —    |
|         |            |              |              |                | 100000    | 10662                  | 8207  | 7668  | 6579  | 5344  | 4732  | 4340  | —    | —    | —    | —    | —    | —    |
| 3 15/16 | 1.45       | 18400        | 10600        | 7270           | 5000      | 20780                  | 20780 | 20780 | 19434 | 15786 | 13978 | 12822 | —    | —    | —    | —    | —    | —    |
|         |            |              |              |                | 10000     | 20780                  | 20780 | 18400 | 15786 | 12822 | 11353 | 10415 | —    | —    | —    | —    | —    | —    |
|         |            |              |              |                | 30000     | 18400                  | 14945 | 13234 | 11353 | 9222  | 8166  | 7490  | —    | —    | —    | —    | —    | —    |
|         |            |              |              |                | 50000     | 15786                  | 12822 | 11353 | 9740  | 7912  | 7005  | 6426  | —    | —    | —    | —    | —    | —    |
|         |            |              |              |                | 100000    | 12822                  | 10415 | 9222  | 7912  | 6426  | 5690  | 5220  | —    | —    | —    | —    | —    | —    |
| 4 7/16  | 1.91       | 25200        | 14500        | 7550           | 5000      | 28460                  | 28460 | 28460 | 26617 | 21620 | 19143 | 17561 | —    | —    | —    | —    | —    | —    |
|         |            |              |              |                | 10000     | 28460                  | 28460 | 25200 | 21620 | 17561 | 15549 | 14264 | —    | —    | —    | —    | —    | —    |
|         |            |              |              |                | 30000     | 25200                  | 20469 | 18124 | 15549 | 12630 | 11183 | 10259 | —    | —    | —    | —    | —    | —    |
|         |            |              |              |                | 50000     | 21620                  | 17561 | 15549 | 13340 | 10835 | 9594  | 8801  | —    | —    | —    | —    | —    | —    |
|         |            |              |              |                | 100000    | 17561                  | 14264 | 12630 | 10835 | 8801  | 7793  | 7149  | —    | —    | —    | —    | —    | —    |
| 4 15/16 | 1.82       | 26600        | 15300        | 8390           | 5000      | 30041                  | 30041 | 30041 | 28095 | 22821 | 20207 | —     | —    | —    | —    | —    | —    | —    |
|         |            |              |              |                | 10000     | 30041                  | 30041 | 26600 | 22821 | 18536 | 16413 | —     | —    | —    | —    | —    | —    | —    |
|         |            |              |              |                | 30000     | 26600                  | 21606 | 19131 | 16413 | 13332 | 11805 | —     | —    | —    | —    | —    | —    | —    |
|         |            |              |              |                | 50000     | 22821                  | 18536 | 16413 | 14081 | 11437 | 10127 | —     | —    | —    | —    | —    | —    | —    |
|         |            |              |              |                | 100000    | 18536                  | 15056 | 13332 | 11437 | 9290  | 8226  | —     | —    | —    | —    | —    | —    | —    |



# Tapered Roller Bearings

## Tapered Roller Bearing 920 and 970 Series

This chart displays the Browning 920 and 970 Series Tapered Roller Bearing's load capacity for a given L10 life, speed and shaft size. Values in the table represent loads at ideal conditions. The shaded areas indicate the maximum speed for the 970 series only. For combined load determination, see **THE BEARING SELECTION SECTION**, page 268. Areas designated by "-" exceed maximum speed value.

Match Bore Size

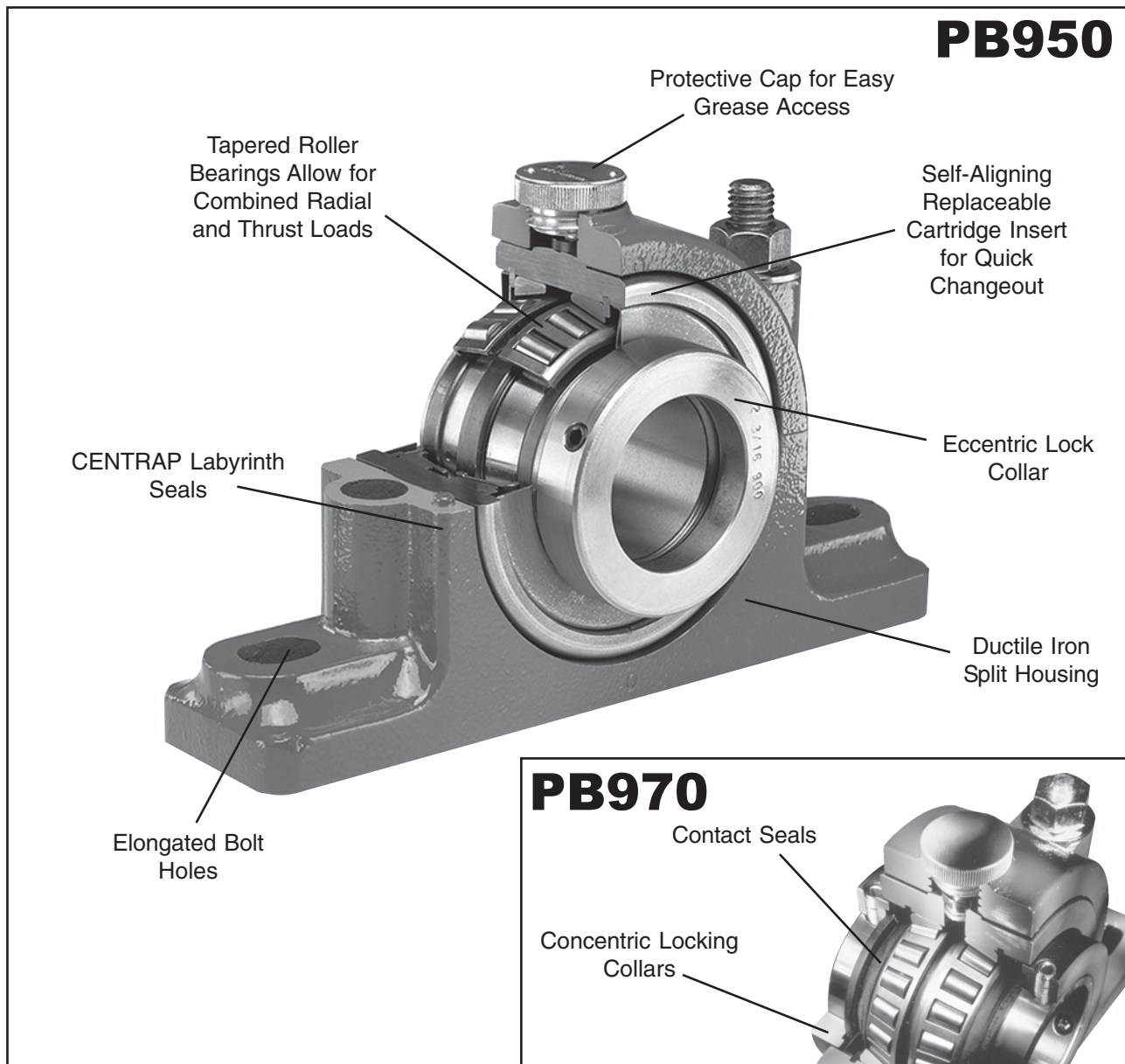
| SIZE                      | "K" FACTOR | 2 ROW RATING | 1 ROW RATING | THRUST RATING* | HOURS  | REVOLUTIONS PER MINUTE |       |       |       |       |       |       |       |      |      |      |      |      |      |  |
|---------------------------|------------|--------------|--------------|----------------|--------|------------------------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|--|
|                           |            |              |              |                |        | 50                     | 100   | 150   | 250   | 500   | 750   | 1000  | 1500  | 1750 | 2000 | 2500 | 3000 | 3500 | 4000 |  |
| 1 3/16<br>1 1/4           | 1.23       | 2975         | 1710         | 1390           | 5000   | 3360                   | 3360  | 3360  | 3142  | 2552  | 2260  | 2073  | 1836  | 1753 | 1684 | 1575 | 1491 | 1424 | 1368 |  |
|                           |            |              |              |                | 10000  | 3360                   | 3360  | 2975  | 2552  | 2073  | 1836  | 1491  | 1424  | 1368 | 1279 | 1211 | 1156 | 1111 |      |  |
|                           |            |              |              |                | 30000  | 2975                   | 2416  | 2140  | 1836  | 1491  | 1320  | 1211  | 1072  | 1024 | 984  | 920  | 871  | 832  | 799  |  |
|                           |            |              |              |                | 50000  | 2552                   | 2073  | 1836  | 1575  | 1279  | 1133  | 1039  | 920   | 878  | 844  | 789  | 747  | 714  | 685  |  |
|                           |            |              |              |                | 100000 | 2073                   | 1684  | 1491  | 1279  | 1039  | 920   | 844   | 747   | 714  | 685  | 641  | 607  | 580  | 556  |  |
| 1 3/8<br>1 7/16           | 1.31       | 4760         | 2740         | 2080           | 5000   | 5376                   | 5376  | 5376  | 5028  | 4084  | 3616  | 3317  | 2937  | 2804 | 2694 | 2520 | 2386 | 2278 | 2188 |  |
|                           |            |              |              |                | 10000  | 5376                   | 5376  | 4760  | 4084  | 3317  | 2937  | 2694  | 2386  | 2278 | 2188 | 2047 | 1938 | 1850 | —    |  |
|                           |            |              |              |                | 30000  | 4760                   | 3866  | 3424  | 2937  | 2386  | 2112  | 1938  | 1716  | 1638 | 1574 | 1472 | 1394 | 1331 | —    |  |
|                           |            |              |              |                | 50000  | 4084                   | 3317  | 2937  | 2520  | 2047  | 1812  | 1662  | 1472  | 1406 | 1350 | 1263 | 1196 | 1142 | —    |  |
|                           |            |              |              |                | 100000 | 3317                   | 26741 | 2386  | 2047  | 1662  | 1472  | 1350  | 1196  | 1142 | 1097 | 1026 | 971  | 927  | —    |  |
| 1 1/2<br>1 11/16          | 1.36       | 6140         | 3530         | 2600           | 5000   | 6934                   | 6934  | 6934  | 6485  | 5268  | 4664  | 4279  | 3789  | 3617 | 3475 | 3250 | 3077 | —    | —    |  |
|                           |            |              |              |                | 10000  | 6934                   | 6934  | 6140  | 5268  | 4279  | 3789  | 3475  | 3077  | 2938 | 2823 | 2640 | 2500 | —    | —    |  |
|                           |            |              |              |                | 30000  | 6140                   | 4987  | 4416  | 3789  | 3077  | 2725  | 2500  | 2213  | 2113 | 2030 | 1899 | 1798 | —    | —    |  |
|                           |            |              |              |                | 50000  | 5268                   | 4279  | 3789  | 3250  | 2640  | 2338  | 2144  | 1899  | 1813 | 1742 | 1629 | 1542 | —    | —    |  |
|                           |            |              |              |                | 100000 | 4279                   | 3475  | 3077  | 2640  | 2144  | 1899  | 1742  | 1542  | 1473 | 1415 | 1323 | 1253 | —    | —    |  |
| 1 3/4<br>1 15/16<br>2     | 1.83       | 8070         | 4640         | 2540           | 5000   | 9114                   | 9114  | 9114  | 8524  | 6923  | 6130  | 5624  | 4979  | 4754 | 4568 | 4272 | —    | —    |      |  |
|                           |            |              |              |                | 10000  | 9114                   | 9114  | 8070  | 6923  | 5624  | 4979  | 4568  | 4045  | 3862 | 3710 | 3470 | —    | —    |      |  |
|                           |            |              |              |                | 30000  | 8070                   | 6555  | 5804  | 4979  | 4045  | 3581  | 3285  | 2909  | 2777 | 2668 | 2496 | —    | —    |      |  |
|                           |            |              |              |                | 50000  | 6923                   | 5624  | 4979  | 4272  | 3470  | 3072  | 2818  | 2496  | 2383 | 2289 | 2141 | —    | —    |      |  |
|                           |            |              |              |                | 100000 | 5624                   | 4568  | 4045  | 3470  | 2818  | 2496  | 2289  | 2027  | 1935 | 1859 | 1739 | —    | —    |      |  |
| 2 3/16                    | 1.65       | 8570         | 4910         | 2980           | 5000   | 9679                   | 9679  | 9679  | 9052  | 7352  | 6510  | 5972  | 5288  | 5049 | 4851 | 4537 | —    | —    |      |  |
|                           |            |              |              |                | 10000  | 9679                   | 9679  | 8570  | 7352  | 5972  | 5288  | 4851  | 4295  | 4101 | 3940 | 3685 | —    | —    |      |  |
|                           |            |              |              |                | 30000  | 8570                   | 6961  | 6164  | 5288  | 4295  | 3803  | 3489  | 3089  | 2950 | 2834 | 2650 | —    | —    |      |  |
|                           |            |              |              |                | 50000  | 7352                   | 5972  | 5288  | 4537  | 3685  | 3263  | 2993  | 2650  | 2530 | 2431 | 2274 | —    | —    |      |  |
|                           |            |              |              |                | 100000 | 5972                   | 4851  | 4295  | 3685  | 2993  | 2650  | 2431  | 2153  | 2055 | 1975 | 1847 | —    | —    |      |  |
| 2 1/4<br>2 7/16<br>2 1/2  | 1.51       | 9030         | 5220         | 3470           | 5000   | 10198                  | 10198 | 10198 | 9538  | 7747  | 6860  | 6293  | 5572  | 5320 | 5111 | —    | —    |      |      |  |
|                           |            |              |              |                | 10000  | 10198                  | 10198 | 9030  | 7747  | 6293  | 5572  | 5111  | 4526  | 4321 | 4152 | —    | —    |      |      |  |
|                           |            |              |              |                | 30000  | 9030                   | 7335  | 6495  | 5572  | 4526  | 4007  | 3676  | 3255  | 3108 | 2986 | —    | —    |      |      |  |
|                           |            |              |              |                | 50000  | 7747                   | 6293  | 5572  | 4780  | 3883  | 3438  | 3154  | 2793  | 2666 | 2562 | —    | —    |      |      |  |
|                           |            |              |              |                | 100000 | 6293                   | 5111  | 4526  | 3883  | 3154  | 2793  | 2562  | 2268  | 2166 | 2081 | —    | —    |      |      |  |
| 2 11/16<br>2 15/16<br>3   | 1.30       | 9630         | 5510         | 4260           | 5000   | 10876                  | 10876 | 10876 | 10171 | 8262  | 7316  | 6711  | 5942  | 5674 | —    | —    |      |      |      |  |
|                           |            |              |              |                | 10000  | 10876                  | 10876 | 9630  | 8262  | 6711  | 5942  | 5451  | 4826  | 4608 | —    | —    |      |      |      |  |
|                           |            |              |              |                | 30000  | 9630                   | 7822  | 6926  | 5942  | 4826  | 4274  | 3920  | 3471  | 3314 | —    | —    |      |      |      |  |
|                           |            |              |              |                | 50000  | 8262                   | 6711  | 5942  | 5098  | 4141  | 3666  | 3363  | 2978  | 2843 | —    | —    |      |      |      |  |
|                           |            |              |              |                | 100000 | 6711                   | 5451  | 4826  | 4141  | 3363  | 2978  | 2732  | 2419  | 2310 | —    | —    |      |      |      |  |
| 3 3/16<br>3 7/16<br>3 1/2 | 1.19       | 15320        | 8790         | 7410           | 5000   | 17302                  | 17302 | 17302 | 16181 | 13143 | 11638 | 10676 | 9453  | —    | —    |      |      |      |      |  |
|                           |            |              |              |                | 10000  | 17302                  | 17302 | 15320 | 13143 | 10676 | 9453  | 8671  | 7678  | —    | —    |      |      |      |      |  |
|                           |            |              |              |                | 30000  | 15320                  | 12444 | 11018 | 9453  | 7678  | 6799  | 6273  | 5522  | —    | —    |      |      |      |      |  |
|                           |            |              |              |                | 50000  | 13143                  | 10676 | 9453  | 8110  | 6587  | 5833  | 5351  | 4738  | —    | —    |      |      |      |      |  |
|                           |            |              |              |                | 100000 | 10676                  | 8671  | 7678  | 6587  | 5351  | 4738  | 4346  | 3848  | —    | —    |      |      |      |      |  |
| 3 15/16<br>4              | 1.23       | 20980        | 12100        | 9800           | 5000   | 23694                  | 23694 | 23694 | 22159 | 17999 | 15938 | 14620 | 12945 | —    | —    |      |      |      |      |  |
|                           |            |              |              |                | 10000  | 23694                  | 23694 | 20980 | 17999 | 14620 | 12945 | 11875 | 10515 | —    | —    |      |      |      |      |  |
|                           |            |              |              |                | 30000  | 20980                  | 17041 | 15089 | 12945 | 10515 | 9311  | 8441  | 7563  | —    | —    |      |      |      |      |  |
|                           |            |              |              |                | 50000  | 17999                  | 14620 | 12945 | 11106 | 9021  | 7988  | 7327  | 6488  | —    | —    |      |      |      |      |  |
|                           |            |              |              |                | 100000 | 14620                  | 11875 | 10515 | 9021  | 7327  | 6488  | 5952  | 5270  | —    | —    |      |      |      |      |  |
| 4 7/16<br>4 1/2           | 1.13       | 25750        | 14800        | 13100          | 5000   | 29081                  | 29081 | 29081 | 27198 | 22091 | 19561 | 17944 | —     | —    |      |      |      |      |      |  |
|                           |            |              |              |                | 10000  | 29081                  | 29081 | 25750 | 22091 | 17944 | 15889 | 14575 | —     | —    |      |      |      |      |      |  |
|                           |            |              |              |                | 30000  | 25750                  | 20915 | 18520 | 15889 | 12906 | 11427 | 10483 | —     | —    |      |      |      |      |      |  |
|                           |            |              |              |                | 50000  | 22091                  | 17944 | 15889 | 13631 | 11072 | 9804  | 8993  | —     | —    |      |      |      |      |      |  |
|                           |            |              |              |                | 100000 | 17944                  | 14575 | 12906 | 11072 | 8993  | 7963  | 7305  | —     | —    |      |      |      |      |      |  |
| 4 15/16<br>5              | 1.27       | 35520        | 20400        | 16000          | 5000   | 40114                  | 40114 | 40114 | 37517 | 30473 | 26983 | 24752 | —     | —    |      |      |      |      |      |  |
|                           |            |              |              |                | 10000  | 40114                  | 40114 | 35520 | 30473 | 24752 | 21917 | 20105 | —     | —    |      |      |      |      |      |  |
|                           |            |              |              |                | 30000  | 35520                  | 28851 | 25547 | 21917 | 17802 | 15763 | 14460 | —     | —    |      |      |      |      |      |  |
|                           |            |              |              |                | 50000  | 30473                  | 24752 | 21917 | 18803 | 15273 | 13524 | 12405 | —     | —    |      |      |      |      |      |  |
|                           |            |              |              |                | 100000 | 24752                  | 20105 | 17802 | 15273 | 12405 | 10985 | 10076 | —     | —    |      |      |      |      |      |  |

See page 156 for trademark acknowledgments.

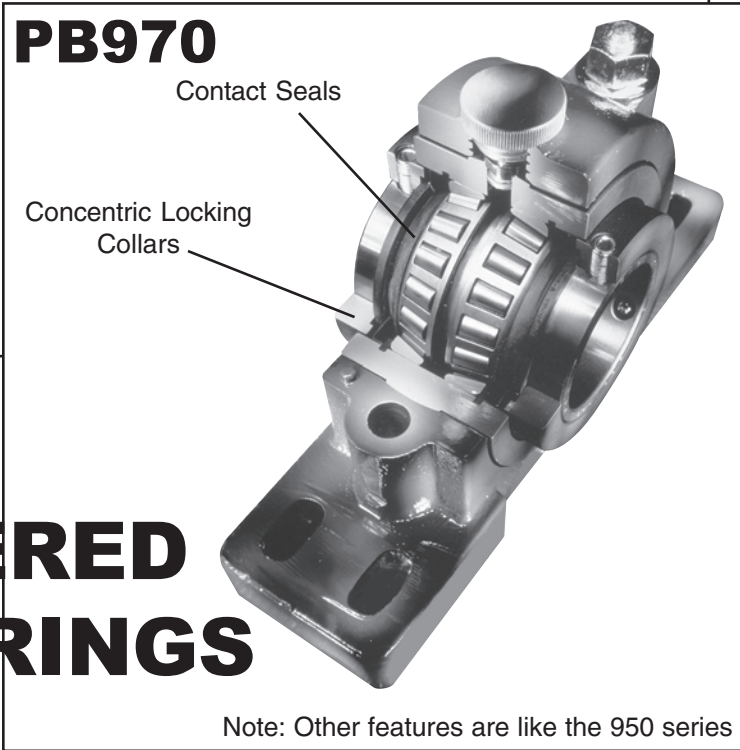




# Tapered Roller Bearings



## PB950



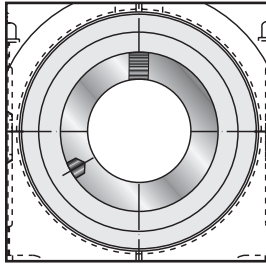
## PB970

# BROWNING 950/970 TAPERED ROLLER BEARINGS FEATURES/BENEFITS

Note: Other features are like the 950 series



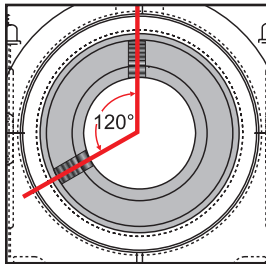
## LOCKING



### 950 ECCENTRIC LOCK-

Browning 950 Series roller bearings have an eccentric locking collar that mates with the inner race for improved shaft hold. One end of the inner race is machined to a cam form and the mating lock collar has an off center counterbore. The wedge

action of the collar on the inner race secures the inner race to the shaft. This locking method tends to tighten and grip the shaft and not leave burrs as with setscrew collars. **NOTE: Eccentric collars are not recommended for reversing applications.**

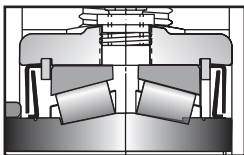


### 970 SETSCREW LOCK-

This locking device has two rugged lock collars with two setscrews to anchor the bearing to the inner race. The elastic deflection of the collar serves to help retain the bearing hold to the shaft. Double locking collars with setscrews at 120°

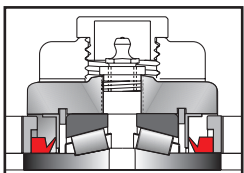
provide improved holding power and shaft lock, especially in applications with vibration or unidirectional loads. Double extended inner races provide improved shaft support – the load is distributed evenly over a wide area. Browning lock collars are black oxide coated for corrosion resistance.

## SEALS



### 950 SEALS - CENTRAP

Labyrinth seals contain an angled flinger that rotates with the shaft, creating a centrifugal force to help keep out contamination. Excess grease purges from the seal to help remove contaminants caught in the lubricant and prevent seal damage from over lubrication. This non-contact labyrinth design reduces drag, saves energy and normally cannot be blown by over greasing.

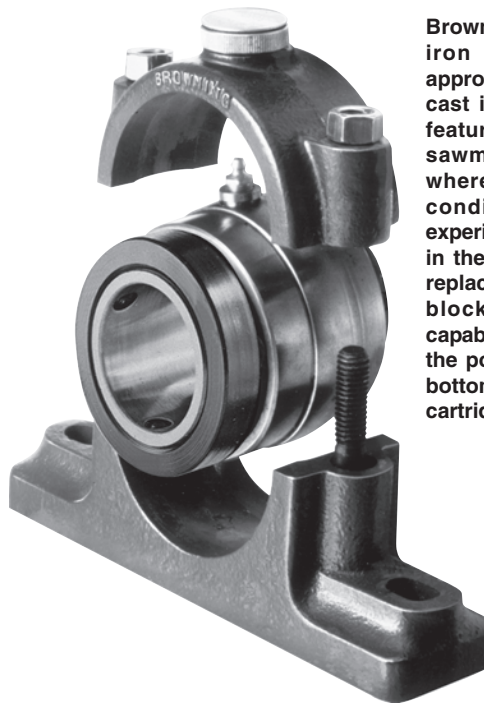


**970 SEALS** -The rubber contact face seal is designed to retain lubricant and help exclude contaminants. The seal is designed with a long flexible face that seals axially against the counterface. The contact seal is self purging. It retains low torque characteristics and rotates with the shaft to help reduce contaminant build-up on the seal. Its low friction reduces heat generation and wear.

See page 156 for trademark acknowledgments.

# BROWNING TAPERED ROLLER BEARINGS 950/970 SERIES FEATURES/BENEFITS

## HOUSINGS



Browning 950/970 Series ductile iron split housings are approximately twice as strong as cast iron. This is an important feature in applications such as sawmills, aggregate and steel where heavy loads and shock conditions are normally experienced. Elongated bolt holes in the housing base permit easy replacement of competitive pillow blocks and more adjustment capability. Guide pins also reduce the possibility of having top and bottom mismatch when replacing cartridge inserts.

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|                            |     |
|----------------------------|-----|
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**PB950**

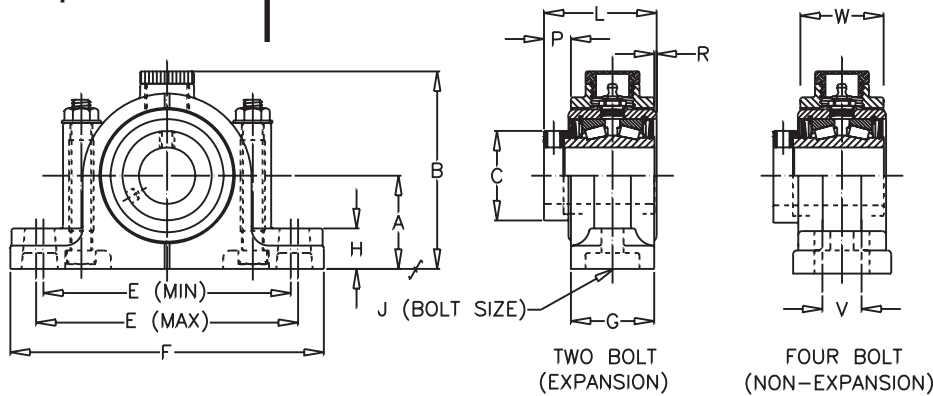
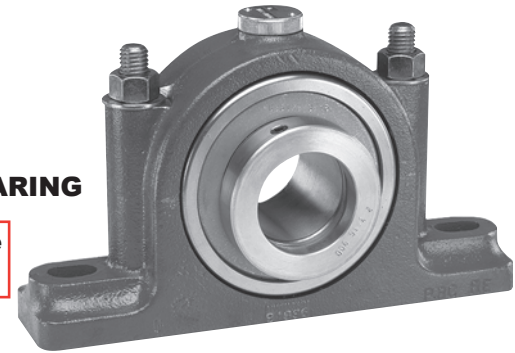
Lock: Eccentric  
 Seal: CENTRAP Labyrinth  
 Housing: Ductile Iron  
 Temperatures: -20°F to 200°F  
 Self Aligning: ±1 1/2°  
 Fitting: 1/8" NPT  
 Bearing Insert: Tapered Roller  
 (C950 Cartridge)

Load Rating Tables: Page 121  
 Interchange Tables: Page 166

Expansion and Non-Expansion

**P PILLOW**  
**B BLOCK**  
**9 950**  
**5 ECCENTRIC LOCK**  
**0 TAPERED ROLLER BEARING**

**Dimensional Interchange with Type K Units**



| SHAFT DIA. IN.        | Dimensions In Inches |          |         |          |          |        |       |         |       |         |        |      |       |       | UNIT WT. |
|-----------------------|----------------------|----------|---------|----------|----------|--------|-------|---------|-------|---------|--------|------|-------|-------|----------|
|                       | A                    | B        | C       | E        |          | F      | G     | H       | J     | L       | P      | R    | V     | W     |          |
|                       |                      |          |         | MIN.     | MAX.     |        |       |         |       |         |        |      |       |       |          |
| <b>TWO BOLT BASE</b>  |                      |          |         |          |          |        |       |         |       |         |        |      |       |       |          |
| 1 7/16                |                      |          |         |          |          |        |       |         |       |         |        |      |       |       |          |
| 1 1/2                 | 2 3/8                | 5 1/32   | 2 3/16  | 6 5/16   | 6 11/16  | 8      | 2 1/8 | 1 1/32  | 1/2   | 2 7/8   | 11/16  | 1/16 | -     | -     | 11.0     |
| 1 5/8                 |                      |          |         |          |          |        |       |         |       |         |        |      |       |       |          |
| 1 11/16               | 2 5/8                | 5 13/32  | 2 1/2   | 7 1/16   | 7 11/16  | 9      | 2 1/4 | 1 5/32  | 1/2   | 2 15/16 | 5/8    | 1/8  | -     | -     | 13.5     |
| 1 3/4                 |                      |          |         |          |          |        |       |         |       |         |        |      |       |       |          |
| 1 7/8                 |                      |          |         |          |          |        |       |         |       |         |        |      |       |       |          |
| 1 15/16               | 2 7/8                | 6 1/16   | 3       | 7 7/8    | 8 1/2    | 10     | 2 3/8 | 1 9/32  | 5/8   | 3 5/32  | 3/4    | 3/32 | -     | -     | 18.4     |
| 2                     |                      |          |         |          |          |        |       |         |       |         |        |      |       |       |          |
| 2 1/8                 |                      |          |         |          |          |        |       |         |       |         |        |      |       |       |          |
| 2 3/16                | 3                    | 6 13/32  | 3 3/8   | 8 1/2    | 9 1/4    | 10 7/8 | 2 1/2 | 1 9/32  | 5/8   | 3 7/32  | 23/64  | 3/32 | -     | -     | 21.7     |
| 2 1/4                 |                      |          |         |          |          |        |       |         |       |         |        |      |       |       |          |
| 2 7/16                | 3 1/4                | 6 25/32  | 3 3/8   | 9 3/64   | 10 5/16  | 12     | 2 1/2 | 1 13/32 | 5/8   | 3 21/64 | 51/64  | 5/64 | -     | -     | 26.0     |
| 2 1/2                 |                      |          |         |          |          |        |       |         |       |         |        |      |       |       |          |
| 2 11/16               |                      |          |         |          |          |        |       |         |       |         |        |      |       |       |          |
| 2 3/4                 | 3 3/4                | 7 21/32  | 4       | 10 3/16  | 11 9/16  | 13 3/8 | 2 5/8 | 1 13/32 | 3/4   | 3 15/32 | 27/32  | 3/32 | -     | -     | 33.4     |
| 2 15/16               |                      |          |         |          |          |        |       |         |       |         |        |      |       |       |          |
| 3                     |                      |          |         |          |          |        |       |         |       |         |        |      |       |       |          |
| 3 3/16                | 3 3/4                | 7 15/16  | 4 1/4   | 10 11/16 | 12 3/64  | 13 7/8 | 3 1/8 | 1 13/32 | 3/4   | 3 31/32 | 27/32  | 3/32 | -     | -     | 41.7     |
| 3 7/16                |                      |          |         |          |          |        |       |         |       |         |        |      |       |       |          |
| 3 1/2                 | 4 1/2                | 9 5/32   | 4 11/16 | 12 1/2   | 13 7/8   | 16     | 3 1/8 | 1 29/32 | 7/8   | 4 5/64  | 61/64  | 5/64 | -     | -     | 57.0     |
| <b>FOUR BOLT BASE</b> |                      |          |         |          |          |        |       |         |       |         |        |      |       |       |          |
| 3 15/16               |                      |          |         |          |          |        |       |         |       |         |        |      |       |       |          |
| 4                     | 5                    | 10 1/32  | 5 1/4   | 13 3/16  | 14 13/16 | 16 3/4 | 4 1/8 | 2 1/32  | 13/16 | 4 29/32 | 1 1/32 | 5/32 | 2     | 3 7/8 | 83.5     |
| 4 7/16                |                      |          |         |          |          |        |       |         |       |         |        |      |       |       |          |
| 4 1/2                 | 5 3/4                | 11 13/32 | 6 1/8   | 14 7/16  | 16 5/16  | 18 1/4 | 4 3/8 | 2 1/4   | 3/4   | 5 1/4   | 1 1/8  | 1/16 | 2 1/4 | 4 1/8 | 110.0    |
| 4 15/16               |                      |          |         |          |          |        |       |         |       |         |        |      |       |       |          |
| 5                     | 6 1/4                | 12 9/32  | 6 5/8   | 16 1/8   | 18 1/8   | 20 3/8 | 4 7/8 | 2 1/2   | 7/8   | 5 15/32 | 1 7/32 | 3/32 | 2 1/2 | 4 1/4 | 141.0    |

Non-expansion Pillow Block Part Numbers are specified by "PB950NE" and bore size: Example, "PB950NEx2 7/16".  
 Expansion Pillow Block Numbers are specified by "PB950NE" and bore size: Example, PB950NEx2 7/16".  
 Bearings with eccentric locking collars are not recommended for reversing applications.

# Browning®

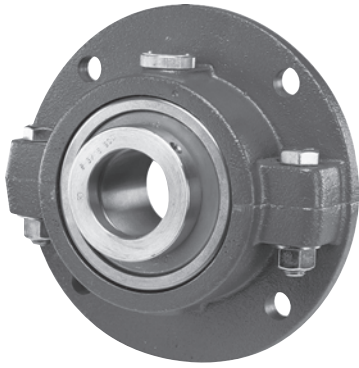
## Tapered Roller Bearings

Eccentric



950

# FB950



**FLANGE F**  
**BLOCK B**

**950 9**

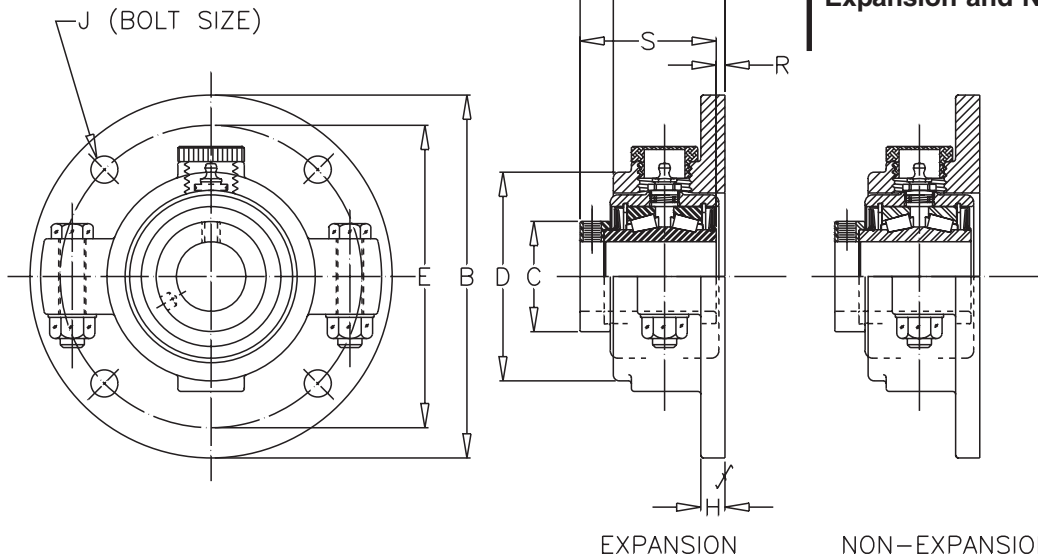
**ECCENTRIC LOCK 5**  
**TAPERED ROLLER BEARING 0**

**Dimensional Interchange  
with Type K Units**

**Lock:** Eccentric  
**Seal:** CENTRAP Labyrinth  
**Housing:** Ductile Iron  
**Temperatures:** -20°F to 200°F  
**Self Aligning:** ±1 1/2°  
**Fitting:** 1/8" NPT  
**Bearing Insert:** Tapered Roller  
(C950 Cartridge)

**Load Rating Tables:** Page 121  
**Interchange Tables:** Page 166

**Expansion and Non-Expansion**



| SHAFT<br>DIA. IN. | Dimensions In Inches |         |        |        |       |        |         |         |       |         | UNIT<br>WT. |
|-------------------|----------------------|---------|--------|--------|-------|--------|---------|---------|-------|---------|-------------|
|                   | B                    | C       | D      | E      | H     | J      | L       | M       | R     | S       |             |
| 1 7/16            | 7 1/2                | 2 3/16  | 4 5/16 | 6 1/4  | 1/2   | 1/2    | 3       | 2 5/16  | 3/16  | 2 13/16 | 13.3        |
| 1 1/2             |                      |         |        |        |       |        |         |         |       |         |             |
| 1 5/8             |                      |         |        |        |       |        |         |         |       |         |             |
| 1 11/16           | 8                    | 2 1/2   | 4 5/8  | 6 3/4  | 1/2   | 1/2    | 3 1/16  | 2 7/16  | 1/4   | 2 13/16 | 16.1        |
| 1 3/4             |                      |         |        |        |       |        |         |         |       |         |             |
| 1 7/8             |                      |         |        |        |       |        |         |         |       |         |             |
| 1 15/16           | 8 7/8                | 3       | 5 1/2  | 7 1/2  | 9/16  | 5/8    | 3 5/16  | 2 9/16  | 1/4   | 3 1/16  | 20.8        |
| 2                 |                      |         |        |        |       |        |         |         |       |         |             |
| 2 1/8             |                      |         |        |        |       |        |         |         |       |         |             |
| 2 3/16            | 9 3/8                | 3 3/8   | 6      | 8      | 9/16  | 5/8    | 3 13/32 | 2 11/16 | 9/32  | 3 1/8   | 25.1        |
| 2 1/4             |                      |         |        |        |       |        |         |         |       |         |             |
| 2 7/16            | 9 7/8                | 3 3/8   | 6 5/16 | 8 1/2  | 5/8   | 5/8    | 3 35/64 | 2 3/4   | 19/64 | 3 1/4   | 29.4        |
| 2 1/2             |                      |         |        |        |       |        |         |         |       |         |             |
| 2 11/16           |                      |         |        |        |       |        |         |         |       |         |             |
| 2 3/4             | 11 1/4               | 4       | 7 1/8  | 9 3/4  | 11/16 | 3/4    | 3 25/32 | 2 15/16 | 13/32 | 3 3/8   | 38.2        |
| 2 15/16           |                      |         |        |        |       |        |         |         |       |         |             |
| 3                 |                      |         |        |        |       |        |         |         |       |         |             |
| 3 3/16            | 11 1/4               | 4 1/4   | 7 5/8  | 9 3/4  | 11/16 | 3/4    | 4 9/32  | 3 7/16  | 13/32 | 3 7/8   | 45.8        |
| 3 7/16            |                      |         |        |        |       |        |         |         |       |         |             |
| 3 1/2             | 13 1/4               | 4 11/16 | 8 5/8  | 11 1/2 | 3/4   | 7/8    | 4 25/64 | 3 7/16  | 13/32 | 4       | 61.0        |
| 3 15/16           |                      |         |        |        |       |        |         |         |       |         |             |
| 4                 | 15 1/4               | 5 1/4   | 9 3/8  | 13     | 13/16 | 1 1/32 | 5 9/32  | 4 1/4   | 17/32 | 4 3/4   | 98.0        |
| 4 7/16            |                      |         |        |        |       |        |         |         |       |         |             |
| 4 1/2             | 17                   | 6 1/8   | 10 5/8 | 15     | 1     | 1 1/32 | 5 5/8   | 4 1/2   | 7/16  | 5 3/16  | 134.0       |
| 4 15/16           |                      |         |        |        |       |        |         |         |       |         |             |
| 5                 | 18 1/8               | 6 5/8   | 11 3/8 | 16     | 1 1/8 | 1 1/8  | 5 27/32 | 4 5/8   | 15/32 | 5 3/8   | 157.0       |

Non-Expansion Pillow Block Part Numbers are specified by "FB950NE" and bore size: Example, **FB950NEx 2 7/16"**.  
Expansion Pillow Block Part Numbers are specified by "FB950E" and bore size: Example, **FB950Ex 2 7/16"**.  
Bearings with Eccentric Locking Collars are not recommended for reversing applications.  
See page 156 for trademark acknowledgments.

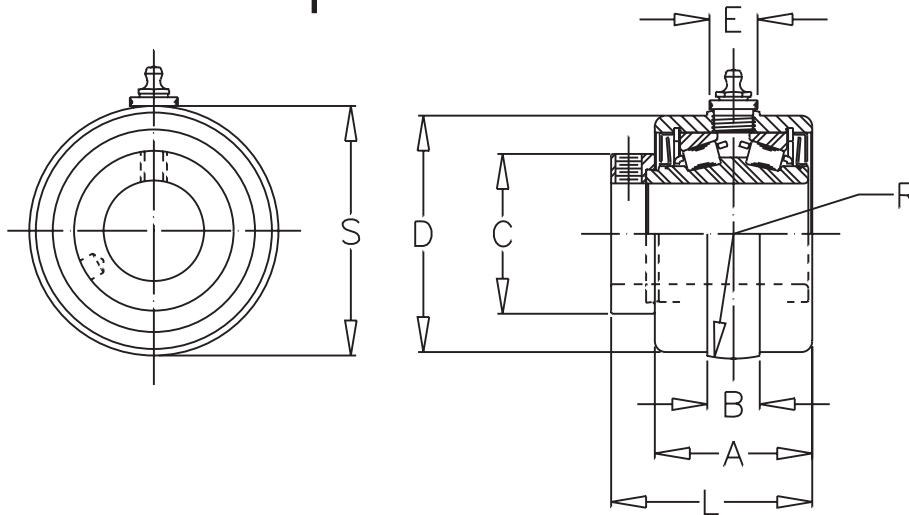
**C950**

Lock: Eccentric  
 Seal: CENTRAP Labyrinth  
 Temperatures: -20°F to 200°F  
 Self Aligning: ±1 1/2°  
 Fitting: 1/8" NPT  
 Bearing Insert: Tapered Roller

Load Rating Tables: Page 121  
 Interchange Tables: Page 166

**C CARTRIDGE**

**9 950**  
**5 ECCENTRIC LOCK**  
**0 TAPERED ROLLER BEARING**



| SHAFT DIA. IN.              | Dimensions In Inches |       |         |         |       |         |         |         | UNIT WT. |
|-----------------------------|----------------------|-------|---------|---------|-------|---------|---------|---------|----------|
|                             | A                    | B     | C       | D       | E     | L       | R       | S       |          |
| 1 7/16<br>1 1/2             | 2 1/4                | 3/4   | 2 3/16  | 3 3/8   | 11/16 | 2 7/8   | 1 25/32 | 3 9/16  | 4.2      |
| 1 5/8<br>1 11/16<br>1 3/4   | 2 3/8                | 3/4   | 2 1/2   | 3 5/8   | 11/16 | 2 15/16 | 1 29/32 | 3 13/16 | 4.8      |
| 1 7/8<br>1 15/16<br>2       | 2 7/16               | 1     | 3       | 4 13/32 | 11/16 | 3 5/32  | 2 5/16  | 4 5/8   | 7.5      |
| 2 1/8<br>2 3/16             | 2 1/2                | 1     | 3 3/8   | 4 27/32 | 11/16 | 3 7/32  | 2 17/32 | 5 1/16  | 19.4     |
| 2 1/4<br>2 7/16<br>2 1/2    | 2 9/16               | 1     | 3 3/8   | 5 3/32  | 11/16 | 3 21/64 | 2 21/32 | 5 5/16  | 10.8     |
| 2 11/16<br>2 3/4<br>2 15/16 | 2 5/8                | 1 1/4 | 3 7/16  | 5 5/8   | 11/16 | 3 15/32 | 2 31/32 | 5 15/16 | 13.6     |
| 3<br>3 3/16                 | 3 1/8                | 1 1/4 | 4 1/4   | 6 1/8   | 11/16 | 3 31/32 | 3 7/32  | 6 7/16  | 18.3     |
| 3 7/16<br>3 1/2             | 3 1/8                | 1 1/4 | 4 11/16 | 6 7/8   | 11/16 | 4 5/64  | 3 19/32 | 7 3/16  | 22.8     |
| 3 15/16<br>4                | 3 7/8                | 1 3/8 | 5 1/4   | 7 1/2   | 11/16 | 4 29/32 | 3 29/32 | 7 13/16 | 32.8     |
| 4 7/16<br>4 1/2             | 4 1/8                | 1 5/8 | 6 1/8   | 8 1/2   | 11/16 | 5 17/64 | 4 7/16  | 8 7/8   | 47.0     |
| 4 15/16<br>5                | 4 1/4                | 1 3/4 | 6 5/8   | 9       | 11/16 | 5 15/32 | 4 11/16 | 9 3/8   | 51.0     |

Replacement Cartridge Part Numbers are specified by "C950" and bore size: Example, **C950x 2 7/16"**.

Browning C950 Replacement Cartridges Fit both Expansion and Non-Expansion Pillow Blocks and Flange Blocks.

Bearings with Eccentric Locking Collars are not recommended for reversing applications.



# Tapered Roller Bearings

## Tapered Roller Bearing 900 and 950 Series

This chart displays the Browning 900 and 950 Series Tapered Roller Bearing's load capacity for a given L10 life, speed and shaft size. Values in the table represent loads at ideal conditions. The shaded areas indicate the maximum speed for the 950 series only. Select 950 Series where aligning capability is required. For combined load determination, see **THE BEARING SELECTION SECTION**, page 268. Areas designated by “-” exceed maximum speed value.

Match Bore Size

| SIZE                         | "K" FACTOR | 2 ROW RATING | 1 ROW RATING | THRUST RATING* | L10 HOURS | REVOLUTIONS PER MINUTE |       |       |       |       |       |       |      |      |      |      |      |      |      |      |
|------------------------------|------------|--------------|--------------|----------------|-----------|------------------------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|
|                              |            |              |              |                |           | 50                     | 100   | 150   | 250   | 500   | 750   | 1000  | 1500 | 1750 | 2000 | 2500 | 3000 | 3500 |      |      |
| 1                            | 1.42       | 3700         | 2130         | 1500           | 5000      | 4179                   | 4179  | 4179  | 3908  | 3174  | 2811  | 2578  | 2283 | 2180 | 2094 | 1959 | 1854 | 1771 |      |      |
|                              |            |              |              |                | 10000     | 4179                   | 4179  | 3700  | 3174  | 2578  | 2283  | 2094  | 1854 | 1771 | 1701 | 1591 | 1506 | 1438 |      |      |
|                              |            |              |              |                | 30000     | 3700                   | 3005  | 2611  | 2283  | 1854  | 1642  | 1506  | 1334 | 1273 | 1223 | 1144 | 1083 | 1034 |      |      |
|                              |            |              |              |                | 50000     | 3174                   | 2578  | 2283  | 1959  | 1591  | 1409  | 1292  | 1144 | 1093 | 1050 | 982  | 929  | 887  |      |      |
|                              |            |              |              |                | 100000    | 2578                   | 2094  | 1854  | 1591  | 1292  | 1144  | 1050  | 929  | 887  | 853  | 797  | 755  | 721  |      |      |
| 1 3/16<br>1 1/4<br>1 3/8     | 1.53       | 5130         | 2950         | 1930           | 5000      | 5794                   | 5794  | 5794  | 5418  | 4401  | 3897  | 3575  | 3165 | 2904 | 2571 | 2455 | 2358 | 2206 | 2088 | 1944 |
|                              |            |              |              |                | 10000     | 5794                   | 5794  | 5130  | 4401  | 3575  | 3165  | 2904  | 2571 | 2455 | 2358 | 2206 | 2088 | 1944 |      |      |
|                              |            |              |              |                | 30000     | 5130                   | 4167  | 3690  | 3165  | 2571  | 2277  | 2088  | 1849 | 1766 | 1696 | 1586 | 1502 | 1434 |      |      |
|                              |            |              |              |                | 50000     | 4401                   | 3575  | 3165  | 2716  | 2206  | 1953  | 1792  | 1586 | 1515 | 1455 | 1361 | 1289 | 1230 |      |      |
|                              |            |              |              |                | 100000    | 3575                   | 2904  | 2571  | 2206  | 1792  | 1586  | 1455  | 1289 | 1230 | 1182 | 1106 | 1047 | 999  |      |      |
| 1 7/16<br>1 1/2              | 1.46       | 5930         | 3410         | 2330           | 5000      | 6697                   | 6697  | 6697  | 6263  | 5087  | 4505  | 4132  | 3659 | 3494 | 3356 | 3139 | 2972 | —    | —    | —    |
|                              |            |              |              |                | 10000     | 6697                   | 6697  | 5930  | 5087  | 4132  | 3659  | 3356  | 2972 | 2838 | 2726 | 2550 | 2414 | —    | —    | —    |
|                              |            |              |              |                | 30000     | 5930                   | 4817  | 4265  | 3659  | 2972  | 2632  | 2414  | 2138 | 2041 | 1961 | 1834 | 1736 | —    | —    | —    |
|                              |            |              |              |                | 50000     | 5087                   | 4132  | 3659  | 3139  | 2550  | 2258  | 2071  | 1834 | 1751 | 1682 | 1573 | 1490 | —    | —    | —    |
|                              |            |              |              |                | 100000    | 4132                   | 3356  | 2972  | 2550  | 2071  | 1834  | 1682  | 1490 | 1422 | 1366 | 1278 | 1210 | —    | —    | —    |
| 1 5/8<br>1 11/16<br>1 3/4    | 1.37       | 6050         | 3470         | 2540           | 5000      | 6833                   | 6833  | 6833  | 6390  | 5190  | 4596  | 4216  | 3733 | 3564 | 3424 | 3203 | —    | —    | —    |      |
|                              |            |              |              |                | 10000     | 6833                   | 6833  | 6050  | 5190  | 4216  | 3733  | 3424  | 3032 | 2895 | 2781 | 2601 | —    | —    | —    |      |
|                              |            |              |              |                | 30000     | 6050                   | 4914  | 4351  | 3733  | 3032  | 2685  | 2463  | 2181 | 2082 | 2000 | 1871 | —    | —    | —    |      |
|                              |            |              |              |                | 50000     | 5190                   | 4216  | 3733  | 3203  | 2601  | 2303  | 2113  | 1871 | 1786 | 1716 | 1605 | —    | —    | —    |      |
|                              |            |              |              |                | 100000    | 4216                   | 3424  | 3032  | 2601  | 2113  | 1871  | 1716  | 1520 | 1451 | 1394 | 1304 | —    | —    | —    |      |
| 1 7/8<br>1 5/8<br>2<br>2 1/8 | 1.65       | 8550         | 4910         | 2980           | 5000      | 9656                   | 9656  | 8656  | 9031  | 7335  | 6495  | 5958  | 5276 | 5037 | 4839 | —    | —    | —    |      |      |
|                              |            |              |              |                | 10000     | 9656                   | 9656  | 8550  | 7335  | 5958  | 5276  | 4839  | 4285 | 4091 | 3931 | —    | —    | —    |      |      |
|                              |            |              |              |                | 30000     | 8550                   | 6945  | 6149  | 5276  | 4285  | 3794  | 3481  | 3082 | 2943 | 2827 | —    | —    | —    |      |      |
|                              |            |              |              |                | 50000     | 7335                   | 5958  | 5276  | 4526  | 3676  | 3255  | 2986  | 2644 | 2525 | 2425 | —    | —    | —    |      |      |
|                              |            |              |              |                | 100000    | 5958                   | 4839  | 4285  | 3676  | 2986  | 2644  | 2425  | 2148 | 2051 | 1970 | —    | —    | —    |      |      |
| 2 3/16                       | 1.51       | 9090         | 5220         | 3470           | 5000      | 10266                  | 10266 | 10266 | 9601  | 7798  | 6905  | 6334  | 5609 | 5355 | 5145 | —    | —    | —    |      |      |
|                              |            |              |              |                | 10000     | 10266                  | 10266 | 9090  | 7798  | 6334  | 5609  | 5145  | 4556 | 4350 | 4179 | —    | —    | —    |      |      |
|                              |            |              |              |                | 30000     | 9090                   | 7383  | 6538  | 5609  | 4556  | 4034  | 3700  | 3277 | 3129 | 3006 | —    | —    | —    |      |      |
|                              |            |              |              |                | 50000     | 7798                   | 6334  | 5609  | 4812  | 3908  | 3461  | 3175  | 2811 | 2684 | 2579 | —    | —    | —    |      |      |
|                              |            |              |              |                | 100000    | 6334                   | 5145  | 4556  | 3908  | 3175  | 2811  | 2579  | 2283 | 2180 | 2095 | —    | —    | —    |      |      |
| 2 1/4<br>2 7/16<br>2 1/2     | 1.45       | 9290         | 5340         | 3670           | 5000      | 10492                  | 10492 | 10492 | 9812  | 7970  | 7057  | 6474  | 5732 | 5473 | —    | —    | —    |      |      |      |
|                              |            |              |              |                | 10000     | 10492                  | 10492 | 9290  | 7970  | 6474  | 5732  | 5258  | 4656 | 4446 | —    | —    | —    |      |      |      |
|                              |            |              |              |                | 30000     | 9290                   | 7546  | 6682  | 5732  | 4656  | 4123  | 3782  | 3349 | 3197 | —    | —    | —    |      |      |      |
|                              |            |              |              |                | 50000     | 7970                   | 6474  | 5732  | 4918  | 3994  | 3537  | 3245  | 2873 | 2743 | —    | —    | —    |      |      |      |
|                              |            |              |              |                | 100000    | 6474                   | 5258  | 4656  | 3994  | 3245  | 2873  | 2635  | 2334 | 2228 | —    | —    | —    |      |      |      |
| 2 11/16<br>2 3/4<br>2 15/16  | 1.30       | 9600         | 5510         | 4260           | 5000      | 10842                  | 10842 | 10842 | 10140 | 8236  | 7293  | 6690  | 5924 | —    | —    | —    | —    |      |      |      |
|                              |            |              |              |                | 10000     | 10842                  | 10842 | 9600  | 8236  | 6690  | 5924  | 5434  | 4811 | —    | —    | —    | —    |      |      |      |
|                              |            |              |              |                | 30000     | 9600                   | 7798  | 6905  | 5924  | 4811  | 4260  | 3908  | 3460 | —    | —    | —    | —    |      |      |      |
|                              |            |              |              |                | 50000     | 8236                   | 6690  | 5924  | 5082  | 4128  | 3655  | 3353  | 2969 | —    | —    | —    | —    |      |      |      |
|                              |            |              |              |                | 100000    | 6690                   | 5434  | 4811  | 4128  | 3353  | 2969  | 2723  | 2411 | —    | —    | —    | —    |      |      |      |
| 3<br>3 3/16                  | 1.31       | 14500        | 8330         | 6340           | 5000      | 16376                  | 16376 | 16376 | 15315 | 12440 | 11015 | 10104 | —    | —    | —    | —    | —    |      |      |      |
|                              |            |              |              |                | 10000     | 16376                  | 16378 | 14500 | 12440 | 10104 | 8947  | 8207  | —    | —    | —    | —    | —    |      |      |      |
|                              |            |              |              |                | 30000     | 14500                  | 11778 | 10429 | 8947  | 7267  | 6435  | 5903  | —    | —    | —    | —    | —    |      |      |      |
|                              |            |              |              |                | 50000     | 12440                  | 10104 | 8947  | 7676  | 6235  | 5521  | 5064  | —    | —    | —    | —    | —    |      |      |      |
|                              |            |              |              |                | 100000    | 10104                  | 8207  | 7267  | 6235  | 5064  | 4484  | 4113  | —    | —    | —    | —    | —    |      |      |      |
| 3 7/16<br>3 1/2              | 1.19       | 15300        | 8790         | 7410           | 5000      | 17279                  | 17279 | 17279 | 16160 | 13126 | 11623 | 10662 | —    | —    | —    | —    | —    |      |      |      |
|                              |            |              |              |                | 10000     | 17279                  | 17279 | 15300 | 13126 | 10662 | 9441  | 8660  | —    | —    | —    | —    | —    |      |      |      |
|                              |            |              |              |                | 30000     | 15300                  | 12427 | 11004 | 9441  | 7668  | 6790  | 6228  | —    | —    | —    | —    | —    |      |      |      |
|                              |            |              |              |                | 50000     | 13126                  | 10104 | 9441  | 8099  | 6579  | 5825  | 5344  | —    | —    | —    | —    | —    |      |      |      |
|                              |            |              |              |                | 100000    | 10662                  | 8207  | 7668  | 6579  | 5344  | 4732  | 4340  | —    | —    | —    | —    | —    |      |      |      |
| 3 15/16<br>4                 | 1.45       | 18400        | 10600        | 7270           | 5000      | 20780                  | 20780 | 20780 | 19434 | 15786 | 13978 | 12822 | —    | —    | —    | —    | —    |      |      |      |
|                              |            |              |              |                | 10000     | 20780                  | 20780 | 18400 | 15786 | 12822 | 11353 | 10415 | —    | —    | —    | —    | —    |      |      |      |
|                              |            |              |              |                | 30000     | 18400                  | 14945 | 13234 | 11353 | 9222  | 8166  | 7490  | —    | —    | —    | —    | —    |      |      |      |
|                              |            |              |              |                | 50000     | 15786                  | 12822 | 11353 | 9740  | 7912  | 7005  | 6426  | —    | —    | —    | —    | —    |      |      |      |
|                              |            |              |              |                | 100000    | 12822                  | 10415 | 9222  | 7912  | 6426  | 5690  | 5220  | —    | —    | —    | —    | —    |      |      |      |
| 4 7/16<br>4 1/2              | 1.91       | 25200        | 14500        | 7550           | 5000      | 28460                  | 28460 | 28460 | 26617 | 21620 | 19143 | 17561 | —    | —    | —    | —    | —    |      |      |      |
|                              |            |              |              |                | 10000     | 28460                  | 28460 | 25200 | 21620 | 17561 | 15549 | 14264 | —    | —    | —    | —    | —    |      |      |      |
|                              |            |              |              |                | 30000     | 25200                  | 20469 | 18124 | 15549 | 12630 | 11183 | 10259 | —    | —    | —    | —    | —    |      |      |      |
|                              |            |              |              |                | 50000     | 21620                  | 17561 | 15549 | 13340 | 10835 | 9594  | 8801  | —    | —    | —    | —    | —    |      |      |      |
|                              |            |              |              |                | 100000    | 17561                  | 14264 | 12630 | 10835 | 8801  | 7793  | 7149  | —    | —    | —    | —    | —    |      |      |      |
| 4 15/16<br>5                 | 1.82       | 26600        | 15300        | 8390           | 5000      | 30041                  | 30041 | 30041 | 28095 | 22821 | 20207 | —     | —    | —    | —    | —    | —    |      |      |      |
|                              |            |              |              |                | 10000     | 30041                  | 30041 | 26600 | 22821 | 18536 | 16413 | —     | —    | —    | —    | —    | —    |      |      |      |
|                              |            |              |              |                | 30000     | 26600                  | 21606 | 19131 | 16413 | 13332 | 11805 | —     | —    | —    | —    | —    | —    |      |      |      |
|                              |            |              |              |                | 50000     | 22821                  | 18536 | 16413 | 14081 | 11437 | 10127 | —     | —    | —    | —    | —    | —    |      |      |      |
|                              |            |              |              |                | 100000    | 18536                  | 15056 | 13332 | 11437 | 9290  | 8226  | —     | —    | —    | —    | —    | —    |      |      |      |

See page 156 for trademark acknowledgments.



### PB970

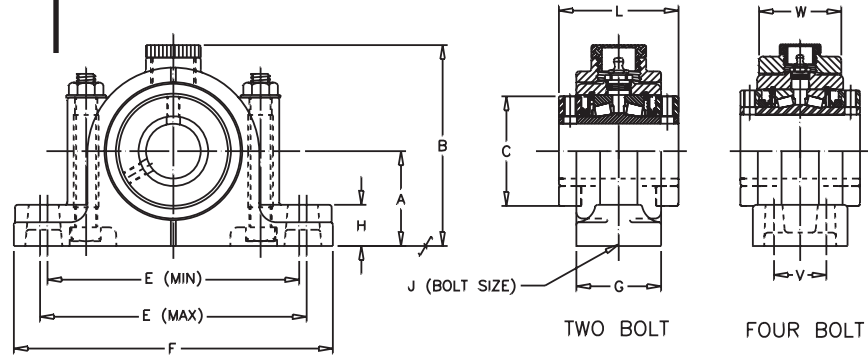
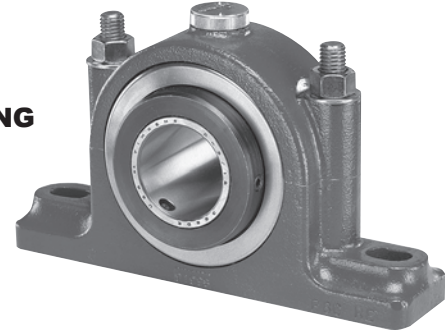
**Lock:** Set Screw  
**Seal:** Contact  
**Housing:** Ductile Iron  
**Temperatures:** - 20° to 200°F  
**Self Aligning:** ±1 1/2°  
**Fitting:** 1/8" NPT  
**Bolt Holes:** Elongated  
**Bearing Insert:** Tapered Roller  
 (C970 Cartridge Insert)

**Load Rating Tables:** Page 125  
**Interchange Tables:** Page 166

**Expansion and Non-Expansion**

**P PILLOW**  
**B BLOCK**  
**9 970**  
**7 SET SCREW LOCK**  
**0 TAPERED ROLLER BEARING**

**Dimensional Interchange with (DI) Units**

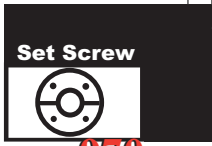


| SHAFT DIA. IN.        | Dimensions In Inches |          |         |         |          |        |       |         |     |         |       | UNIT WT. |       |
|-----------------------|----------------------|----------|---------|---------|----------|--------|-------|---------|-----|---------|-------|----------|-------|
|                       | A                    | B        | C       | E       |          | F      | G     | H       | J   | L       | V     |          | W     |
|                       |                      |          |         | MIN.    | MAX.     |        |       |         |     |         |       |          |       |
| <b>TWO BOLT BASE</b>  |                      |          |         |         |          |        |       |         |     |         |       |          |       |
| 1 3/8                 |                      |          |         |         |          |        |       |         |     |         |       |          |       |
| 1 7/16                | 2 3/8                | 5 1/32   | 2 3/4   | 6 5/16  | 6 11/16  | 8      | 2 1/8 | 1 1/32  | 1/2 | 3       | -     | -        | 11.0  |
| 1 1/2                 |                      |          |         |         |          |        |       |         |     |         |       |          |       |
| 1 11/16               | 2 5/8                | 5 13/32  | 3 3/16  | 7 1/16  | 7 11/16  | 9      | 2 1/4 | 1 5/32  | 1/2 | 3 7/16  | -     | -        | 13.5  |
| 1 3/4                 |                      |          |         |         |          |        |       |         |     |         |       |          |       |
| 1 15/16               | 2 7/8                | 6 1/16   | 3 7/16  | 7 7/8   | 8 1/2    | 10     | 2 3/8 | 1 9/32  | 5/8 | 3 1/2   | -     | -        | 18.4  |
| 2                     |                      |          |         |         |          |        |       |         |     |         |       |          |       |
| 2 3/16                | 3                    | 6 13/32  | 3 3/4   | 8 1/2   | 9 1/4    | 10 7/8 | 2 1/2 | 1 9/32  | 5/8 | 3 3/4   | -     | -        | 21.7  |
| 2 1/4                 |                      |          |         |         |          |        |       |         |     |         |       |          |       |
| 2 7/16                | 3 1/4                | 6 25/32  | 4 1/16  | 9 1/16  | 10 5/16  | 12     | 2 1/2 | 1 13/32 | 5/8 | 4       | -     | -        | 25.3  |
| 2 1/2                 |                      |          |         |         |          |        |       |         |     |         |       |          |       |
| 2 11/16               |                      |          |         |         |          |        |       |         |     |         |       |          |       |
| 2 15/16               | 3 3/4                | 7 21/32  | 4 23/32 | 10 3/16 | 11 9/16  | 13 3/8 | 2 5/8 | 1 13/32 | 3/4 | 4 33/64 | -     | -        | 32.5  |
| 3                     |                      |          |         |         |          |        |       |         |     |         |       |          |       |
| 3 3/16                |                      |          |         |         |          |        |       |         |     |         |       |          |       |
| 3 7/16                | 4 1/2                | 9 5/32   | 5 7/16  | 12 1/2  | 13 7/8   | 16     | 3 1/8 | 1 29/32 | 7/8 | 5 1/64  | -     | -        | 57.0  |
| 3 1/2                 |                      |          |         |         |          |        |       |         |     |         |       |          |       |
| <b>FOUR BOLT BASE</b> |                      |          |         |         |          |        |       |         |     |         |       |          |       |
| 2 1/4                 |                      |          |         |         |          |        |       |         |     |         |       |          |       |
| 2 7/16                | 3 1/4                | 6 13/16  | 4 1/16  | 9 1/16  | 10 5/16  | 12     | 3 3/8 | 1 15/32 | 1/2 | 4       | 1 3/4 | 2 3/4    | 30.0  |
| 2 1/2                 |                      |          |         |         |          |        |       |         |     |         |       |          |       |
| 2 11/16               |                      |          |         |         |          |        |       |         |     |         |       |          |       |
| 2 15/16               | 3 3/4                | 7 11/16  | 4 23/32 | 10 3/16 | 11 9/16  | 13 1/2 | 3 3/4 | 1 31/32 | 5/8 | 4 33/64 | 1 7/8 | 3 1/8    | 38.0  |
| 3                     |                      |          |         |         |          |        |       |         |     |         |       |          |       |
| 3 3/16                |                      |          |         |         |          |        |       |         |     |         |       |          |       |
| 3 7/16                | 4 1/2                | 9 3/16   | 5 7/16  | 12 1/2  | 13 7/8   | 16     | 4     | 2 7/32  | 3/4 | 5 1/64  | 2     | 3 1/2    | 60.0  |
| 3 1/2                 |                      |          |         |         |          |        |       |         |     |         |       |          |       |
| 3 15/16               |                      |          |         |         |          |        |       |         |     |         |       |          |       |
| 4                     | 5                    | 10 1/32  | 5 15/16 | 13 3/16 | 14 13/16 | 16 3/4 | 4 1/8 | 2 1/32  | 3/4 | 6 1/4   | 2     | 3 7/8    | 84.0  |
| 4 7/16                |                      |          |         |         |          |        |       |         |     |         |       |          |       |
| 4 1/2                 | 5 3/4                | 11 13/32 | 6 13/32 | 14 7/16 | 16 5/16  | 18 1/4 | 4 3/8 | 2 1/4   | 3/4 | 6 3/4   | 2 1/4 | 4 1/8    | 110.0 |
| 4 15/16               |                      |          |         |         |          |        |       |         |     |         |       |          |       |
| 5                     | 6 1/4                | 12 3/4   | 7 13/32 | 16 1/8  | 18 1/8   | 20 3/8 | 4 7/8 | 2 1/2   | 7/8 | 7 1/4   | 2 1/2 | 4 1/4    | 141.0 |

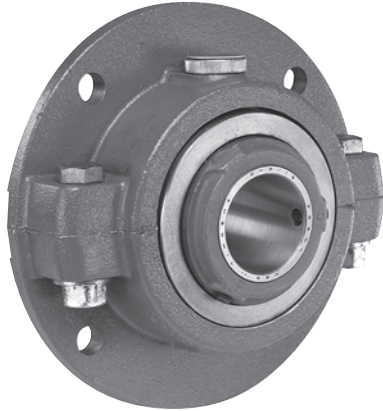
Non-Expansion Pillow Block Part Numbers are specified by "PB970NE" and bore size: Example, **PB970NEx 2 7/16"**. Add "F" for Four Bolt Base: Example, **PB970FNEx 2 7/16"**. Expansion Pillow Block Part Numbers are specified by "PB970E" and bore size: Example, **PB970Ex 2 7/16"**. Add "F" for Four Bolt Base: Example, **PB970FEx 2 7/16"**



# Tapered Roller Bearings



970



**FLANGE F**  
**BLOCK B**  
**970 9**  
**SET SCREW LOCK 7**  
**TAPERED ROLLER BEARING 0**

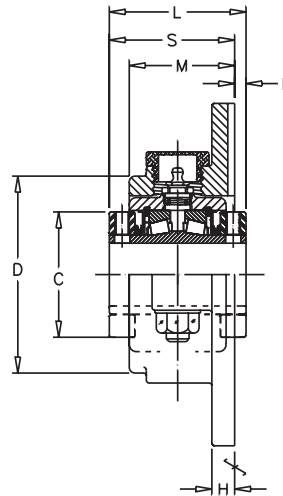
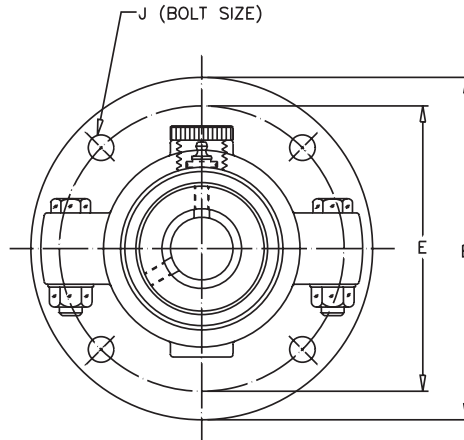
**Dimensional Interchange  
with (DI) Units**

## FB970

**Lock:** Set Screw  
**Seal:** Contact  
**Housing:** Ductile Iron  
**Temperatures:** - 20°F to 200°F  
**Self Aligning:** ±1 1/2°  
**Fitting:** 1/8" NPT  
**Bearing Insert:** Tapered Roller  
 (C970 Cartridge Insert)

**Load Rating Tables:** Page 125  
**Interchange Tables:** Page 166

**Expansion and Non-Expansion**



| SHAFT DIA. IN.                     | Dimensions In Inches |         |        |        |       |       |         |         |       |         | UNIT WT. |
|------------------------------------|----------------------|---------|--------|--------|-------|-------|---------|---------|-------|---------|----------|
|                                    | B                    | C       | D      | E      | H     | J     | L       | M       | R     | S       |          |
| 1 3/8<br>1 7/16                    | 7 1/2                | 2 3/4   | 4 5/16 | 6 1/4  | 1/2   | 1/2   | 3       | 2 5/16  | 1/4   | 2 3/4   | 14.1     |
| 1 1/2<br>1 11/16                   | 8                    | 3 3/16  | 4 5/8  | 6 3/4  | 1/2   | 1/2   | 3 7/16  | 2 7/16  | 25/64 | 3 1/32  | 17.0     |
| 1 3/4<br>1 15/16<br>2              | 8 7/8                | 3 7/16  | 5 1/2  | 7 1/2  | 9/16  | 5/8   | 3 1/2   | 2 9/16  | 3/8   | 3 1/8   | 22.2     |
| 2 3/16<br>2 1/4<br>2 7/16<br>2 1/2 | 9 3/8                | 3 3/4   | 6      | 8      | 9/16  | 5/8   | 3 3/4   | 2 11/16 | 17/32 | 3 7/32  | 26.9     |
| 2 11/16<br>2 15/16<br>3            | 11 1/4               | 4 23/32 | 7 1/8  | 9 3/4  | 11/16 | 3/4   | 4 33/64 | 2 15/16 | 5/8   | 3 7/8   | 40.6     |
| 3 3/16<br>3 7/16<br>3 1/2          | 13 1/4               | 5 7/16  | 8 5/8  | 11 1/2 | 3/4   | 7/8   | 5 1/64  | 3 7/16  | 5/8   | 4 3/8   | 65.3     |
| 3 15/16<br>4                       | 15 1/4               | 5 15/16 | 9 3/8  | 13     | 13/16 | 1     | 6 1/4   | 4 1/4   | 13/16 | 5 7/16  | 104.2    |
| 4 7/16<br>4 1/2                    | 17                   | 6 13/32 | 10 5/8 | 15     | 1     | 1     | 6 3/4   | 4 1/2   | 15/16 | 5 53/64 | 142.9    |
| 4 15/16<br>5                       | 18 1/8               | 7 13/32 | 11 3/8 | 16     | 1 1/8 | 1 1/8 | 7 1/4   | 4 5/8   | 1 1/8 | 6 1/8   | 166.7    |

Non-Expansion Pillow Block Part Numbers are specified by "FB970NE" and bore size: Example, **FB970NE** 2 7/16".

Expansion Pillow Block Part Numbers are specified by "FB970E" and bore size: Example, **FB970E** 2 7/16".

See page 156 for trademark acknowledgments.



Set Screw

970

# C970

Lock: Set Screw  
 Seal: Contact  
 Temperatures: - 20° to 200°F  
 Self Aligning: ±1 1/2°  
 Fitting: 1/8" NPT  
 Bearing Insert: Tapered Roller

Load Rating Tables: Page 125  
 Interchange Tables: Page 166

# Browning®

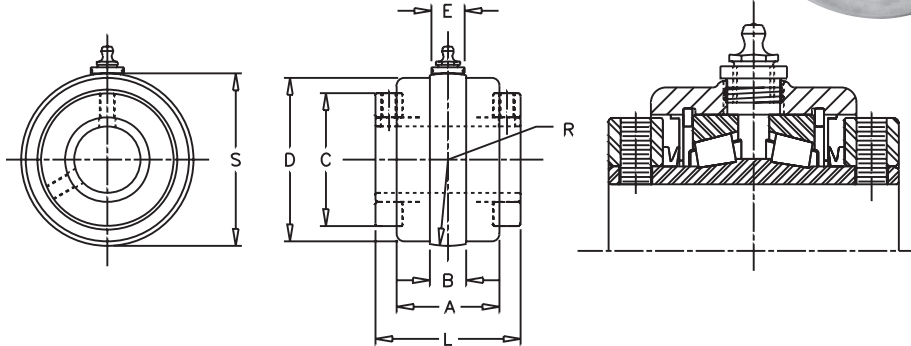
## Tapered Roller Bearings

### C CARTRIDGE

9 970

7 SET SCREW LOCK

0 TAPERED ROLLER BEARING



| SHAFT DIA. IN.                     | Dimensions In Inches |       |         |         |       |         |         |         | UNIT WT. |
|------------------------------------|----------------------|-------|---------|---------|-------|---------|---------|---------|----------|
|                                    | A                    | B     | C       | D       | E     | L       | R       | S       |          |
| 1 3/8<br>1 7/16                    | 2 1/8                | 3/4   | 2 3/4   | 3 3/8   | 11/16 | 3       | 1 25/32 | 3 9/16  | 5.0      |
| 1 1/2<br>1 11/16                   | 2 3/8                | 3/4   | 3 3/16  | 3 5/8   | 11/16 | 3 7/16  | 1 29/32 | 3 13/16 | 5.7      |
| 1 3/4<br>1 15/16<br>2              | 2 1/2                | 1     | 3 7/16  | 4 13/32 | 11/16 | 3 1/2   | 2 5/16  | 4 5/8   | 8.9      |
| 2 3/16<br>2 1/4<br>2 7/16<br>2 1/2 | 2 5/8                | 1     | 3 3/4   | 4 27/32 | 11/16 | 3 3/4   | 2 17/32 | 5 1/16  | 11.3     |
| 2 11/16<br>2 15/16<br>3            | 3                    | 1 1/4 | 4 23/32 | 5 5/8   | 11/16 | 4 33/64 | 2 31/32 | 5 15/16 | 14.9     |
| 3 3/16<br>3 7/16<br>3 1/2          | 3 5/8                | 1 1/4 | 5 7/16  | 6 7/8   | 11/16 | 5 1/64  | 3 19/32 | 7 3/16  | 27.1     |
| 3 15/16<br>4                       | 4 1/2                | 1 3/8 | 5 15/16 | 7 1/2   | 11/16 | 6 1/4   | 3 29/32 | 7 13/16 | 39.0     |
| 4 7/16<br>4 1/2                    | 4 5/8                | 1 5/8 | 6 13/32 | 8 1/2   | 11/16 | 6 3/4   | 4 7/16  | 8 7/8   | 55.9     |
| 4 15/16<br>5                       | 5 1/8                | 1 3/4 | 7 13/32 | 9 11/16 | 11/16 | 7 1/4   | 5 3/32  | 10 3/16 | 60.7     |

Replacement Cartridge Part Numbers are specified by "C970" and bore size: Example, **C970x 2 7/16"**.

Browning C970 Replacement Cartridges Fit both Expansion and Non-Expansion Pillow Blocks and Flange Blocks.



# Tapered Roller Bearings

## Tapered Roller Bearing 920 and 970 Series

This chart displays the Browning 920 and 970 Series Tapered Roller Bearing's load capacity for a given L10 life, speed and shaft size. Values in the table represent loads at ideal conditions. The shaded areas indicate the maximum speed for the 970 series only. For combined load determination, see **THE BEARING SELECTION SECTION**, page 268. Areas designated by “-” exceed maximum speed value.

### Match Bore Size

| SIZE                      | "K" FACTOR | 2 ROW RATING | 1 ROW RATING | THRUST RATING* | HOURS  | REVOLUTIONS PER MINUTE |       |       |       |       |       |       |       |       |       |       |       |       |       |
|---------------------------|------------|--------------|--------------|----------------|--------|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                           |            |              |              |                |        | 50                     | 100   | 150   | 250   | 500   | 750   | 1000  | 1500  | 1750  | 2000  | 2500  | 3000  | 3500  | 4000  |
| 1 3/16<br>1 1/4           | 1.23       | 2975         | 1710         | 1390           | 5000   | 3360                   | 3360  | 3360  | 3142  | 2552  | 2260  | 2073  | 1836  | 1753  | 1684  | 1575  | 1491  | 1424  | 1368  |
|                           |            |              |              |                | 10000  | 3360                   | 3360  | 2975  | 2552  | 2073  | 1836  | 1684  | 1491  | 1424  | 1368  | 1279  | 1211  | 1156  | 1111  |
|                           |            |              |              |                | 30000  | 2975                   | 2416  | 2140  | 1836  | 1491  | 1320  | 1211  | 1072  | 1024  | 984   | 920   | 871   | 832   | 799   |
|                           |            |              |              |                | 50000  | 2552                   | 2073  | 1836  | 1575  | 1279  | 1133  | 1039  | 920   | 878   | 844   | 789   | 747   | 714   | 685   |
|                           |            |              |              |                | 100000 | 2073                   | 1684  | 1491  | 1279  | 1039  | 920   | 844   | 747   | 714   | 685   | 641   | 607   | 580   | 556   |
| 1 3/8<br>1 7/16           | 1.31       | 4760         | 2740         | 2080           | 5000   | 5376                   | 5376  | 5376  | 5028  | 4084  | 3616  | 3317  | 2937  | 2804  | 2694  | 2520  | 2386  | 2278  | 2188  |
|                           |            |              |              |                | 10000  | 5376                   | 5376  | 4760  | 4084  | 3317  | 2937  | 2694  | 2386  | 2278  | 2188  | 2047  | 1938  | 1850  |       |
|                           |            |              |              |                | 30000  | 4760                   | 3866  | 3424  | 2937  | 2386  | 2112  | 1938  | 1716  | 1638  | 1574  | 1472  | 1394  | 1331  |       |
|                           |            |              |              |                | 50000  | 4084                   | 3317  | 2937  | 2520  | 2047  | 1812  | 1662  | 1472  | 1406  | 1350  | 1263  | 1196  | 1142  |       |
|                           |            |              |              |                | 100000 | 3317                   | 26741 | 2386  | 2047  | 1662  | 1472  | 1350  | 1196  | 1142  | 1097  | 1026  | 971   | 927   |       |
| 1 1/2<br>1 11/16          | 1.36       | 6140         | 3530         | 2600           | 5000   | 6934                   | 6934  | 6934  | 6485  | 5268  | 4664  | 4279  | 3789  | 3617  | 3475  | 3250  | 3077  | 2938  | 2823  |
|                           |            |              |              |                | 10000  | 6934                   | 6934  | 6140  | 5268  | 4279  | 3789  | 3475  | 3077  | 2938  | 2823  | 2640  | 2500  |       |       |
|                           |            |              |              |                | 30000  | 6140                   | 4987  | 4416  | 3789  | 3077  | 2725  | 2500  | 2213  | 2113  | 2030  | 1899  | 1798  |       |       |
|                           |            |              |              |                | 50000  | 5268                   | 4279  | 3789  | 3250  | 2640  | 2338  | 2144  | 1899  | 1813  | 1742  | 1629  | 1542  |       |       |
|                           |            |              |              |                | 100000 | 4279                   | 3475  | 3077  | 2640  | 2144  | 1899  | 1742  | 1542  | 1473  | 1415  | 1323  | 1253  |       |       |
| 1 3/4<br>1 15/16<br>2     | 1.83       | 8070         | 4640         | 2540           | 5000   | 9114                   | 9114  | 9114  | 8524  | 6923  | 6130  | 5624  | 4979  | 4754  | 4568  | 4272  | 4111  | 3940  | 3685  |
|                           |            |              |              |                | 10000  | 9114                   | 9114  | 8070  | 6923  | 5624  | 4979  | 4568  | 4045  | 3862  | 3710  | 3470  | 3250  |       |       |
|                           |            |              |              |                | 30000  | 8070                   | 6555  | 5804  | 4979  | 4045  | 3581  | 3285  | 2909  | 2777  | 2668  | 2496  | 2341  |       |       |
|                           |            |              |              |                | 50000  | 6923                   | 5624  | 4979  | 4272  | 3470  | 3072  | 2818  | 2496  | 2383  | 2289  | 2141  | 2030  |       |       |
|                           |            |              |              |                | 100000 | 5624                   | 4568  | 4045  | 3470  | 2818  | 2496  | 2289  | 2027  | 1935  | 1859  | 1739  | 1629  |       |       |
| 2 3/16                    | 1.65       | 8570         | 4910         | 2980           | 5000   | 9679                   | 9679  | 9679  | 9052  | 7352  | 6510  | 5972  | 5288  | 5049  | 4851  | 4537  | 4321  | 4111  | 3940  |
|                           |            |              |              |                | 10000  | 9679                   | 9679  | 8570  | 7352  | 5972  | 5288  | 4851  | 4295  | 4101  | 3940  | 3685  | 3500  |       |       |
|                           |            |              |              |                | 30000  | 8570                   | 6961  | 6164  | 5288  | 4295  | 3803  | 3489  | 3089  | 2950  | 2834  | 2650  | 2500  |       |       |
|                           |            |              |              |                | 50000  | 7352                   | 5972  | 5288  | 4537  | 3685  | 3263  | 2993  | 2650  | 2530  | 2431  | 2274  | 2141  |       |       |
|                           |            |              |              |                | 100000 | 5972                   | 4851  | 4295  | 3685  | 2993  | 2650  | 2431  | 2153  | 2055  | 1975  | 1847  | 1739  |       |       |
| 2 1/4<br>2 7/16<br>2 1/2  | 1.51       | 9030         | 5220         | 3470           | 5000   | 10198                  | 10198 | 10198 | 9538  | 7747  | 6860  | 6293  | 5572  | 5320  | 5111  | 4847  | 4621  | 4411  | 4200  |
|                           |            |              |              |                | 10000  | 10198                  | 10198 | 9030  | 7747  | 6293  | 5572  | 5111  | 4526  | 4321  | 4152  | 3940  | 3710  |       |       |
|                           |            |              |              |                | 30000  | 9030                   | 7335  | 6495  | 5572  | 4526  | 4007  | 3676  | 3255  | 3108  | 2986  | 2834  | 2650  |       |       |
|                           |            |              |              |                | 50000  | 7747                   | 6293  | 5572  | 4780  | 3883  | 3438  | 3154  | 2793  | 2666  | 2562  | 2431  | 2274  |       |       |
|                           |            |              |              |                | 100000 | 6293                   | 5111  | 4526  | 3883  | 3154  | 2793  | 2562  | 2268  | 2166  | 2081  | 1975  | 1847  |       |       |
| 2 11/16<br>2 15/16<br>3   | 1.30       | 9630         | 5510         | 4260           | 5000   | 10876                  | 10876 | 10876 | 10171 | 8262  | 7316  | 6711  | 5942  | 5674  | 5411  | 5152  | 4900  | 4657  | 4424  |
|                           |            |              |              |                | 10000  | 10876                  | 10876 | 9630  | 8262  | 6711  | 5942  | 5451  | 4826  | 4608  | 4411  | 4200  | 4000  |       |       |
|                           |            |              |              |                | 30000  | 9630                   | 7822  | 6926  | 5942  | 4826  | 4274  | 3920  | 3471  | 3314  | 3141  | 2978  | 2843  |       |       |
|                           |            |              |              |                | 50000  | 8262                   | 6711  | 5942  | 5098  | 4141  | 3666  | 3363  | 2978  | 2843  | 2710  | 2581  | 2452  |       |       |
|                           |            |              |              |                | 100000 | 6711                   | 5451  | 4826  | 4141  | 3363  | 2978  | 2732  | 2419  | 2310  | 2200  | 2090  | 1980  |       |       |
| 3 3/16<br>3 7/16<br>3 1/2 | 1.19       | 15320        | 8790         | 7410           | 5000   | 17302                  | 17302 | 17302 | 16181 | 13143 | 11638 | 10676 | 9453  | 9111  | 8871  | 8631  | 8391  | 8151  | 7911  |
|                           |            |              |              |                | 10000  | 17302                  | 17302 | 15320 | 13143 | 10676 | 9453  | 8671  | 7678  | 7438  | 7198  | 6958  | 6718  |       |       |
|                           |            |              |              |                | 30000  | 15320                  | 12444 | 11018 | 9453  | 7678  | 6799  | 6273  | 5522  | 5282  | 5042  | 4802  | 4562  |       |       |
|                           |            |              |              |                | 50000  | 13143                  | 10676 | 9453  | 8110  | 6587  | 5833  | 5351  | 4738  | 4498  | 4258  | 4018  | 3778  |       |       |
|                           |            |              |              |                | 100000 | 10676                  | 8671  | 7678  | 6587  | 5351  | 4738  | 4346  | 3848  | 3608  | 3408  | 3208  | 3008  |       |       |
| 3 15/16<br>4              | 1.23       | 20980        | 12100        | 9800           | 5000   | 23694                  | 23694 | 23694 | 22159 | 17999 | 15938 | 14620 | 12945 | 12505 | 12065 | 11625 | 11185 | 10745 | 10305 |
|                           |            |              |              |                | 10000  | 23694                  | 23694 | 20980 | 17999 | 14620 | 12945 | 11875 | 10515 | 10175 | 9835  | 9495  | 9155  |       |       |
|                           |            |              |              |                | 30000  | 20980                  | 17041 | 15089 | 12945 | 10515 | 9311  | 8411  | 7563  | 7223  | 6883  | 6543  | 6203  |       |       |
|                           |            |              |              |                | 50000  | 17999                  | 14620 | 12945 | 11106 | 9021  | 7988  | 7327  | 6488  | 6148  | 5808  | 5468  | 5128  |       |       |
|                           |            |              |              |                | 100000 | 14620                  | 11875 | 10515 | 9021  | 7327  | 6488  | 5952  | 5270  | 5030  | 4790  | 4550  | 4310  |       |       |
| 4 7/16<br>4 1/2           | 1.13       | 25750        | 14800        | 13100          | 5000   | 29081                  | 29081 | 29081 | 27198 | 22091 | 19561 | 17944 | 15889 | 15449 | 15009 | 14569 | 14129 | 13689 | 13249 |
|                           |            |              |              |                | 10000  | 29081                  | 29081 | 25750 | 22091 | 17944 | 15889 | 14575 | 13261 | 12921 | 12581 | 12241 | 11901 |       |       |
|                           |            |              |              |                | 30000  | 25750                  | 20915 | 18520 | 15889 | 12906 | 11427 | 10483 | 9539  | 9199  | 8859  | 8519  | 8179  |       |       |
|                           |            |              |              |                | 50000  | 22091                  | 17944 | 15889 | 13631 | 11072 | 9804  | 8993  | 8149  | 7809  | 7469  | 7129  | 6789  |       |       |
|                           |            |              |              |                | 100000 | 17944                  | 14575 | 12906 | 11072 | 8993  | 7963  | 7305  | 6647  | 6307  | 5967  | 5627  | 5287  |       |       |
| 4 15/16<br>5              | 1.27       | 35520        | 20400        | 16000          | 5000   | 40114                  | 40114 | 40114 | 37517 | 30473 | 26983 | 24752 | 21917 | 21477 | 21037 | 20597 | 20157 | 19717 | 19277 |
|                           |            |              |              |                | 10000  | 40114                  | 40114 | 35520 | 30473 | 24752 | 21917 | 20105 | 18293 | 17853 | 17413 | 16973 | 16533 |       |       |
|                           |            |              |              |                | 30000  | 35520                  | 28851 | 25547 | 21917 | 17802 | 15763 | 14460 | 13157 | 12817 | 12477 | 12137 | 11797 |       |       |
|                           |            |              |              |                | 50000  | 30473                  | 24752 | 21917 | 18803 | 15273 | 13524 | 12405 | 11286 | 10946 | 10606 | 10266 | 9926  |       |       |
|                           |            |              |              |                | 100000 | 24752                  | 20105 | 17802 | 15273 | 12405 | 10985 | 10076 | 9167  | 8827  | 8487  | 8147  | 7807  |       |       |

See page 156 for trademark acknowledgments.

**Browning**

# Spherical Roller Bearings

## SPB1000

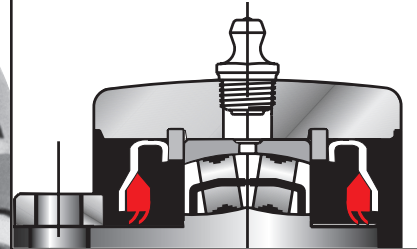
Extended Inner Race with Concentric Locking Collar and Two Setscrews

Self-Aligning Double Row Spherical Roller Bearings

Elongated Bolt Holes with Two and Four Bolt Housings

One Piece Cast Iron Housing

Contact Seal for 1000 & 1100 Series  
To Specify Add C  
Example: SPB1000NECx2 7/16"



MULTI-TRAP® Seal

## SPB1100

Ductile Iron Housing

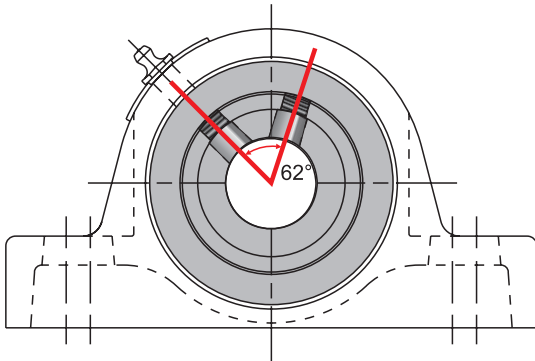
# BROWNING SPHERICAL ROLLER BEARINGS 1000/1100 SERIES FEATURES/BENEFITS

Note: Other features are like the 1000 Series



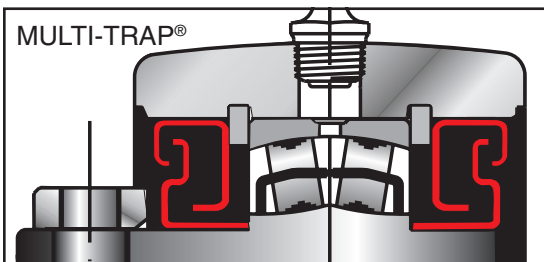
## LOCKING

**1000/1100 LOCKING** - A concentric locking collar with two set screws anchor the bearing to the inner race. The elastic deflection of the collar serves to help retain the bearing on the shaft. Set screws are located at 62° for improved holding power and resistance to back out especially in applications with heavy vibration or unidirectional loads. Browning lock collars are black oxide coated for corrosion resistance.



## SEALS

**1000/1100 SEALING** - The Browning MULTI-TRAP® seal offers additional protection against contaminant entry and provides for grease retention. The labyrinth seal is constructed of three components with a rotating flinger to help direct contamination away from the sealing surfaces during operational or dynamic misalignment. These self-aligning, non-contact seals reduce drag and save energy and normally cannot be blown by over greasing. Black oxide offers additional protection against corrosion. Browning also offers a double lip contact seal with integral metal shield help protect against contaminants. It has good grease retention characteristics in operating temperatures up to 200° F. Contact seals are standard on the 4 7/16" - 4 15/16" 1000 series pillow blocks and optional on all other 1000 and 1100 series.



See page 156 for trademark acknowledgments.

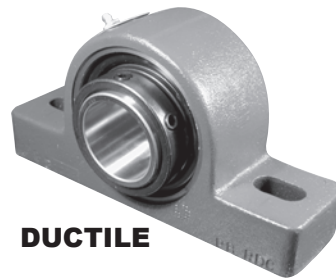
# BROWNING SPHERICAL ROLLER BEARINGS 1000/1100 SERIES FEATURES/BENEFITS

## HOUSINGS



**CAST IRON**

**1000 HOUSING** - Browning compact, solid, one piece, cast iron housings provide strength and load support in a wide variety of applications.



**DUCTILE**

**1100 HOUSING** - 1100 Series ductile iron housings are approximately twice as strong as cast iron. This is an important feature in applications such as sawmills where heavy loads and shock conditions are normally experienced.

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# Browning®

## Spherical Roller Bearings

### SPB1000

**Lock:** Set Screw  
**Seal:** MULTI-TRAP® Labyrinth  
**Housing:** Cast Iron  
**Temperatures:** -20°F to 200°F  
**Optional Seal:** Double Lip Contact  
**Self Aligning:** ±1 1/2°  
**Fitting:** 1/8" NPT

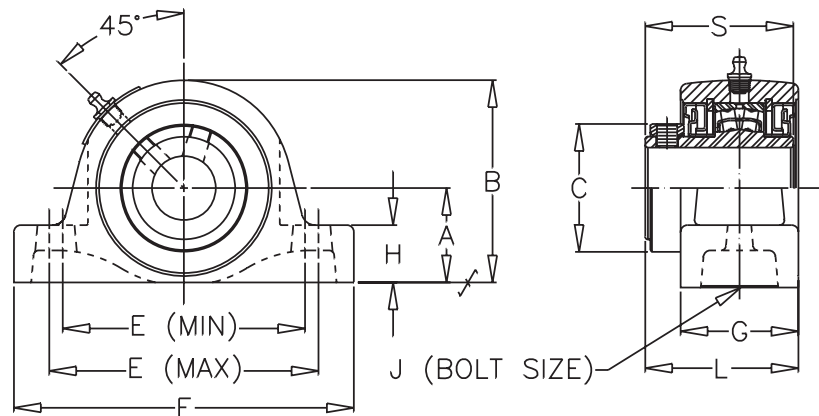
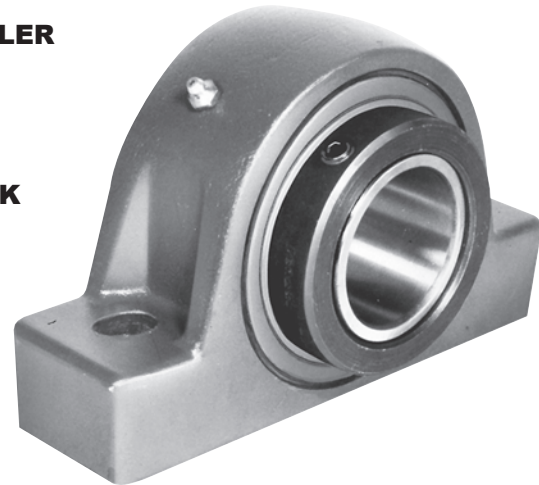
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**Interchange Tables:** Page 166

**Expansion and Non-Expansion**

**S SPHERICAL ROLLER**  
**P PILLOW**  
**B BLOCK**

**1 1000 SERIES**  
**0 SET SCREW LOCK**  
**0 CAST IRON**  
**0 BEARING**



| SHAFT DIA. IN. | Dimensions in Inches |         |         |         |         |         |         |        |     |         |         | UNIT WT. |
|----------------|----------------------|---------|---------|---------|---------|---------|---------|--------|-----|---------|---------|----------|
|                | A                    | B       | C       | E       |         | F       | G       | H      | J   | L*      | S       |          |
|                |                      |         |         | MIN     | MAX     |         |         |        |     |         |         |          |
| 1 1/8          |                      |         |         |         |         |         |         |        |     |         |         |          |
| 1 3/16         | 1 3/4                | 3 3/4   | 2 15/32 | 4 1/2   | 5       | 6 5/16  | 2 3/16  | 1 1/16 | 3/8 | 2 27/32 | 2 3/4   | 6.5      |
| 1 1/4          |                      |         |         |         |         |         |         |        |     |         |         |          |
| 1 7/16         | 1 7/8                | 3 7/8   | 2 15/32 | 4 11/16 | 5 5/16  | 6 7/8   | 2 3/16  | 1 3/16 | 1/2 | 2 27/32 | 2 3/4   | 6.9      |
| 1 1/2          |                      |         |         |         |         |         |         |        |     |         |         |          |
| 1 11/16        | 2 1/8                | 4 1/4   | 2 23/32 | 5 3/16  | 5 13/16 | 7 3/8   | 2 3/16  | 1 5/16 | 1/2 | 2 31/32 | 2 7/8   | 8.1      |
| 1 3/4          |                      |         |         |         |         |         |         |        |     |         |         |          |
| 1 15/16        | 2 1/4                | 4 9/16  | 2 29/32 | 5 15/16 | 6 9/16  | 8 3/8   | 2 3/16  | 1 3/8  | 5/8 | 2 31/32 | 2 7/8   | 9.1      |
| 2              |                      |         |         |         |         |         |         |        |     |         |         |          |
| 2 3/16         | 2 1/2                | 5       | 3 1/4   | 6 9/16  | 7 1/16  | 8 7/8   | 2 7/16  | 1 5/8  | 5/8 | 3 7/32  | 3 1/8   | 11.8     |
| 2 7/16         |                      |         |         |         |         |         |         |        |     |         |         |          |
| 2 1/2          | 2 3/4                | 5 11/16 | 4       | 6 13/16 | 7 7/16  | 9 1/4   | 2 11/16 | 1 3/4  | 5/8 | 3 15/32 | 3 3/8   | 16.2     |
| 2 11/16        |                      |         |         |         |         |         |         |        |     |         |         |          |
| 2 3/4          | 3 1/4                | 6 7/16  | 4 3/8   | 7 13/16 | 8 7/16  | 10 7/16 | 2 13/16 | 2 1/4  | 3/4 | 3 25/32 | 3 5/8   | 22.1     |
| 2 15/16        |                      |         |         |         |         |         |         |        |     |         |         |          |
| 3              |                      |         |         |         |         |         |         |        |     |         |         |          |
| 3 3/16         | 3 3/4                | 7 1/2   | 5 1/8   | 9 1/4   | 10 3/4  | 13      | 3 3/16  | 2 1/4  | 7/8 | 4 3/16  | 4 1/32  | 31.6     |
| 3 7/16         |                      |         |         |         |         |         |         |        |     |         |         |          |
| 3 1/2          |                      |         |         |         |         |         |         |        |     |         |         |          |
| 3 11/16        | 4 1/8                | 8 7/16  | 6       | 10      | 11 3/4  | 14 1/4  | 3 9/16  | 2 1/2  | 1   | 4 3/4   | 4 19/32 | 44.6     |
| 3 15/16        |                      |         |         |         |         |         |         |        |     |         |         |          |
| 4              |                      |         |         |         |         |         |         |        |     |         |         |          |

\*These dimensions are for Non-Expansion units. For expansion type, adjust ±.050."

Non-Expansion Pillow Block Part Numbers are specified by "SPB1000NE" and bore size: Example, **SPB1000NE 2 7/16"**. For Contact Seals Add "C" to prefix: Example, **SPB1000NECx 2 7/16"**.

Expansion Pillow Block Part Numbers are specified by "SPB1000E" and bore size: Example, **SPB1000E 2 7/16"**. For Contact Seals Add "C" to prefix: Example, **SPB1000ECx 2 7/16"**.

Self-aligning with contact seals ± 1 1/4°.

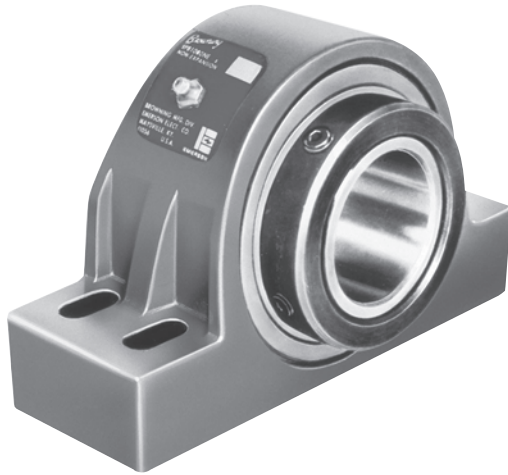
# Browning®

## Spherical Roller Bearings

Set Screw



1000



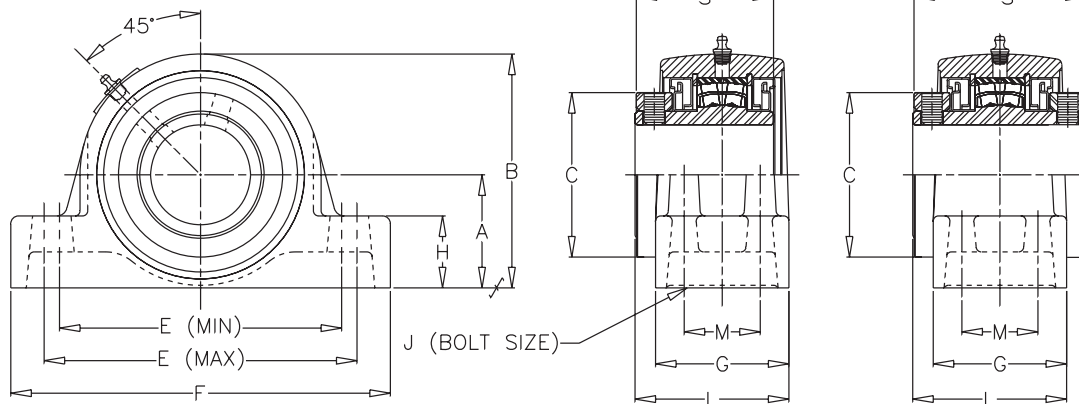
**SPHERICAL ROLLER S**  
**PILLOW P**  
**BLOCK B**

**1000 SERIES 1**  
**SET SCREW LOCK 0**  
**CAST IRON 0**  
**BEARING 0**  
**FOUR BOLT BASE F**

**Lock:** Set Screw  
**Seal:** MULTI-TRAP® Labyrinth  
**Housing:** Cast Iron  
**Temperatures:** -20°F to 200°F  
**Optional Seal:** Double Lip Contact  
**Self Aligning:** ±1 1/2°  
**Fitting:** 1/8" NPT

**Load Rating Tables:** Page 139  
**Interchange Tables:** Page 166

**Expansion and Non-Expansion**



"DOUBLE COLLAR"

| SHAFT DIA. IN.                   | Dimensions in Inches |         |       |        |        |         |       |       |     |         |       | UNIT WT. |       |
|----------------------------------|----------------------|---------|-------|--------|--------|---------|-------|-------|-----|---------|-------|----------|-------|
|                                  | A                    | B       | C     | E      |        | F       | G     | H     | J   | L*      | M     |          | S     |
|                                  |                      |         |       | MIN    | MAX    |         |       |       |     |         |       |          |       |
| 2 7/16<br>2 1/2                  | 2 3/4                | 5 11/16 | 4     | 6 7/8  | 7 5/8  | 9 1/4   | 3 1/4 | 1 3/4 | 1/2 | 3 3/4   | 1 3/4 | 3 3/8    | 16.5  |
| 2 11/16<br>2 3/4<br>2 15/16<br>3 | 3 1/4                | 6 7/16  | 4 3/8 | 7 7/8  | 8 3/8  | 10 7/16 | 3 3/4 | 2 1/4 | 5/8 | 4 1/4   | 1 7/8 | 3 5/8    | 26.0  |
| 3 3/16<br>3 7/16<br>3 1/2        | 3 3/4                | 7 1/2   | 5 1/8 | 9 1/4  | 10 3/4 | 13      | 3 7/8 | 2 1/4 | 3/4 | 4 17/32 | 2     | 4 1/32   | 37.5  |
| 3 11/16<br>3 15/16<br>4          | 4 1/4                | 8 9/16  | 6     | 11     | 13     | 15 1/4  | 4 1/2 | 2 5/8 | 3/4 | 5 7/32  | 2 1/4 | 4 19/32  | 50.0  |
| ▲ 4 7/16<br>▲ 4 1/2              | 4 3/4                | 9 3/8   | 6 1/8 | 13 1/8 | 13 7/8 | 16 5/8  | 4 5/8 | 2 3/4 | 3/4 | 5 3/8   | 2 1/2 | 6 1/8    | 71.0  |
| ▲ 4 15/16                        | 5 1/2                | 10 7/8  | 6 7/8 | 15 1/8 | 15 7/8 | 18 1/2  | 5 1/8 | 3     | 7/8 | 5 7/8   | 2 3/4 | 6 5/8    | 100.0 |

\*These dimensions are for Non-Expansion units. For expansion type, adjust ±.050."

Non-Expansion Pillow Block Part Numbers are specified by "SPB1000FNE" and bore size: Example, **SPB1000FNEx 2 7/16"**. For Contact Seals Add "C" to prefix: Example, **SPB1000FNECx 2 7/16"**.

Expansion Pillow Block Part Numbers are specified by "SPB1000FE" and bore size: Example, **SPB1000FEEx 2 7/16"**. For Contact Seals Add "C" to prefix: Example, **SPB1000FECEx 2 7/16"**.

Self-aligning with contacts seals ± 1 1/4°.

▲ Available with contacts seals and double locking collars only.

See page 156 for trademark acknowledgments.



1000

**Browning**<sup>®</sup>

Spherical Roller Bearings

**SFB1000**

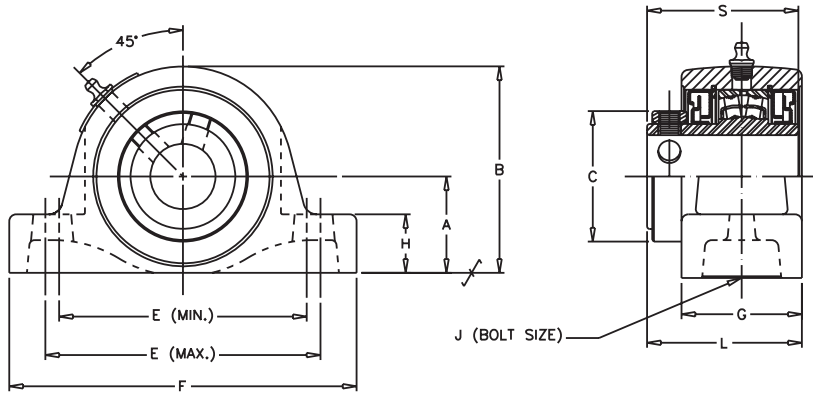
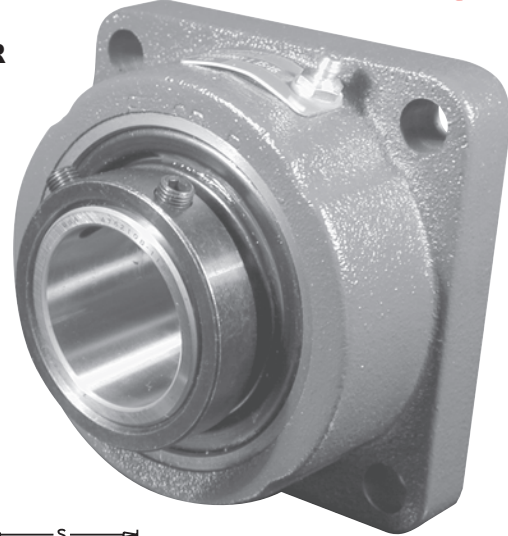
Lock: Set Screw  
 Seal: MULTI-TRAP<sup>®</sup> Labyrinth  
 Housing: Cast Iron  
 Temperatures: -20°F to 200°F  
 Optional Seal: Double Lip Contact  
 Self Aligning: ±1 1/2°  
 Fitting: 1/8" NPT

Load Rating Tables: Page 139  
 Interchange Tables: Page 166

Expansion and Non-Expansion

**S SPHERICAL ROLLER**  
**F FLANGE**  
**B BLOCK**

**1 1000 SERIES**  
**0 SET SCREW LOCK**  
**0 CAST IRON**  
**0 BEARING**



| SHAFT DIA. IN.                   | Dimensions in Inches |        |         |       |         |        |     |         |         |        |       |         | UNIT WT. |
|----------------------------------|----------------------|--------|---------|-------|---------|--------|-----|---------|---------|--------|-------|---------|----------|
|                                  | B                    | BC     | C       | D     | E       | H      | J   | L*      | M       | P      | R*    | S       |          |
| 1 7/16<br>1 1/2                  | 4 5/8                | 5      | 2 15/32 | 3 7/8 | 3 35/64 | 3/4    | 1/2 | 2 13/16 | 2 1/16  | 3/4    | 1/16  | 2 3/4   | 6.8      |
| 1 11/16<br>1 3/4                 | 5                    | 5 1/2  | 2 23/32 | 4 1/2 | 3 57/64 | 3/4    | 1/2 | 3 3/64  | 2 1/4   | 3/4    | 11/64 | 2 7/8   | 9.8      |
| 1 15/16<br>2                     | 5 3/16               | 5 3/4  | 2 29/32 | 4 3/4 | 4 5/64  | 3/4    | 1/2 | 3 3/64  | 2 1/4   | 3/4    | 11/64 | 2 7/8   | 10.3     |
| 2 3/16                           | 5 7/8                | 6 3/8  | 3 1/4   | 5 1/8 | 4 1/2   | 13/16  | 5/8 | 3 19/64 | 2 7/16  | 13/16  | 11/64 | 3 1/8   | 12.2     |
| 2 7/16<br>2 1/2                  | 6 1/8                | 6 3/4  | 4       | 5 3/4 | 4 25/32 | 1 1/32 | 5/8 | 3 35/64 | 2 21/32 | 27/32  | 11/64 | 3 3/8   | 16.2     |
| 2 11/16<br>2 3/4<br>2 15/16<br>3 | 7 3/16               | 7 7/8  | 4 3/8   | 6 5/8 | 5 37/64 | 15/16  | 3/4 | 3 59/64 | 2 7/8   | 1      | 19/64 | 3 5/8   | 25.1     |
| 3 3/16<br>3 7/16<br>3 1/2        | 8 3/8                | 9 1/2  | 5 1/8   | 7 5/8 | 6 23/32 | 1 1/8  | 3/4 | 4 21/64 | 3 9/32  | 1      | 19/64 | 4 1/32  | 35.0     |
| 3 11/16<br>3 15/16<br>4          | 9 1/2                | 10 3/4 | 6       | 8 3/8 | 7 39/64 | 1 3/16 | 7/8 | 4 53/64 | 3 9/16  | 1 9/32 | 15/64 | 4 19/32 | 48.0     |

Non-Expansion Pillow Block Part Numbers are specified by "SFB1000NE" and bore size: Example, **SFB1000NEx 2 7/16"**. For Contact Seals Add "C" to prefix: Example, **SFB1000NECx 2 7/16"**.

Expansion Pillow Block Part Numbers are specified by "SFB1000E" and bore size: Example, **SFB1000Ex 2 7/16"**. For Contact Seals Add "C" to prefix: Example, **SFB1000ECx 2 7/16"**.

Self-aligning with contacts seals ± 1 1/4°.



# Spherical Roller Bearings



1000

## SFB1000-3&4

**SPHERICAL ROLLER S**  
**FLANGE F**  
**BASE B**

**1000 SERIES 1**  
**SET SCREW LOCK 0**  
**CAST IRON 0**  
**BEARING 0**

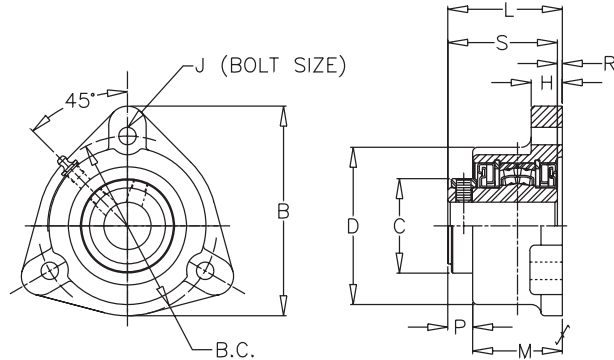
**THREE OR FOUR BOLT MOUNTING 3**

**Lock:** Set screw  
**Seal:** MULTI-TRAP® Labyrinth  
**Housing:** Cast Iron  
**Temperatures:** -20°F to 200°F  
**Optional Seal:** Double Lip Contact  
**Self Aligning:** ±1 1/2°  
**Fitting:** 1/4" NPT

**Load Rating Tables:** Page 139

**Interchange Tables:** Page 166

**Expansion and Non-Expansion**



| SHAFT DIA. IN. | Dimensions in Inches |       |         |         |       |     |       |       |     |     |       | UNIT WT. |
|----------------|----------------------|-------|---------|---------|-------|-----|-------|-------|-----|-----|-------|----------|
|                | B                    | BC    | C       | D       | H     | J   | L*    | M     | P   | R*  | S     |          |
| 1 1/8          |                      |       |         |         |       |     |       |       |     |     |       |          |
| 1 3/16         | 5 1/4                | 4 1/2 | 2 15/32 | 3 15/16 | 25/32 | 3/8 | 2 7/8 | 2 1/4 | 5/8 | 1/8 | 2 3/4 | 7.3      |
| 1 1/4          |                      |       |         |         |       |     |       |       |     |     |       |          |
| 1 7/16         | 5 1/4                | 5     | 2 15/32 | 3 15/16 | 25/32 | 1/2 | 2 7/8 | 2 1/4 | 5/8 | 1/8 | 2 3/4 | 6.8      |
| 1 1/2          |                      |       |         |         |       |     |       |       |     |     |       |          |

\*Dimensions L and R are for non-expansion unit. For expansion type, increase L and R by .098" max.

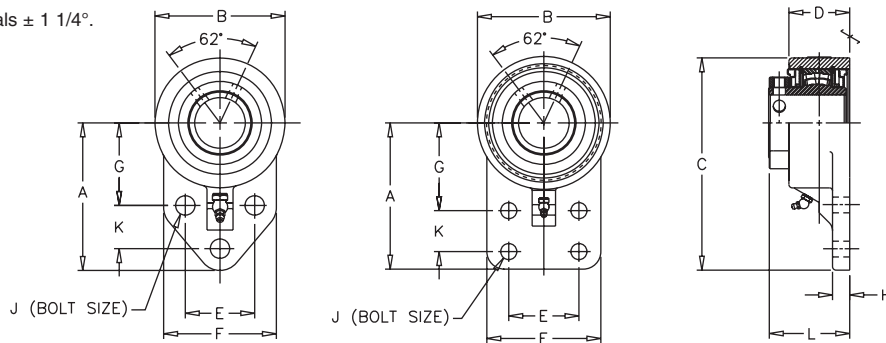
Non-Expansion Flange Block part numbers are SFB1000NE-3 and bore size. Example: SFB1000NE-3 x 1 1/8. For contact seal add "C" to prefix:

Example: **SFB1000NE3C x 1 1/8"**.

Expansion Flange Block part numbers are SFB1000E-3 and bore size. Example: SFB1000E-3 x 1 1/8. For contact seal add "C" to prefix:

Example: **SFB1000E3C x 1 1/8"**.

Self-aligning with contacts seals ± 1 1/4°.



| SHAFT DIA. IN.    | UNIT DESCRIPTION | Dimensions in Inches |         |        |         |       |       |         |       |     |       |         | UNIT WT. |
|-------------------|------------------|----------------------|---------|--------|---------|-------|-------|---------|-------|-----|-------|---------|----------|
|                   |                  | A                    | B       | C      | D       | E     | F     | G       | H     | J   | K     | L*      |          |
| <b>THREE BOLT</b> |                  |                      |         |        |         |       |       |         |       |     |       |         |          |
| 1 7/16            | SBF1000NE3       | 4 1/4                | 3 3/4   | 6 1/8  | 2 1/4   | 2     | 3 1/4 | 2 3/8   | 5/8   | 1/2 | 1 1/4 | 3       | 6.8      |
| 1 15/16           | SBF1000NE3       | 5 3/16               | 4 1/4   | 7 5/16 | 2 3/8   | 2 3/4 | 4     | 2 15/16 | 11/16 | 1/2 | 1 5/8 | 3 11/64 | 8.3      |
| <b>FOUR BOLT</b>  |                  |                      |         |        |         |       |       |         |       |     |       |         |          |
| 2 7/16            | SBF1000NE4       | 6 1/4                | 5 11/16 | 9 3/32 | 2 21/32 | 3     | 4 7/8 | 3 3/4   | 3/4   | 5/8 | 1 3/4 | 3 35/64 | 13.5     |

\*These dimensions are for non-expansion unit. For expansion type, adjust ±.040.

Expansion 3 Bolt Flange Block part numbers are SBF1000E3 and bore size. Example SBF1000E3 X 1 7/16.

Expansion 4 Bolt Flange Block part numbers are SBF1000E4 and bore size. Example SBF1000E4 x 2 7/16.

For Contact Seals add "C" to prefix: Example SBF1000NEC4 X 2 7/16.

See page 156 for trademark acknowledgments.

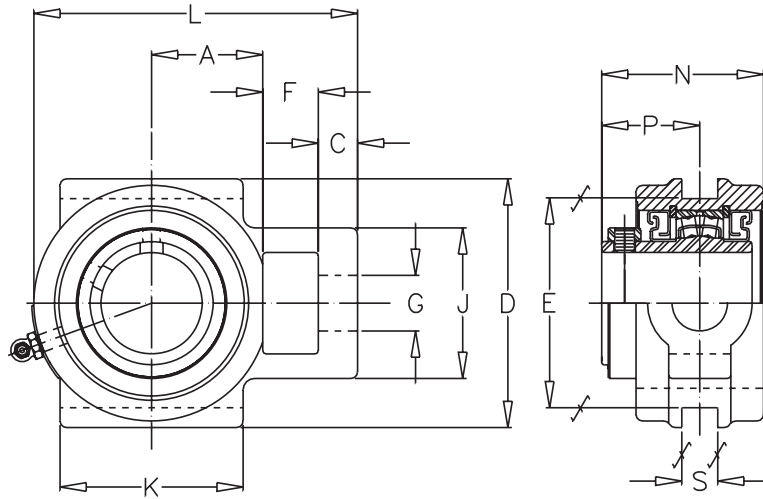
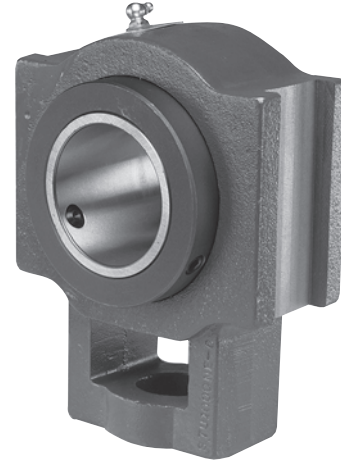


# STU1000

**Lock:** Set Screw  
**Seal:** MULTI-TRAP<sup>®</sup> Labyrinth  
**Housing:** Cast Iron  
**Temperatures:** -20°F to 200°F  
**Optional Seal:** Double Lip Contact  
**Self Aligning:** ±1 1/2°  
**Fitting:** 1/8" NPT

**Load Rating Tables:** Page 139  
**Interchange Tables:** Page 166

**S SPHERICAL ROLLER**  
**T TAKE**  
**U UP**  
  
**1 1000 SERIES**  
**0 SET SCREW LOCK**  
**0 CAST IRON**  
**0 BEARING**



| SHAFT DIA. IN.                   | Dimensions In Inches |       |        |         |         |         |       |       |          |         |         |         | UNIT WT. |
|----------------------------------|----------------------|-------|--------|---------|---------|---------|-------|-------|----------|---------|---------|---------|----------|
|                                  | A                    | C     | D      | E       | F       | G       | J     | K     | L        | N       | P       | S       |          |
| 1 15/16<br>2                     | 2 1/8                | 3/4   | 4 3/4  | 4       | 1 1/16  | 1 1/16  | 2 7/8 | 3 1/2 | 6 3/16   | 3 3/32  | 1 7/8   | 11/16   | 15.0     |
| 2 3/16                           | 2 3/8                | 3/4   | 5 1/4  | 4 1/2   | 1 3/16  | 1 3/16  | 3 1/2 | 3 3/4 | 6 13/16  | 3 9/32  | 2       | 13/16   | 18.0     |
| 2 7/16<br>2 1/2                  | 2 3/4                | 7/8   | 5 7/8  | 5 1/8   | 1 5/16  | 1 5/16  | 3 3/4 | 4 3/4 | 7 15/16  | 3 15/32 | 2 1/8   | 1 1/16  | 24.0     |
| 2 11/16<br>2 3/4<br>2 15/16<br>3 | 3                    | 1     | 6 3/4  | 5 15/16 | 1 9/16  | 1 9/16  | 4 1/4 | 4 3/4 | 8 3/4    | 3 7/8   | 2 3/8   | 1 13/16 | 30.0     |
| 3 3/16<br>3 7/16<br>3 1/2        | 3 5/8                | 1     | 7 5/8  | 6 13/16 | 1 13/16 | 1 13/16 | 4 7/8 | 6 1/4 | 10 7/16  | 4 7/16  | 2 19/32 | 1 13/16 | 38.0     |
| 3 11/16<br>3 15/16<br>4          | 4 1/8                | 1 1/8 | 9 7/16 | 8 5/8   | 2 1/8   | 2 3/16  | 5 5/8 | 7     | 11 13/16 | 5 7/32  | 2 31/32 | 2 1/16  | 48.0     |

Part Numbers are specified by "STU1000NE" and bore size: Example, **STU1000NEx 3 7/16"**.

For Contact Seals Add "C" to prefix: Example **STU1000NECx 3 7/16"**.

These Take-Up Bearings are to be used with T1000 Take-Up Frames shown on page 133.

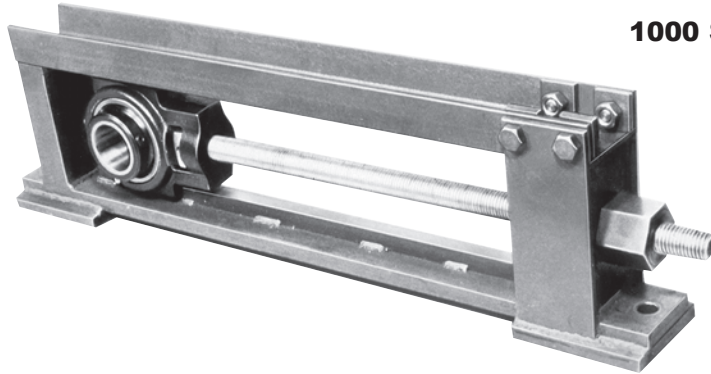
Bearing unit and frame must be ordered separately.

Self-aligning with contacts seals ± 1 1/4°.



# Spherical Roller Bearings

# T1000

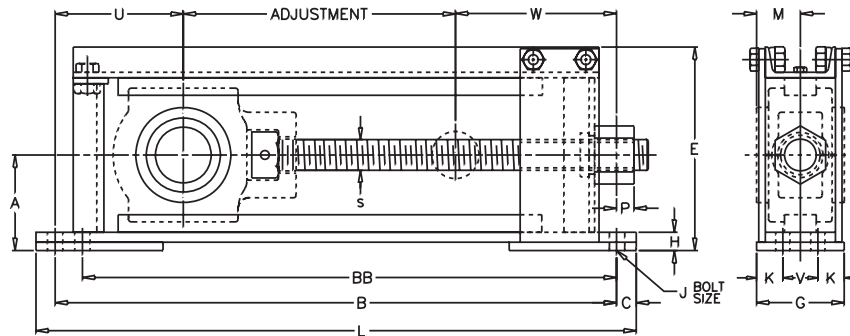


**TAKE UP FRAME T**

**1000 SERIES 1  
0  
0  
0**

**Material:** All Steel Construction

**Exclusive Design:** Removable Top Permits Assembling of Take-Up Unit on Shaft Before Inserting in Take-Up Frame.



| SHAFT DIA. IN | FRAME PART NO. | Adjustment* |        | Dimensions in Inches |        |        |       |          |   |        |       |        |         |           |       |        |       | Bolts Req'd |     | UNIT WT. |        |
|---------------|----------------|-------------|--------|----------------------|--------|--------|-------|----------|---|--------|-------|--------|---------|-----------|-------|--------|-------|-------------|-----|----------|--------|
|               |                | No-m.       | Actual | A                    | B      | BB     | C     | E        | G | H      | K     | L      | M       | S         | P     | U      | V     | W           | No. |          | Size J |
| 1 15/16       | 12-16.5T1000D  | 12          | 16.5   | 3 15/16              | 27 1/2 | 26 1/2 | 1     | 8 9/32   | 4 | 1 1/4  | -     | 29 1/2 | 1 7/8   | 1-8NC     | 1 1/4 | 5 3/8  | -     | 5 5/8       | 2   | 5/8      | 60     |
|               | 18-22.5T1000D  | 18          | 22.5   | 3 15/16              | 33 1/2 | 32 1/2 | 1     | 8 9/32   | 4 | 1 1/4  | -     | 35 1/2 | 1 7/8   | 1-8NC     | 1 1/4 | 5 3/8  | -     | 5 5/8       | 2   | 5/8      | 70     |
|               | 24-28.5T1000D  | 24          | 28.5   | 3 15/16              | 39 1/2 | 38 1/2 | 1     | 8 9/32   | 4 | 1 1/4  | -     | 41 1/2 | 1 7/8   | 1-8NC     | 1 1/4 | 5 3/8  | -     | 5 5/8       | 2   | 5/8      | 80     |
| 2 3/16        | 12-17T1000EL   | 12          | 17     | 4 3/16               | 27 1/2 | -      | 1     | 8 21/32  | 4 | 1 3/8  | -     | 29 1/2 | 2       | 1 1/8-7NC | 1 5/8 | 4 9/16 | -     | 5 15/16     | 2   | 5/8      | 65     |
|               | 18-23T1000EL   | 18          | 23     | 4 3/16               | 33 1/2 | -      | 1     | 8 21/32  | 4 | 1 3/8  | -     | 35 1/2 | 2       | 1 1/8-7NC | 1 5/8 | 4 9/16 | -     | 5 15/16     | 2   | 5/8      | 77     |
|               | 24-29T1000EL   | 24          | 29     | 4 3/16               | 39 1/2 | -      | 1     | 8 21/32  | 4 | 1 3/8  | -     | 41 1/2 | 2       | 1 1/8-7NC | 1 5/8 | 4 9/16 | -     | 5 15/16     | 2   | 5/8      | 86     |
| 2 3/16        | 12-17T1000EH   | 12          | 17     | 4 7/16               | 27 1/2 | -      | 1     | 8 29/32  | 4 | 1 5/8  | -     | 29 1/2 | 2       | 1 1/8-7NC | 1 5/8 | 4 9/16 | -     | 5 15/16     | 2   | 5/8      | 68     |
|               | 18-23T1000EH   | 18          | 23     | 4 7/16               | 33 1/2 | -      | 1     | 8 29/32  | 4 | 1 5/8  | -     | 35 1/2 | 2       | 1 1/8-7NC | 1 5/8 | 4 9/16 | -     | 5 15/16     | 2   | 5/8      | 80     |
|               | 24-29T1000EH   | 24          | 29     | 4 7/16               | 39 1/2 | -      | 1     | 8 29/32  | 4 | 1 5/8  | -     | 41 1/2 | 2       | 1 1/8-7NC | 1 5/8 | 4 9/16 | -     | 5 15/16     | 2   | 5/8      | 91     |
| 2 7/16        | 12-16.6T1000F  | 12          | 16.6   | 4 3/8                | 28 1/2 | -      | 1     | 9 3/16   | 4 | 1 1/8  | -     | 30 1/2 | 2 1/8   | 1 1/4-7NC | 1 3/4 | 5 5/16 | -     | 6 9/16      | 2   | 3/4      | 71     |
|               | 18-22.6T1000F  | 18          | 22.6   | 4 3/8                | 34 1/2 | -      | 1     | 9 3/16   | 4 | 1 1/8  | -     | 36 1/2 | 2 1/8   | 1 1/4-7NC | 1 3/4 | 5 5/16 | -     | 6 9/16      | 2   | 3/4      | 81     |
|               | 24-28.6T1000F  | 24          | 28.6   | 4 3/8                | 40 1/2 | -      | 1     | 9 3/16   | 4 | 1 1/8  | -     | 42 1/2 | 2 1/8   | 1 1/4-7NC | 1 3/4 | 5 5/16 | -     | 6 9/16      | 2   | 3/4      | 91     |
| 2 1/2         | 30-34.6T1000F  | 30          | 34.6   | 4 3/8                | 46 1/2 | -      | 1     | 9 3/16   | 4 | 1 1/8  | -     | 48 1/2 | 2 1/8   | 1 1/4-7NC | 1 3/4 | 5 5/16 | -     | 6 9/16      | 2   | 3/4      | 111    |
|               | 12-15.5T1000GL | 12          | 15.5   | 4 15/16              | 30 1/2 | -      | 1     | 10 11/16 | 5 | 31/32  | 1 1/2 | 32 1/2 | 2 3/8   | 1 1/2-6NC | 1/2   | 6 1/2  | 2     | 8 1/2       | 4   | 5/8      | 105    |
|               | 18-21.5T1000GL | 18          | 21.5   | 4 15/16              | 36 1/2 | -      | 1     | 10 11/16 | 5 | 31/32  | 1 1/2 | 38 1/2 | 2 3/8   | 1 1/2-6NC | 1/2   | 6 1/2  | 2     | 8 1/2       | 4   | 5/8      | 120    |
| 2 15/16       | 24-27.5T1000GL | 24          | 27.5   | 4 15/16              | 42 1/2 | -      | 1     | 10 11/16 | 5 | 31/32  | 1 1/2 | 44 1/2 | 2 3/8   | 1 1/2-6NC | 1/2   | 6 1/2  | 2     | 8 1/2       | 4   | 5/8      | 135    |
|               | 30-33.5T1000GL | 30          | 33.5   | 4 15/16              | 48 1/2 | -      | 1     | 10 11/16 | 5 | 31/32  | 1 1/2 | 50 1/2 | 2 3/8   | 1 1/2-6NC | 1/2   | 6 1/2  | 2     | 8 1/2       | 4   | 5/8      | 150    |
|               | 12-15.5T1000GH | 12          | 15.5   | 5 1/8                | 30 1/2 | -      | 1     | 10 7/8   | 5 | 1 5/32 | 1 1/2 | 32 1/2 | 2 3/8   | 1 1/2-6NC | 1/2   | 6 1/2  | 2     | 8 1/2       | 4   | 5/8      | 109    |
| 2 3/4         | 18-21.5T1000GH | 18          | 21.5   | 5 1/8                | 36 1/2 | -      | 1     | 10 7/8   | 5 | 1 5/32 | 1 1/2 | 38 1/2 | 2 3/8   | 1 1/2-6NC | 1/2   | 6 1/2  | 2     | 8 1/2       | 4   | 5/8      | 126    |
|               | 24-27.5T1000GH | 24          | 27.5   | 5 1/8                | 42 1/2 | -      | 1     | 10 7/8   | 5 | 1 5/32 | 1 1/2 | 44 1/2 | 2 3/8   | 1 1/2-6NC | 1/2   | 6 1/2  | 2     | 8 1/2       | 4   | 5/8      | 141    |
|               | 30-33.5T1000GH | 30          | 33.5   | 5 1/8                | 48 1/2 | -      | 1     | 10 7/8   | 5 | 1 5/32 | 1 1/2 | 50 1/2 | 2 3/8   | 1 1/2-6NC | 1/2   | 6 1/2  | 2     | 8 1/2       | 4   | 5/8      | 156    |
| 3 3/16        | 12-15.5T1000JL | 12          | 15.5   | 5 7/16               | 32     | -      | 1 1/8 | 11 5/8   | 5 | 1 1/32 | 1 1/2 | 34 1/4 | 2 19/32 | 1 3/4-5NC | 1     | 7 5/16 | 2     | 9 3/16      | 4   | 3/4      | 138    |
|               | 18-21.5T1000JL | 18          | 21.5   | 5 7/16               | 38     | -      | 1 1/8 | 11 5/8   | 5 | 1 1/32 | 1 1/2 | 40 1/4 | 2 19/32 | 1 3/4-5NC | 1     | 7 5/16 | 2     | 9 3/16      | 4   | 3/4      | 156    |
|               | 24-27.5T1000JL | 24          | 27.5   | 5 7/16               | 44     | -      | 1 1/8 | 11 5/8   | 5 | 1 1/32 | 1 1/2 | 46 1/4 | 2 19/32 | 1 3/4-5NC | 1     | 7 5/16 | 2     | 9 3/16      | 4   | 3/4      | 173    |
| 3 7/16        | 30-33.5T1000JL | 30          | 33.5   | 5 7/16               | 50     | -      | 1 1/8 | 11 5/8   | 5 | 1 1/32 | 1 1/2 | 52 1/4 | 2 19/32 | 1 3/4-5NC | 1     | 7 5/16 | 2     | 9 3/16      | 4   | 3/4      | 191    |
|               | 12-15.5T1000JH | 12          | 15.5   | 5 5/8                | 32     | -      | 1 1/8 | 11 13/16 | 5 | 1 7/32 | 1 1/2 | 34 1/4 | 2 19/32 | 1 3/4-5NC | 1     | 7 5/16 | 2     | 9 3/16      | 4   | 3/4      | 145    |
|               | 18-21.5T1000JH | 18          | 21.5   | 5 5/8                | 38     | -      | 1 1/8 | 11 13/16 | 5 | 1 7/32 | 1 1/2 | 40 1/4 | 2 19/32 | 1 3/4-5NC | 1     | 7 5/16 | 2     | 9 3/16      | 4   | 3/4      | 163    |
| 3 1/2         | 24-27.5T1000JH | 24          | 27.5   | 5 5/8                | 44     | -      | 1 1/8 | 11 13/16 | 5 | 1 7/32 | 1 1/2 | 46 1/4 | 2 19/32 | 1 3/4-5NC | 1     | 7 5/16 | 2     | 9 3/16      | 4   | 3/4      | 179    |
|               | 30-33.5T1000JH | 30          | 33.5   | 5 5/8                | 50     | -      | 1 1/8 | 11 13/16 | 5 | 1 7/32 | 1 1/2 | 52 1/4 | 2 19/32 | 1 3/4-5NC | 1     | 7 5/16 | 2     | 9 3/16      | 4   | 3/4      | 197    |
|               | 12-18T1000K    | 12          | 18     | 7                    | 36     | -      | 1 1/4 | 14 15/32 | 6 | 1 7/16 | 1 3/4 | 38 1/2 | 2 31/32 | 2-4 1/2NC | 1 5/8 | 7 1/2  | 2 1/2 | 10 7/16     | 4   | 3/4      | 191    |
| 3 15/16       | 18-24T1000K    | 18          | 24     | 7                    | 42     | -      | 1 1/4 | 14 15/32 | 6 | 1 7/16 | 1 3/4 | 44 1/2 | 2 31/32 | 2-4 1/2NC | 1 5/8 | 7 1/2  | 2 1/2 | 10 7/16     | 4   | 3/4      | 223    |
|               | 24-30T1000K    | 24          | 30     | 7                    | 48     | -      | 1 1/4 | 14 15/32 | 6 | 1 7/16 | 1 3/4 | 50 1/2 | 2 31/32 | 2-4 1/2NC | 1 5/8 | 7 1/2  | 2 1/2 | 10 7/16     | 4   | 3/4      | 249    |
|               | 30-36T1000K    | 30          | 36     | 7                    | 54     | -      | 1 1/4 | 14 15/32 | 6 | 1 7/16 | 1 3/4 | 56 1/2 | 2 31/32 | 2-4 1/2NC | 1 5/8 | 7 1/2  | 2 1/2 | 10 7/16     | 4   | 3/4      | 274    |

Part Numbers are specified by "T1000" with travel adjustment and bore size: Example, 12-16.6T1000F has 12"-16.6" adjustment and will accommodate a STU1000x 2 7/16" bearing unit.

These Take-Up Frames are to be used with STU Take-Up Units shown on page 132.

Bearing unit and frame must be ordered separately.

\*Nominal adjustment is that offered by competitive frames having the same length.

Browning frames give greater ACTUAL adjustment, often permitting use of shorter, more compact frames.

Browning frames with over 12" nominal adjustment have a third foot in the center for extra support.

See page 156 for trademark acknowledgments.

Set Screw



1000

# SFC1000

Lock: Set Screw  
 Seal: MULTI-TRAP® Labyrinth  
 Housing: Cast Iron  
 Temperatures: -20°F to 200°F  
 Optional Seal: Double Lip Contact  
 Self Aligning: ±1 1/2°  
 Fitting: 1/4" -28NF

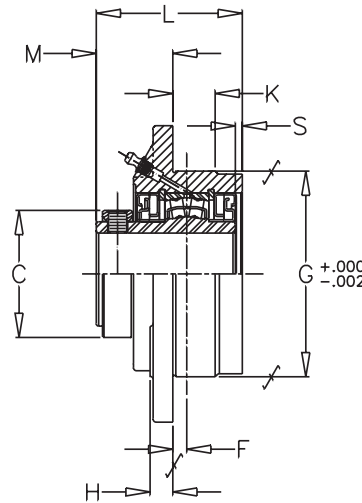
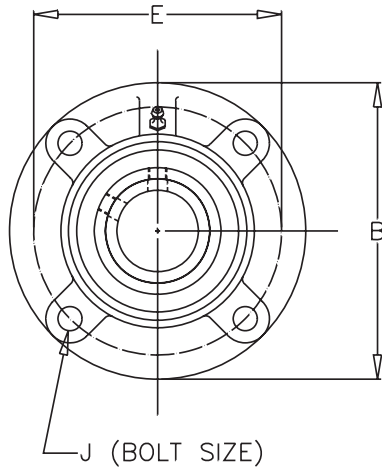
Load Rating Tables: Page 139  
 Interchange Tables: Page 166

# Browning®

## Spherical Roller Bearings

**SPHERICAL ROLLER S**  
**FLANGE F**  
**CARTRIDGE C**

**1000 SERIES 1**  
**SET SCREW LOCK 0**  
**CAST IRON 0**  
**BEARING 0**



| SHAFT DIA. IN.              | Dimensions In Inches |         |       |       |       |       |      |       |         |         |      | UNIT WT. |
|-----------------------------|----------------------|---------|-------|-------|-------|-------|------|-------|---------|---------|------|----------|
|                             | B                    | C       | E     | F*    | G     | H     | J    | K     | L*      | M*      | S*   |          |
| 1 7/16<br>1 1/2             | 5 1/4                | 2 15/32 | 4 3/8 | 1/4   | 3 5/8 | 15/32 | 3/8  | -     | 2 3/4   | 1 33/64 | 1/16 | 6.6      |
| 1 11/16<br>1 3/4            | 6 1/8                | 2 23/32 | 5 1/8 | 19/64 | 4 1/4 | 15/32 | 7/16 | 7/8   | 3 1/64  | 1 37/64 | 9/64 | 8.2      |
| 1 15/16<br>2                | 6 3/8                | 2 29/32 | 5 3/8 | 21/64 | 4 1/2 | 17/32 | 7/16 | 7/8   | 3 1/64  | 1 9/16  | 9/64 | 10.4     |
| 2 3/16                      | 7 1/8                | 3 1/4   | 6     | 9/32  | 5     | 17/32 | 1/2  | 1     | 3 7/32  | 1 3/4   | 3/32 | 14.5     |
| 2 7/16<br>2 1/2             | 7 5/8                | 4       | 6 1/2 | 11/32 | 5 1/2 | 19/32 | 1/2  | 1     | 3 27/64 | 1 13/16 | 3/64 | 16.0     |
| 2 11/16<br>2 3/4<br>2 15/16 | 8 3/4                | 4 3/8   | 7 1/2 | 13/32 | 6 3/8 | 23/32 | 5/8  | 1 1/4 | 3 27/32 | 2       | 7/32 | 22.0     |
| 3 3/16<br>3 7/16<br>3 1/2   | 10 1/4               | 5 1/8   | 8 5/8 | 9/32  | 7 3/8 | 27/32 | 3/4  | 1 1/4 | 4 9/64  | 2 19/64 | 7/64 | 33.0     |
| 3 11/16<br>3 15/16<br>4     | 10 7/8               | 6       | 9 3/8 | 5/16  | 8 1/8 | 31/32 | 3/4  | 1 1/2 | 4 3/4   | 2 21/32 | 9/64 | 45.0     |

\*These dimensions are for Non-Expansion units. For expansion type, adjust ±.050."

REV 1

Non-Expansion Pillow Block Part Numbers are specified by "SFC1000NE" and bore size: Example, **SFC1000NEx 2 7/16"**. For Contact Seals Add "C" to prefix: Example, **SFC1000NECx 2 7/16"**.

Expansion Pillow Block Part Numbers are specified by "SFC1000E" and bore size: Example, **SFC1000Ex 2 7/16"**. For Contact Seals Add "C" to prefix: Example, **SFB1000ECx 2 7/16"**.

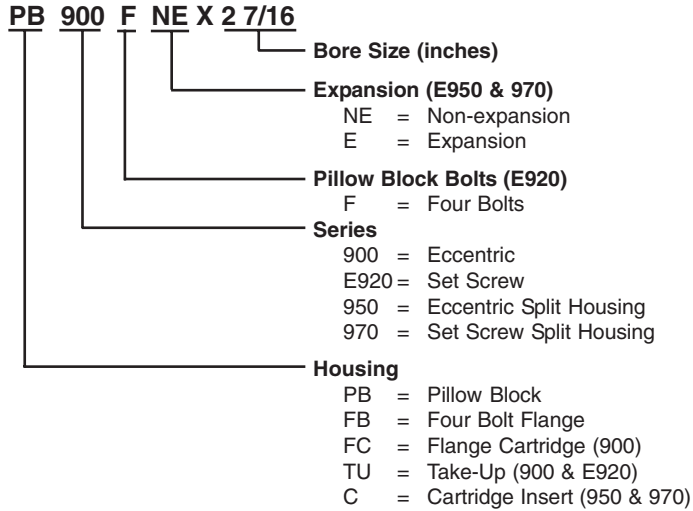
Self-aligning with contacts seals ± 1 1/4°.



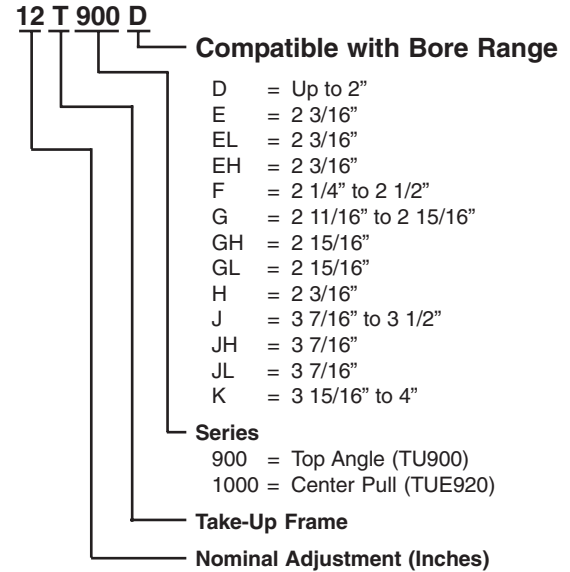
# Spherical Roller Bearings

## Part Number Explanation

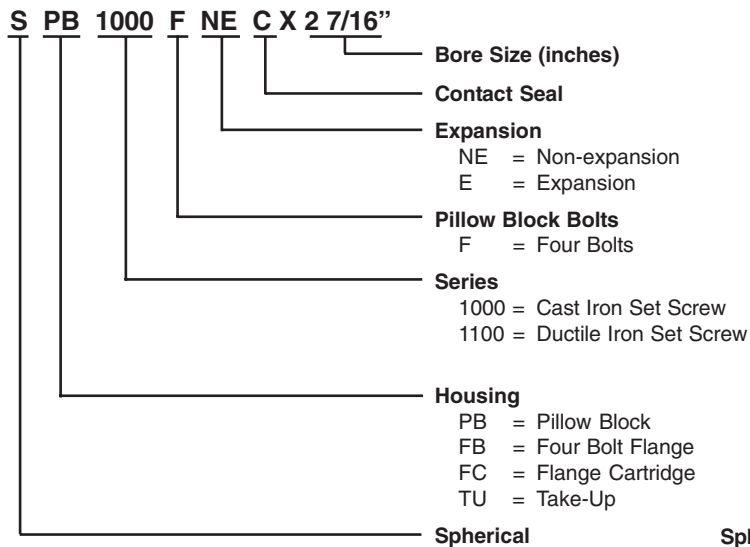
### Tapered Roller Bearings Series (900, E920, 970, 950)



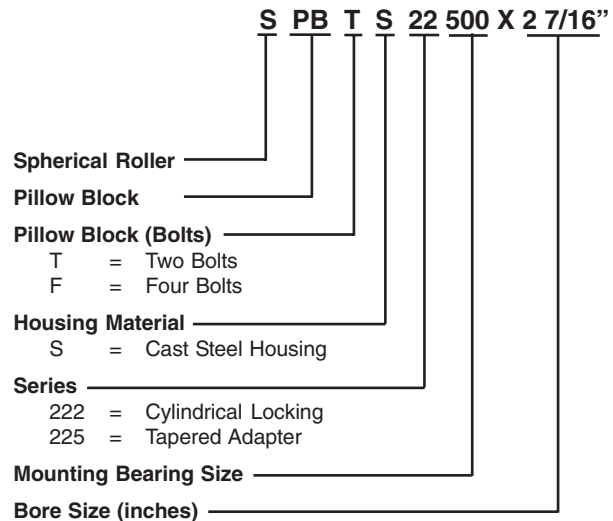
### Take-Up Frames



### Spherical Roller Bearings Series (1000, 1100)



### Spherical Roller Bearings Series (22500, 22200)



See page 156 for trademark acknowledgments.

Set Screw



1100

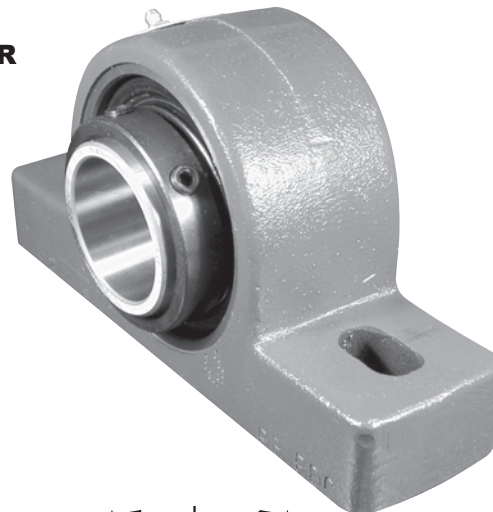
**Browning**<sup>®</sup>

# Spherical Roller Bearings

## SPB1100

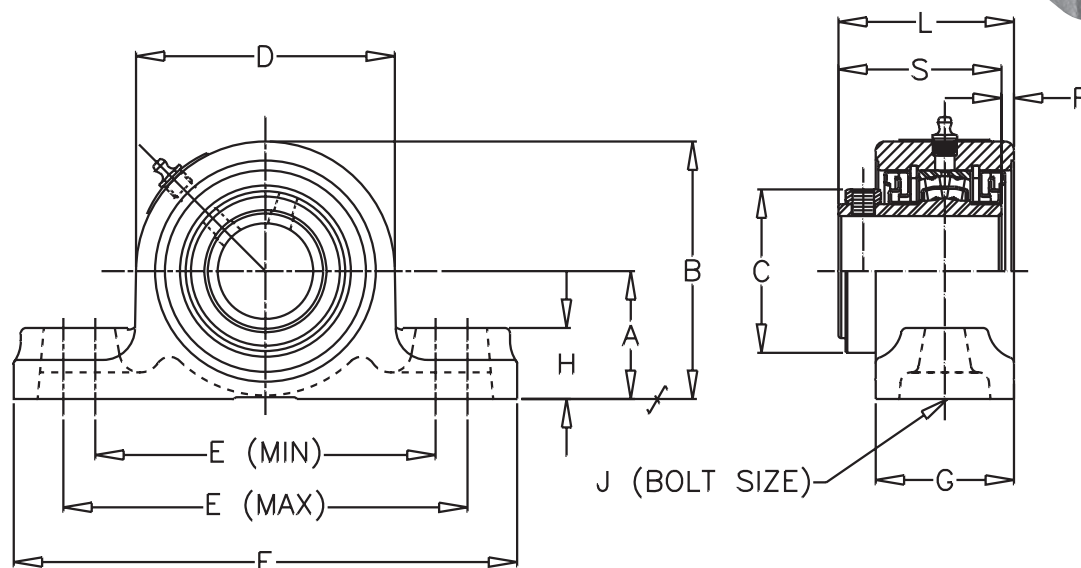
**Lock:** Set Screw  
**Seal:** MULTI-TRAP<sup>®</sup> Labyrinth  
**Housing:** Ductile Iron  
**Temperatures:** -20° to 200°F  
**Optional Seal:** Double Lip Contact  
**Self Aligning:** ±1 1/2°  
**Fitting:** 1/8" NPT  
**Bolt Holes:** Elongated

**S SPHERICAL ROLLER**  
**P PILLOW**  
**B BLOCK**  
  
**1 1100 SERIES**  
**1 SET SCREW**  
**0 DUCTILE IRON**  
**0 BEARING**



**Load Rating Tables:** Page 139  
**Interchange Tables:** Page 166

**Expansion and Non-Expansion**



| SHAFT DIA. IN. | Dimensions in Inches |         |         |         |       |        |        |         |        |     |         |       |         | UNIT WT. |
|----------------|----------------------|---------|---------|---------|-------|--------|--------|---------|--------|-----|---------|-------|---------|----------|
|                | A                    | B       | C       | D       | E     |        | F      | G       | H      | J   | L*      | R*    | S       |          |
|                |                      |         |         |         | MIN   | MAX    |        |         |        |     |         |       |         |          |
| 1 15/16        | 2 1/4                | 4 17/32 | 3       | 4 9/16  | 6     | 7 1/8  | 8 7/8  | 2 7/16  | 1 5/16 | 5/8 | 3 3/32  | 7/32  | 2 7/8   | 11.2     |
| 2              |                      |         |         |         |       |        |        |         |        |     |         |       |         |          |
| 2 3/16         | 2 1/2                | 4 31/32 | 3 3/8   | 4 15/16 | 6 1/2 | 7 7/8  | 9 5/8  | 2 1/2   | 1 7/16 | 5/8 | 3 1/4   | 1/8   | 3 1/8   | 13.4     |
| 2 7/16         | 2 3/4                | 5 5/8   | 3 3/8   | 5 1/4   | 6 7/8 | 8 5/8  | 10 3/8 | 2 53/64 | 1 9/16 | 5/8 | 3 35/64 | 11/64 | 3 3/8   | 18.6     |
| 2 1/2          |                      |         |         |         |       |        |        |         |        |     |         |       |         |          |
| 2 11/16        | 3 1/8                | 6 1/16  | 4       | 5 7/8   | 7 7/8 | 9 5/8  | 11 5/8 | 2 5/8   | 1 5/8  | 3/4 | 3 11/16 | 1/16  | 3 5/8   | 19.9     |
| 2 3/4          |                      |         |         |         |       |        |        |         |        |     |         |       |         |          |
| 2 15/16        |                      |         |         |         |       |        |        |         |        |     |         |       |         |          |
| 3              |                      |         |         |         |       |        |        |         |        |     |         |       |         |          |
| 3 3/16         | 3 3/4                | 7 3/8   | 4 11/16 | 7 1/4   | 9 3/8 | 11 1/4 | 13 1/2 | 3 1/8   | 1 7/8  | 7/8 | 4 5/32  | 1/8   | 4 1/32  | 34.1     |
| 3 7/16         |                      |         |         |         |       |        |        |         |        |     |         |       |         |          |
| 3 1/2          |                      |         |         |         |       |        |        |         |        |     |         |       |         |          |
| 3 11/16        | 4 1/8                | 8 1/2   | 6       | 8 1/8   | 10    | 11 3/4 | 14 1/4 | 3 9/16  | 2 1/4  | 1   | 4 23/32 | 1/8   | 4 19/32 | 50       |
| 3 15/16        |                      |         |         |         |       |        |        |         |        |     |         |       |         |          |
| 4              |                      |         |         |         |       |        |        |         |        |     |         |       |         |          |

\*Dimensions L and R are for non-expansion unit. For expansion type, increase L and R by .098" max.  
 Non-Expansion Pillow Block part numbers are **SPB1100NE** and bore size. Example: **SPB1100NE x 2 7/16**.  
 Expansion Pillow Block part numbers are **SPB1100E** and bore size. Example: **SPB1100E x 2 7/16**.

# Browning®

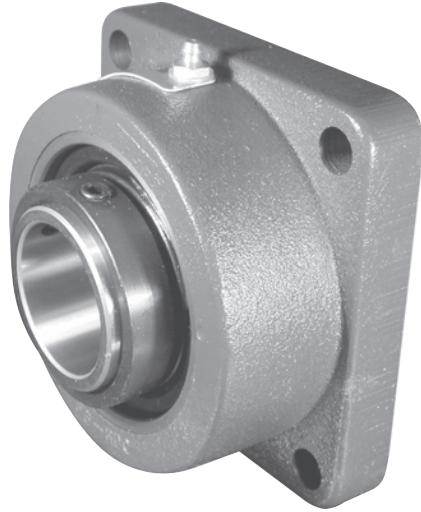
## Spherical Roller Bearings

Set Screw



1100

# SFB1100



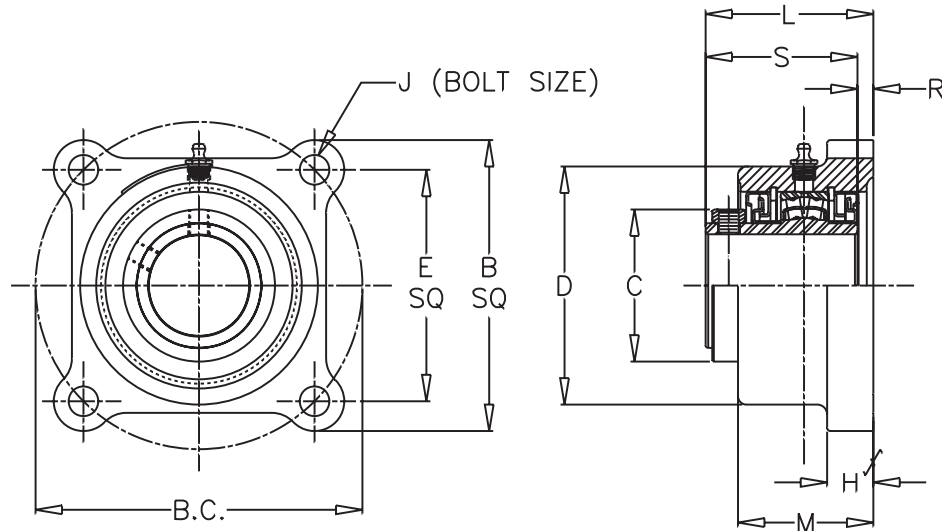
**SPHERICAL ROLLER S**  
**FLANGE F**  
**BLOCK B**

**1100 1**  
**SET SCREW 1**  
**DUCTILE IRON 0**  
**BEARING 0**

**Lock:** Set Screw  
**Seal:** MULTI-TRAP® Labyrinth  
**Housing:** Ductile Iron  
**Temperatures:** -20°F to 200°F  
**Optional Seal:** Double Lip Contact  
**Self Aligning:** ±1 1/2°  
**Fitting:** 1/8" NPT

**Load Rating Tables:** Page 139  
**Interchange Tables:** Page 166

**Expansion and Non-Expansion**



| SHAFT DIA. IN.                   | Dimensions In Inches |         |         |         |         |        |     |         |         |       |         | UNIT WT. |
|----------------------------------|----------------------|---------|---------|---------|---------|--------|-----|---------|---------|-------|---------|----------|
|                                  | B                    | BC      | C       | D       | E       | H      | J   | L*      | M       | R*    | S       |          |
| 1 15/16<br>2                     | 5 1/2                | 6 3/16  | 3       | 4 15/16 | 4 3/8   | 7/8    | 1/2 | 3 11/64 | 2 9/16  | 5/16  | 2 7/8   | 10.2     |
| 2 3/16                           | 6 3/16               | 6 57/64 | 3 3/8   | 5 7/16  | 4 7/8   | 1      | 5/8 | 3 11/32 | 2 5/8   | 1/4   | 3 1/8   | 12.3     |
| 2 7/16<br>2 1/2                  | 6 3/4                | 7 39/64 | 3 3/8   | 6 1/16  | 5 3/8   | 1      | 5/8 | 3 31/64 | 2 11/16 | 5/32  | 3 3/8   | 14.8     |
| 2 11/16<br>2 3/4<br>2 15/16<br>3 | 7 5/8                | 8 31/64 | 4       | 6 13/16 | 6       | 1 1/16 | 3/4 | 3 23/32 | 2 3/4   | 7/64  | 3 5/8   | 18.7     |
| 3 3/16<br>3 7/16<br>3 1/2        | 8 5/8                | 9 57/64 | 4 11/16 | 7 15/16 | 7       | 1 5/16 | 3/4 | 4 1/4   | 3 5/16  | 1/4   | 4 1/32  | 33.1     |
| 3 11/16<br>3 15/16<br>4          | 9 1/2                | 10 3/4  | 6       | 8 29/32 | 7 19/32 | 1 1/4  | 7/8 | 5       | 3 11/16 | 27/64 | 4 19/32 | 48       |

\*Dimensions L and R are for non-expansion unit. For expansion type, increase L and R by .098" max.  
 Non-Expansion Flange Block part numbers are **SFB1100NE** and bore size. Example: **SFB1100NE x 3 7/16**.  
 Expansion Flange Block part numbers are **SFB1100E** and bore size. Example: **SFB1100E x 3 7/16**.

See page 156 for trademark acknowledgments.

Set Screw



1100

# SFC1100

**Lock:** Set Screw  
**Seal:** MULTI-TRAP® Labyrinth  
**Housing:** Ductile Iron  
**Temperatures:** - 20°F to 200°F  
**Optional Seal:** Double Lip Contact  
**Self Aligning:** ±1 1/2°  
**Fitting:** 1/8" NPT

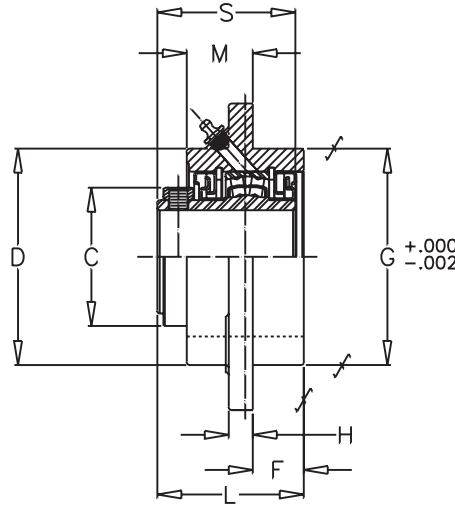
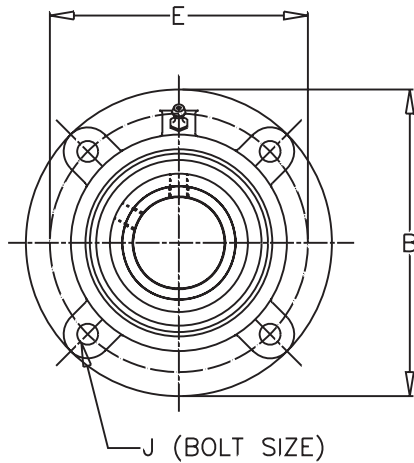
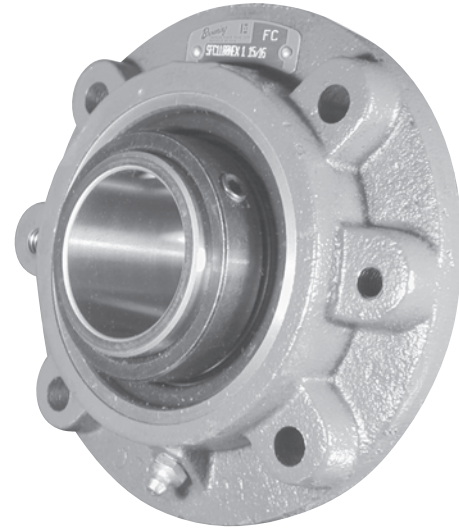
**Load Rating Tables:** Page 139  
**Interchange Tables:** Page 166

**Expansion and Non-Expansion**

# Browning®

## Spherical Roller Bearings

**S SPHERICAL ROLLER**  
**F FLANGE**  
**C CARTRIDGE**  
**1 1100**  
**1 SET SCREW**  
**0 DUCTILE IRON**  
**0 BEARING**



| SHAFT DIA. IN.                   | Dimensions In Inches |         |       |       |        |       |       |     |         |         |         | UNIT WT. |
|----------------------------------|----------------------|---------|-------|-------|--------|-------|-------|-----|---------|---------|---------|----------|
|                                  | B                    | C       | D     | E     | F      | G     | H     | J   | L*      | M*      | S       |          |
| 1 15/16<br>2                     | 6 3/8                | 2 29/32 | 4 1/2 | 5 3/8 | 1 1/16 | 4 1/2 | 1/2   | 3/8 | 3 3/32  | 1 3/8   | 2 7/8   | 10.0     |
| 2 3/16                           | 7 1/8                | 3 1/4   | 4 7/8 | 6     | 1 1/8  | 5     | 1/2   | 1/2 | 3 1/4   | 1 3/8   | 3 1/8   | 14.0     |
| 2 7/16<br>2 1/2                  | 7 5/8                | 4       | 5 3/8 | 6 1/2 | 1 1/8  | 5 1/2 | 9/16  | 1/2 | 3 13/32 | 1 7/16  | 3 3/8   | 15.5     |
| 2 11/16<br>2 3/4<br>2 15/16<br>3 | 8 3/4                | 4 3/8   | 6 1/4 | 7 1/2 | 1 1/4  | 6 3/8 | 11/16 | 5/8 | 3 11/16 | 1 5/16  | 3 5/8   | 21.6     |
| 3 3/16<br>3 7/16<br>3 1/2        | 10 1/4               | 5 1/8   | 7 1/8 | 8 5/8 | 1 5/16 | 7 3/8 | 7/8   | 3/4 | 4 1/8   | 1 13/16 | 4 1/32  | 40.0     |
| 3 11/16<br>3 15/16<br>4          | 10 7/8               | 6       | 7 3/4 | 9 3/8 | 2 1/16 | 8 1/8 | 27/32 | 3/4 | 4 3/4   | 1 7/16  | 4 19/32 | 47       |

Part numbers are specified by "SFC1100E x 1 15/16" or "SFC1100NE x 1 15/16".

\*Dimensions L and M are for non-expansion unit. For expansion type, increase L and M by .098" max.



# Spherical Roller Bearings

## Spherical Roller Bearings 1000 and 1100 Series

This chart displays the Browning 1000 and 1100 Series Spherical Roller Bearing's load capacity for a given L10 life, speed and shaft size. Values in the table represent loads at ideal conditions. The shaded areas indicate the maximum speed for the MULTI-TRAP® Seal. The maximum speed for the Contact Seal is indicated in the non-shaded areas. For combined load determination, see **THE BEARING SELECTION SECTION**, page 269. Areas designated by “..” exceed maximum speed value.

### Match Bore Size

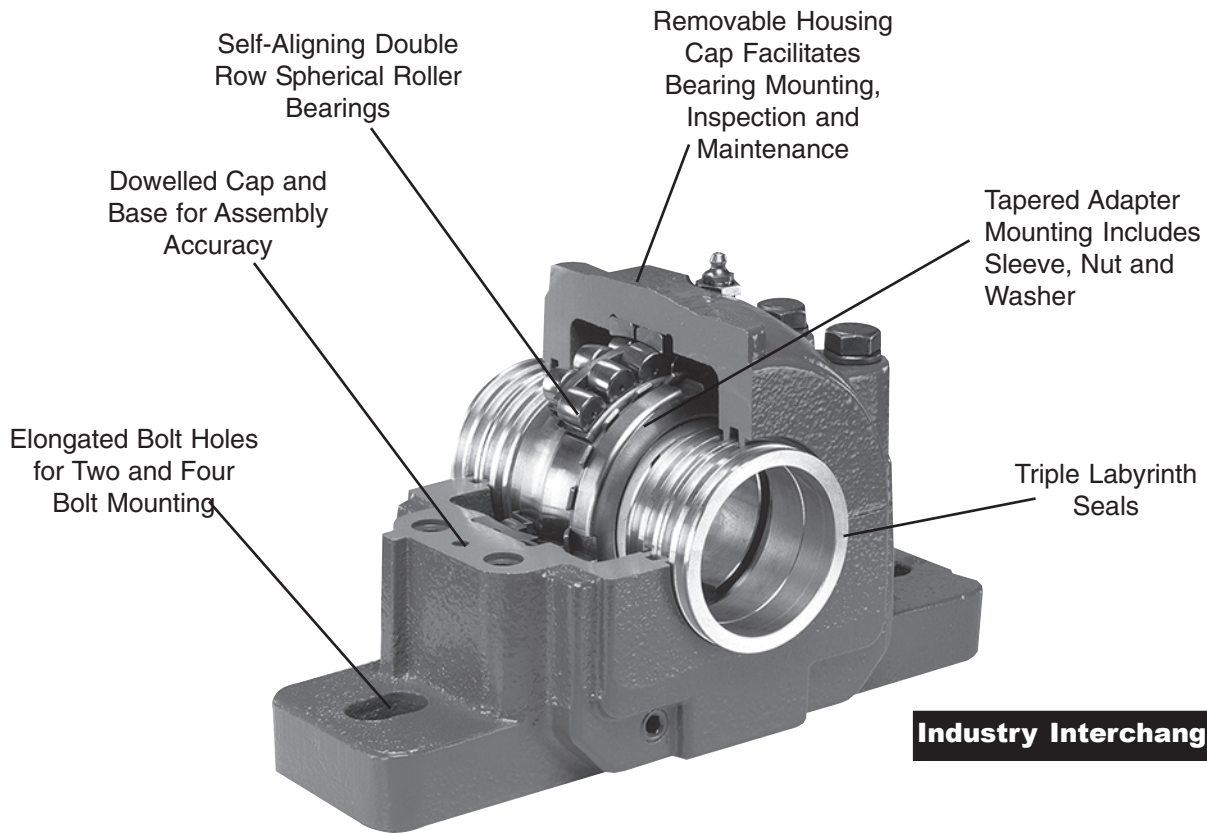
| Size    | Rating  | L10<br>Hours | REVOLUTIONS PER MINUTE |       |       |       |       |       |       |       |       |       |      |      |      |
|---------|---------|--------------|------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|
|         |         |              | 50                     | 100   | 150   | 250   | 500   | 750   | 1000  | 1500  | 1750  | 2000  | 2500 | 3000 | 3500 |
| 1 1/8   | 16600   | 5000         | 4880                   | 4880  | 4880  | 4546  | 3692  | 3269  | 2999  | 2656  | 2535  | 2436  | 2278 | 2157 | 2059 |
| 1 3/16  |         | 10000        | 4880                   | 4860  | 4304  | 3692  | 2999  | 2656  | 2436  | 2157  | 2059  | 1979  | 1850 | 1752 | 1673 |
| 1 1/4   |         | 30000        | 4304                   | 3496  | 3095  | 2656  | 2157  | 1910  | 1752  | 1551  | 1481  | 1423  | 1331 | 1260 | 1203 |
| 1 7/16  |         | 50000        | 3692                   | 2999  | 2656  | 2278  | 1850  | 1639  | 1503  | 1331  | 1271  | 1221  | 1142 | 1081 | 1032 |
| 1 1/2   |         | 100000       | 2999                   | 2436  | 2157  | 1850  | 1503  | 1331  | 1221  | 1081  | 1032  | 992   | 927  | 878  | 838  |
| 1 11/16 | 17300   | 5000         | 2999                   | 6458  | 5522  | 4737  | 3848  | 3407  | 3125  | 2767  | 2642  | 2539  | 2374 | 2248 | 2146 |
| 1 3/4   |         | 10000        | 6458                   | 5065  | 4485  | 3848  | 3125  | 2767  | 2539  | 2248  | 2146  | 2062  | 1929 | 1826 | 1743 |
|         |         | 30000        | 6458                   | 3643  | 3226  | 2767  | 2248  | 1990  | 1826  | 1617  | 1544  | 1483  | 1387 | 1313 | 1254 |
|         |         | 50000        | 4485                   | 3125  | 2767  | 2374  | 1929  | 1708  | 1566  | 1387  | 1324  | 1272  | 1190 | 1127 | 1076 |
|         |         | 100000       | 3848                   | 2539  | 2248  | 1929  | 1566  | 1387  | 1272  | 1127  | 1076  | 1033  | 967  | 915  | 874  |
| 1 15/16 | 19000   | 5000         | 3125                   | 6925  | 6064  | 5203  | 4226  | 3742  | 3433  | 3039  | 2902  | 2788  | 2608 | 2469 | 2357 |
| 2       |         | 10000        | 6925                   | 5563  | 4926  | 4226  | 3433  | 3039  | 2788  | 2469  | 2357  | 2265  | 2118 | 2005 | 1915 |
|         |         | 30000        | 6925                   | 4001  | 3543  | 3039  | 2469  | 2186  | 2005  | 1776  | 1695  | 1629  | 1523 | 1442 | 1377 |
|         |         | 50000        | 4926                   | 3433  | 3039  | 2608  | 2118  | 1875  | 1720  | 1523  | 1454  | 1397  | 1307 | 1237 | 1181 |
|         |         | 100000       | 4226                   | 2788  | 2469  | 2118  | 1720  | 1523  | 1397  | 1237  | 1181  | 1135  | 1062 | 1005 | 960  |
| 2 3/16  | 22400   | 5000         | 3433                   | 7150  | 7150  | 6134  | 4982  | 4412  | 4047  | 3583  | 3421  | 3287  | 3074 | 2911 | 2779 |
|         |         | 10000        | 7150                   | 6559  | 5807  | 4982  | 4047  | 3583  | 3287  | 2911  | 2779  | 2670  | 2497 | 2364 | 2257 |
|         |         | 30000        | 7150                   | 4717  | 4177  | 3583  | 2911  | 2577  | 2364  | 2093  | 1999  | 1920  | 1796 | 1700 | 1623 |
|         |         | 50000        | 5807                   | 4047  | 3583  | 3074  | 2497  | 2211  | 2028  | 1796  | 1715  | 1647  | 1541 | 1459 | 1393 |
|         |         | 100000       | 4982                   | 3287  | 2911  | 2497  | 2028  | 1796  | 1647  | 1459  | 1393  | 1338  | 1251 | 1185 | 1131 |
| 2 7/16  | 33300   | 5000         | 4047                   | 10629 | 10629 | 9119  | 7407  | 6558  | 6016  | 5327  | 5086  | 4887  | 4570 | 4327 | —    |
| 2 1/2   |         | 10000        | 10629                  | 9750  | 8633  | 7407  | 6016  | 5327  | 4887  | 4327  | 4131  | 3969  | 3712 | 3515 | —    |
|         |         | 30000        | 10629                  | 7012  | 6209  | 5327  | 4327  | 3831  | 3515  | 3112  | 2971  | 2855  | 2670 | 2528 | —    |
|         |         | 50000        | 8633                   | 6016  | 5327  | 4570  | 3712  | 3287  | 3015  | 2670  | 2549  | 2449  | 2290 | 2169 | —    |
|         |         | 100000       | 7407                   | 4887  | 4327  | 3712  | 3015  | 2670  | 2449  | 2169  | 2071  | 1989  | 1860 | 1761 | —    |
| 2 11/16 | 35500   | 5000         | 6016                   | 11331 | 11331 | 9721  | 7896  | 6992  | 6413  | 5679  | 5422  | 5209  | 4872 | 4613 | —    |
| 2 3/4   |         | 10000        | 11331                  | 10394 | 9204  | 7896  | 6413  | 5679  | 5209  | 4613  | 4404  | 4231  | 3957 | 3747 | —    |
| 2 15/16 |         | 30000        | 11331                  | 7476  | 6619  | 5679  | 4613  | 4084  | 3747  | 3318  | 3168  | 3043  | 2846 | 2695 | —    |
| 3       |         | 50000        | 9204                   | 6413  | 5679  | 4872  | 3957  | 3504  | 3214  | 2846  | 2718  | 2611  | 2442 | 2312 | —    |
|         |         | 100000       | 7896                   | 5209  | 4613  | 3957  | 3214  | 2846  | 2611  | 2312  | 2207  | 2121  | 1983 | 1878 | —    |
| 3 3/16  | 56900   | 5000         | 6413                   | 20827 | 18161 | 15581 | 12656 | 11206 | 10280 | 9102  | 8691  | 8350  | —    | —    | —    |
| 3 7/16  |         | 10000        | 20827                  | 16660 | 14752 | 12656 | 10280 | 9102  | 8350  | 7393  | 7059  | 6782  | —    | —    | —    |
| 3 1/2   |         | 30000        | 20827                  | 11982 | 10610 | 9102  | 7393  | 6547  | 6005  | 5317  | 5077  | 4878  | —    | —    | —    |
|         |         | 50000        | 14752                  | 10280 | 9102  | 7809  | 6343  | 5616  | 5152  | 4562  | 4356  | 4185  | —    | —    | —    |
|         |         | 100000       | 12656                  | 8350  | 7393  | 6343  | 5152  | 4562  | 4185  | 3705  | 3538  | 3399  | —    | —    | —    |
| 3 11/16 | 69900   | 5000         | 10280                  | 25854 | 22311 | 19141 | 15547 | 13767 | 12628 | 11182 | 10677 | 10257 | —    | —    | —    |
| 3 15/16 |         | 10000        | 25854                  | 20466 | 18122 | 15547 | 12628 | 11182 | 10257 | 9083  | 8672  | 8332  | —    | —    | —    |
| 4       |         | 30000        | 25854                  | 14720 | 13034 | 11182 | 9083  | 8042  | 7377  | 6532  | 6237  | 5992  | —    | —    | —    |
|         |         | 50000        | 18122                  | 12628 | 11182 | 9593  | 7792  | 6900  | 6329  | 5604  | 5351  | 5141  | —    | —    | —    |
|         |         | 100000       | 15547                  | 10257 | 9083  | 7792  | 6329  | 5604  | 5141  | 4552  | 4346  | 4176  | —    | —    | —    |
| 4 7/16  | 91700   | 5000         | 12628                  | 33386 | 29269 | 25110 | 20396 | 18060 | 16567 | —     | —     | —     | —    | —    | —    |
| 4 1/2   |         | 10000        | 33386                  | 26849 | 23774 | 20396 | 16567 | 14669 | 13456 | —     | —     | —     | —    | —    | —    |
|         |         | 30000        | 33386                  | 19310 | 17099 | 14669 | 11915 | 10550 | 9678  | —     | —     | —     | —    | —    | —    |
|         |         | 50000        | 23774                  | 16567 | 14669 | 12585 | 10222 | 9051  | 8303  | —     | —     | —     | —    | —    | —    |
|         |         | 100000       | 20396                  | 13456 | 11915 | 10222 | 8303  | 7352  | 6744  | —     | —     | —     | —    | —    | —    |
| 4 15/16 | 123,000 | 5000         | 16567                  | 45244 | 39259 | 33681 | 27358 | 24224 | —     | —     | —     | —     | —    | —    | —    |
|         |         | 10000        | 45244                  | 36013 | 31889 | 27358 | 22221 | 19676 | —     | —     | —     | —     | —    | —    | —    |
|         |         | 30000        | 45244                  | 25902 | 22935 | 19676 | 15982 | 14152 | —     | —     | —     | —     | —    | —    | —    |
|         |         | 50000        | 31889                  | 22221 | 19676 | 16881 | 13711 | 12141 | —     | —     | —     | —     | —    | —    | —    |
|         |         | 100000       | 27358                  | 18049 | 15982 | 13711 | 11137 | 9862  | —     | —     | —     | —     | —    | —    | —    |





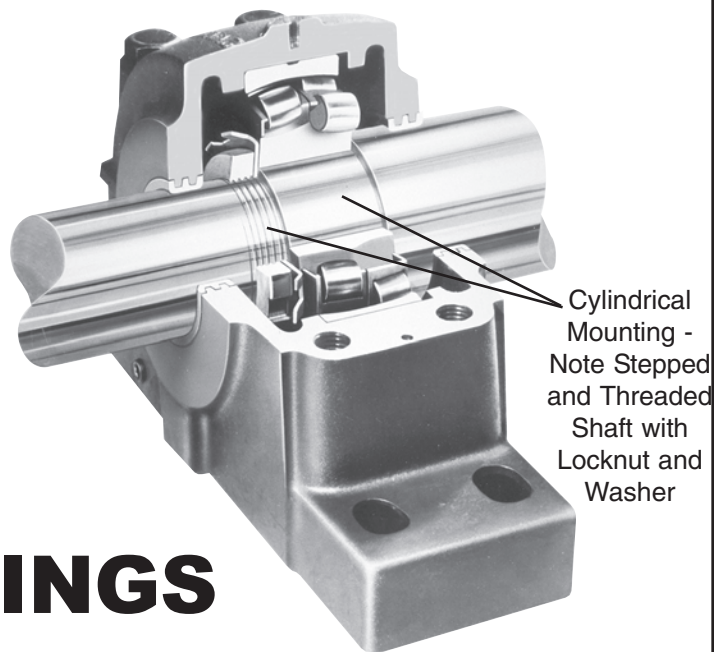
# Spherical Roller Bearings

## SPBT22500



**Industry Interchangeability**

## SPBF22200



Note: Other features are like the 22500 series

# BROWNING

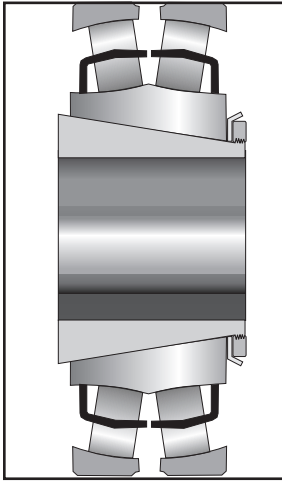
# 22500/22200

# SPHERICAL

# ROLLER BEARINGS

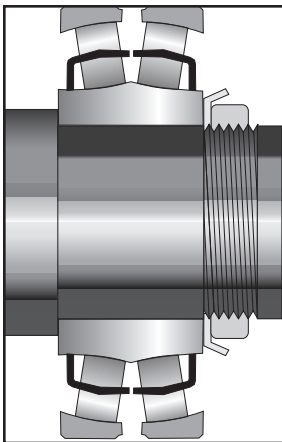
## FEATURES/BENEFITS

## LOCKING



### 22500 LOCKING

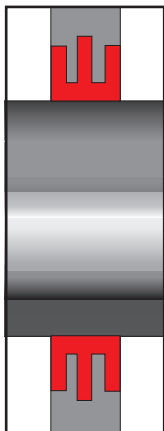
The Browning 22500 series utilizes a tapered adapter system to fasten the bearing to the shaft. The SNW adapter assembly system consists of a sleeve, lock nut and lock washer that is available from Browning for shaft mounting of tapered bore 22200CKW33C3 spherical roller bearings. This method provides positive shaft lock and conforms to a wide range of shaft tolerances, and maintains concentricity of shaft to bearing bore. The adapter sleeve system does not mar the shaft and reduces fretting corrosion.



### 22200 LOCKING

The Browning 22200 cylindrical bore variation requires a press or shrink fit on the shaft. This system requires the user to provide a precise stepped shaft and machined threads for installation of 22200CW33C3 spherical roller bearing inserts.

## SEALING



### 22500/22200 SEALING

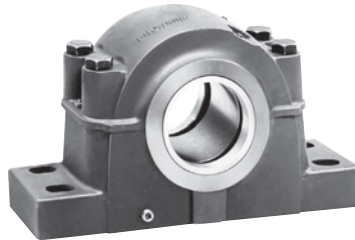
Browning 22500/22200 series are available with standard triple labyrinth seals that are manufactured in aluminum. These (LER) type seals are designed with two grooves that mate with the machined grooves in the housing, forming a labyrinth to help keep out contamination. This close clearance seal provides energy efficient operation and lubricant retention characteristics.

# BROWNING 22500/22200 SPHERICAL ROLLER BEARINGS FEATURES/BENEFITS

## HOUSING

### 22500/22200 HOUSINGS

Browning 22500 and 22200 series housings are available in cast iron or steel. The 22500 steel and 22200 series pillow blocks are not stocked. These housing styles are provided with a universal sump configuration suitable for grease, oil bath or circulating oil lubrication. Slotted bolt holes in the housing base enable positioning and alignment during installation. A stabilizing ring is furnished with each housing and must be removed for expansion.

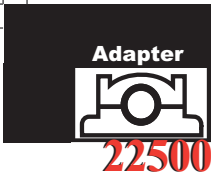


## GENERAL

This heavy duty line of pillow blocks is designed for typical SAF dimensional interchangeably and generally used in applications where heavier loads are encountered and grease or oil lubrication is desirable. Common applications are found on conveyors in the pulp and paper, mining, aggregate, bulk material handling and steel industries.

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| SPBFS22200 Pillow Blocks     | 146 |
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# Browning®

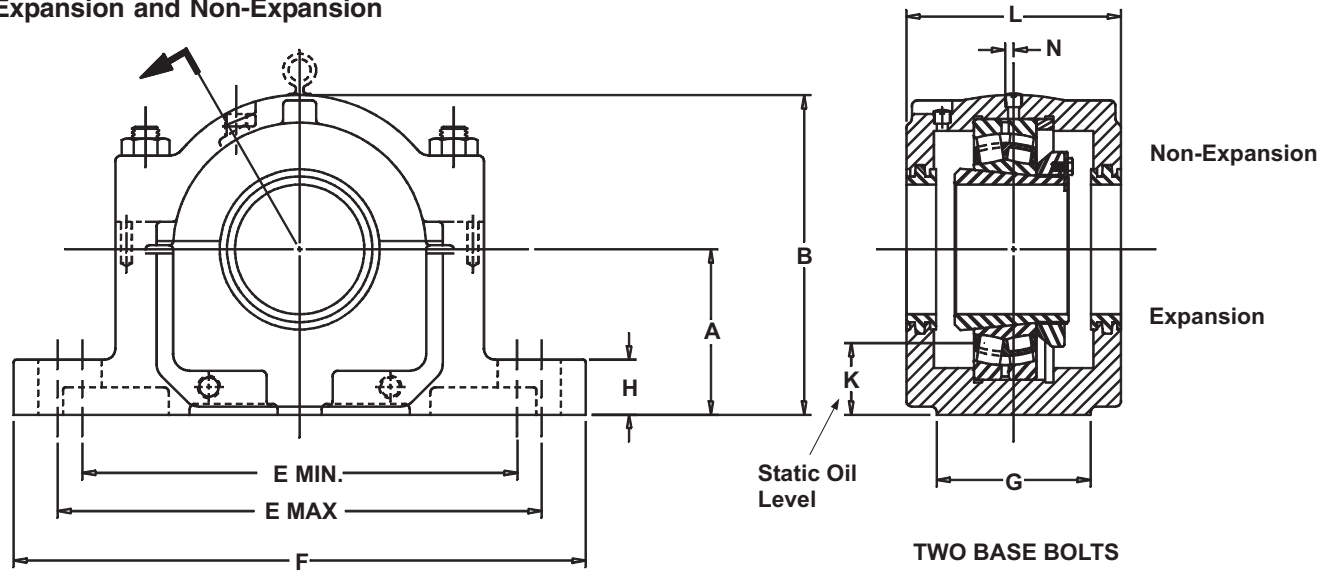
## Spherical Roller Bearings

### 22500 Series

**Cast Iron Pillow Blocks**  
**Lock:** Adapter Mount  
**Seal:** Triple Labyrinth  
**Housing:** Two Bolt Base  
**Temperatures:** -20°F to 200° F  
**Self Aligning:** See Page 276  
**Fitting:** 1/4NPT for housings 515-528 and 216-228  
 3/8NPT for housings 530 and above, and 230 and above  
**Bearing Insert:** 22200 CKW33C3  
**Accessories:** Page 147  
**Ratings:** Page 155  
**Interchange Tables:** Page 166

**S SPHERICAL ROLLER**  
**P PILLOW**  
**B BLOCK**  
**T TWO BOLT BASE**  
**2 22500**  
**2 BEARING SERIES**  
**5 ADAPTER MOUNT**  
**0 BEARING**  
**0 SIZE**

#### Expansion and Non-Expansion

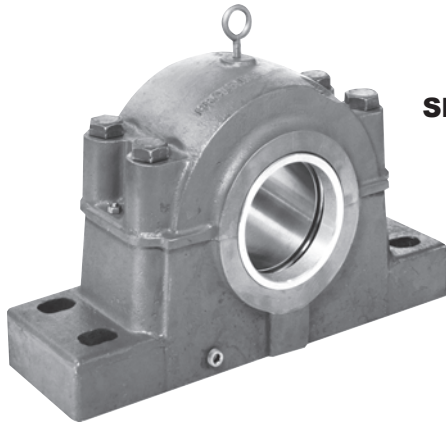
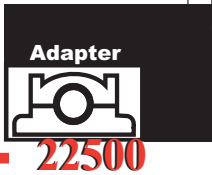


| PART NUMBERS              |                           |            |                       |                             | DIMENSIONS IN INCHES |         |        |        |        |       |        |       |         |   |      |     |      |          |  |
|---------------------------|---------------------------|------------|-----------------------|-----------------------------|----------------------|---------|--------|--------|--------|-------|--------|-------|---------|---|------|-----|------|----------|--|
| SHAFT SIZE                | (1) Complete Pillow Block | COMPONENTS |                       |                             | A                    | B       | E      |        | F      | G     | H      | K     | L       | M | N    | No. | Size | Wt. Lbs. |  |
|                           |                           | Housing    | Seal Rings (2 Req'd.) | Stabilizing Ring (1 Req'd.) |                      |         | MIN.   | MAX.   |        |       |        |       |         |   |      |     |      |          |  |
| <b>TWO BASE BOLT TYPE</b> |                           |            |                       |                             |                      |         |        |        |        |       |        |       |         |   |      |     |      |          |  |
| 2 7/16                    | SPBT22515 X 2 7/16        | ST515      | SR-207                | SR-15                       | 3 1/4                | 6 3/8   | 8 5/8  | 9 5/8  | 11 1/4 | 3 1/8 | 1 1/8  | 1 1/4 | 4 3/4   | - | 1/16 | 2   | 5/8  | 30       |  |
| 2 1/2                     | SPBT22515 X 2 1/2         | ST515      | SR208                 | SR-15                       | 3 1/4                | 6 9/16  | 8 5/8  | 9 5/8  | 11 1/4 | 3 1/8 | 1 1/4  | 1 1/4 | 4 3/4   | - | 1/16 | 2   | 5/8  | 31       |  |
| 2 11/16                   | SPBT22516 X 2 11/16       | ST516      | SR-211                | SR-16                       | 3 1/2                | 6 7/8   | 9 5/8  | 11     | 13     | 3 1/2 | 1 3/16 | 1 3/8 | 4 7/8   | - | 3/16 | 2   | 3/4  | 37       |  |
| 2 3/4                     | SPBT22516 X 2 3/4         | ST516      | SR-212                | SR-16                       | 3 1/2                | 7 1/16  | 9 5/8  | 11     | 13     | 3 1/2 | 1 3/8  | 1 3/8 | 5 3/8   | - | 3/16 | 2   | 3/4  | 43       |  |
| 2 15/16                   | SPBT22517 X 2 15/16       | ST517      | SR-215                | SR-17                       | 3 3/4                | 7 1/4   | 9 7/8  | 11     | 13     | 3 1/2 | 1 1/4  | 1 1/2 | 4 15/16 | - | 3/16 | 2   | 3/4  | 40       |  |
| 3                         | SPBT22517 X 3             | ST517      | SR-300                | SR-17                       | 3 3/4                | 7 1/2   | 9 7/8  | 11     | 13     | 3 1/2 | 1 7/16 | 1 1/2 | 5 3/8   | - | 3/16 | 2   | 3/4  | 48       |  |
| 3 3/16                    | SPBT22518 X 3 3/16        | ST518      | SR-303                | SR-18                       | 4                    | 7 3/4   | 10 3/8 | 11 5/8 | 13 3/4 | 3 7/8 | 1 1/2  | 1 5/8 | 6 1/4   | - | 3/16 | 2   | 3/4  | 49       |  |
| 3 7/16                    | SPBT22520 X 3 7/16        | ST520      | SR-307                | SR-20                       | 4 1/2                | 8 11/16 | 11 5/8 | 13 1/8 | 15 1/4 | 4 3/8 | 1 3/4  | 1 3/4 | 6       | - | 3/16 | 2   | 7/8  | 65       |  |
| 3 1/2                     | SPBT22520 X 3 1/2         | ST520      | SR-308                | SR-20                       | 4 1/2                | 9       | 11 5/8 | 13 1/8 | 15 1/4 | 4 3/8 | 1 3/4  | 1 3/4 | 6 1/4   | - | 3/16 | 2   | 7/8  | 76       |  |

(1) This part number includes all components (housing, bearing, seal rings, stabilizing ring, adapter assembly, locknut and lockwasher) which are required to assemble a complete pillow block. Components are packaged separately. Refer to pages 147-148 for bearing and adapter assemblies. A stabilizing ring is furnished with each housing. **DO NOT** use for expansion bearing. **NOTE:** Only one non-expansion bearing should be used on a shaft; all others on the same shaft **MUST** be expansion type. Non-expansion (fixed bearing is offset by "N" amount in relation to center line of housing.



# Spherical Roller Bearings



**SPHERICAL ROLLER S  
PILLOW P  
BLOCK B  
FOUR BOLT BASE F**

**22500 2  
BEARING SERIES 2  
ADAPTER MOUNT 5  
BEARING 0  
SIZE 0**

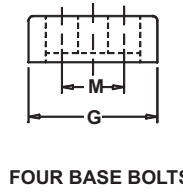
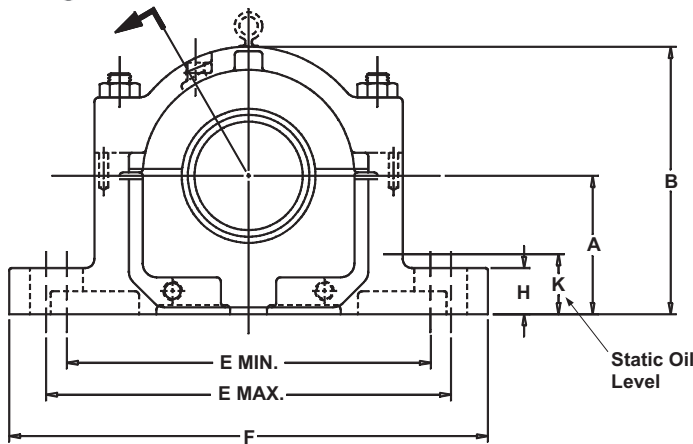
## 22500 Series

### Cast Iron Pillow Blocks

**Lock:** Adapter Mount  
**Seal:** Triple Labyrinth  
**Housing:** Four Bolt Base  
**Temperatures:** -20°F to 200°F  
**Self Aligning:** See Page 276  
**Fitting:** 1/4NPT for housings 515-528 and 216-228  
 3/8NPT for housings 530 and above, and 230 and above

**Bearing Insert:** 22200 CKW33C3  
**Accessories:** Page 147  
**Ratings:** Page 155  
**Interchange Tables:** Page 166

### Expansion and Non-Expansion



FOUR BASE BOLTS

| PART NUMBERS               |                            |            |                       |                             | DIMENSIONS IN INCHES |          |        |        |        |       |         |        |          |       |      |     |       |          |
|----------------------------|----------------------------|------------|-----------------------|-----------------------------|----------------------|----------|--------|--------|--------|-------|---------|--------|----------|-------|------|-----|-------|----------|
| SHAFT SIZE                 | (1) Complete Pillow Block* | COMPONENTS |                       |                             | A                    | B        | E      |        | F      | G     | H       | K      | L        | M     | N    | No. | Size  | Wt. Lbs. |
|                            |                            | Housing    | Seal Rings (2 Req'd.) | Stabilizing Ring (1 Req'd.) |                      |          | MIN.   | MAX.   |        |       |         |        |          |       |      |     |       |          |
| <b>FOUR BASE BOLT TYPE</b> |                            |            |                       |                             |                      |          |        |        |        |       |         |        |          |       |      |     |       |          |
| 2 7/16                     | SPBF22515 X 2 7/16         | SF515      | SR-207                | SR-15                       | 3 1/4                | 6 3/8    | 8 5/8  | 9 5/8  | 11 1/4 | 3 1/8 | 1 1/8   | 1 1/4  | 4 3/4    | 1 7/8 | 1/16 | 4   | 1/2   | 30       |
| 2 1/2                      | SPBF22516 X 2 1/2          | SF515      | SR-208                | SR-15                       | 3 1/4                | 6 9/16   | 8 5/8  | 9 5/8  | 11 1/4 | 3 1/8 | 1 1/8   | 1 1/4  | 4 3/4    | 1 7/8 | 1/16 | 4   | 1/2   | 31       |
| 2 11/16                    | SPBF22516 X 2 11/16        | SF516      | SR-211                | SR-16                       | 3 1/2                | 6 7/8    | 9 5/8  | 11     | 13     | 3 1/2 | 1 3/16  | 1 3/8  | 4 7/8    | 2 1/8 | 3/16 | 4   | 5/8   | 37       |
| 2 3/4                      | SPBF22516 X 2 3/4          | SF516      | SR-212                | SR-16                       | 3 1/2                | 7 1/16   | 9 5/8  | 11     | 13     | 3 1/2 | 1 3/16  | 1 3/8  | 5 3/8    | 2 1/8 | 3/16 | 4   | 5/8   | 43       |
| 2 15/16                    | SPBF22517 X 2 15/16        | SF517      | SR-215                | SR-17                       | 3 3/4                | 7 1/4    | 9 7/8  | 11     | 13     | 3 1/2 | 1 1/4   | 1 7/16 | 4 15/16  | 2 1/8 | 3/16 | 4   | 5/8   | 40       |
| 3                          | SPBF22517 X 3              | SF517      | SR-300                | SR-17                       | 3 3/4                | 7 1/2    | 9 7/8  | 11     | 13     | 3 1/2 | 1 1/4   | 1 1/2  | 5 3/8    | 2 1/8 | 3/16 | 4   | 5/8   | 48       |
| 3 3/16                     | SPBF22518 X 3 3/16         | SF518      | SR-303                | SR-18                       | 4                    | 7 3/4    | 10 3/8 | 11 5/8 | 13 3/4 | 3 7/8 | 1 1/2   | 1 5/8  | 6 1/4    | 2 1/8 | 3/16 | 4   | 5/8   | 49       |
| 3 7/16                     | SPBF22520 X 3 7/16         | SF520      | SR-307                | SR-20                       | 4 1/2                | 8 11/16  | 11 5/8 | 13 1/8 | 15 1/4 | 4 3/8 | 1 11/16 | 1 3/4  | 6        | 2 3/8 | 3/16 | 4   | 3/4   | 65       |
| 3 1/2                      | SPBF22520 X 3 1/2          | SF520      | SR-308                | SR-20                       | 4 1/2                | 9        | 11 5/8 | 13 1/8 | 15 1/4 | 4 3/8 | 1 11/16 | 1 3/4  | 6 1/4    | 2 3/8 | 3/16 | 4   | 3/4   | 76       |
| 3 11/16                    | SPBF22522 X 3 11/16        | SF522      | SR-311                | SR-22                       | 4 15/16              | 9 7/8    | 12 5/8 | 14 1/2 | 16 1/2 | 4 3/4 | 2       | 2      | 6 1/2    | 2 3/4 | 3/16 | 4   | 3/4   | 95       |
| 3 15/16                    | SPBF22522 X 3 15/16        | SF522      | SR-315                | SR-22                       | 4 15/16              | 9 9/16   | 12 5/8 | 14 1/2 | 16 1/2 | 4 3/4 | 2       | 2      | 6 3/8    | 2 3/4 | 3/16 | 4   | 3/4   | 81       |
| 4                          | SPBF22522 X 4              | SF522      | SR-400                | SR-22                       | 4 15/16              | 9 7/8    | 12 5/8 | 14 1/2 | 16 1/2 | 4 3/4 | 2       | 2      | 6 1/2    | 2 3/4 | 3/16 | 4   | 3/4   | 95       |
| 4 3/16                     | SPBF22524 X 4 3/16         | SF524      | SR-403                | SR-24                       | 5 1/4                | 10 1/4   | 13 1/4 | 14 1/2 | 16 1/2 | 4 3/4 | 2 1/8   | 2      | 7 3/8    | 2 3/4 | 3/16 | 4   | 3/4   | 94       |
| 4 7/16                     | SPBF22526 X 4 7/16         | SF526      | SR-407                | SR-26                       | 6                    | 11 9/16  | 14 5/8 | 16     | 18 3/8 | 5 1/8 | 2 3/8   | 2 1/2  | 8        | 3 1/4 | 3/16 | 4   | 7/8   | 137      |
| 4 1/2                      | SPBF22526 X 4 1/2          | SF526      | SR-408                | SR-26                       | 6                    | 11 3/4   | 14 5/8 | 16     | 18 3/8 | 5 1/8 | 2 3/8   | 2 1/2  | 8        | 3 1/4 | 3/16 | 4   | 7/8   | 160      |
| 4 15/16                    | SPBF22528 X 4 15/16        | SF528      | SR-415                | SR-28                       | 6                    | 11 3/4   | 16     | 17 1/8 | 20 1/8 | 5 7/8 | 2 3/8   | 2 1/4  | 7 3/4    | 3 3/8 | 3/16 | 4   | 1     | 159      |
| 5                          | SPBF22528 X 5              | SF528      | SR-500                | SR-28                       | 6                    | 12       | 16     | 17 1/8 | 20 1/8 | 5 7/8 | 2 3/8   | 2 1/4  | 7 1/2    | 3 3/8 | 3/16 | 4   | 1     | 170      |
| 5 3/16                     | SPBF22530 X 5 3/16         | SF530      | SR-503                | SR-30                       | 6 5/16               | 12 1/2   | 17     | 18 1/4 | 21 1/4 | 6 1/4 | 2 1/2   | 2 1/2  | 8 3/8    | 3 3/4 | 3/16 | 4   | 1     | 189      |
| 5 7/16                     | SPBF22532 X 5 7/16         | SF532      | SR-507                | SR-32                       | 6 11/16              | 13 5/16  | 17 3/8 | 19 1/4 | 22     | 6 1/4 | 2 5/8   | 1 7/8  | 8 3/4    | 3 3/4 | 3/16 | 4   | 1     | 225      |
| 5 1/2                      | SPBF22532 X 5 1/2          | SF532      | SR-508                | SR-32                       | 6 11/16              | 13 5/8   | 17 3/8 | 19 1/4 | 22     | 6 1/4 | 2 5/8   | 1 7/8  | 8 3/4    | 3 3/4 | 3/16 | 4   | 1     | 225      |
| 5 15/16                    | SPBF22534 X 5 15/16        | SF534      | SR-515                | SR-34                       | 7 1/16               | 14 9/16  | 19 3/8 | 21 5/8 | 24 3/4 | 6 3/4 | 2 3/4   | 2      | 9 3/8    | 4 1/4 | 3/16 | 4   | 1     | 300      |
| 6                          | SPBF22534 X 6              | SF534      | SR-600                | SR-34                       | 7 1/16               | 14 1/2   | 19 3/8 | 21 5/8 | 24 3/4 | 6 3/4 | 2 3/4   | 2      | 9 5/8    | 4 1/4 | 3/16 | 4   | 1     | 300      |
| 6 7/16                     | SPBF22536 X 6 7/16         | SF536      | SR-607                | SR-36                       | 7 1/2                | 15 1/2   | 20 7/8 | 23 5/8 | 26 3/4 | 7 1/8 | 3       | 2 3/8  | 9 11/16  | 4 5/8 | 3/16 | 4   | 1     | 330      |
| 6 1/2                      | SPBF22536 X 6 1/2          | SF536      | SR-608                | SR-36                       | 7 1/2                | 15 1/4   | 20 7/8 | 23 5/8 | 26 3/4 | 7 1/8 | 3       | 2 3/8  | 10       | 4 5/8 | 3/16 | 4   | 1     | 355      |
| 6 15/16                    | SPBF22538 X 6 15/16        | SF538      | SR-615                | SR-38                       | 7 7/8                | 15 11/16 | 21 5/8 | 24 3/8 | 28     | 7 1/2 | 3 1/8   | 2 3/8  | 10 3/4   | 4 1/2 | 3/16 | 4   | 1 1/4 | 375      |
| 7                          | SPBF22538 X 7              | SF538      | SR-700                | SR-38                       | 7 7/8                | 16 1/8   | 21 5/8 | 24 3/8 | 28     | 7 1/2 | 3 1/8   | 2 3/8  | 10 3/4   | 4 1/2 | 3/16 | 4   | 1 1/4 | 415      |
| 7 3/16                     | SPBF22540 X 7 3/16         | SF540      | SR-703                | SR-40                       | 8 1/4                | 17 3/16  | 22 1/2 | 25     | 29 1/2 | 8     | 3 3/8   | 2 5/8  | 10 13/16 | 5     | 3/16 | 4   | 1 1/4 | 445      |
| 7 1/2                      | SPBF22544 X 7 1/2          | SF544      | SR-708                | SR44                        | 9 1/2                | 19 3/8   | 24 3/4 | 27 7/8 | 32 3/4 | 8 3/4 | 3 3/4   | 2 1/2  | 12       | 5 1/4 | 3/16 | 4   | 1 1/2 | 685      |
| 7 15/16                    | SPBF22544 X 7 15/16        | SF544      | SR-715                | SR-44                       | 9 1/2                | 19 5/8   | 24 3/4 | 27 7/8 | 32 3/4 | 8 3/4 | 3 3/4   | 2 1/2  | 11 1/2   | 5 1/4 | 3/16 | 4   | 1 1/2 | 615      |
| 8                          | SPBF22544 X 8              | SF544      | SR-800                | SR-44                       | 9 1/2                | 19 3/8   | 24 3/4 | 27 7/8 | 32 3/4 | 8 3/4 | 3 3/4   | 2 1/2  | 12       | 5 1/4 | 3/16 | 4   | 1 1/2 | 685      |

See page 156 for trademark acknowledgments.



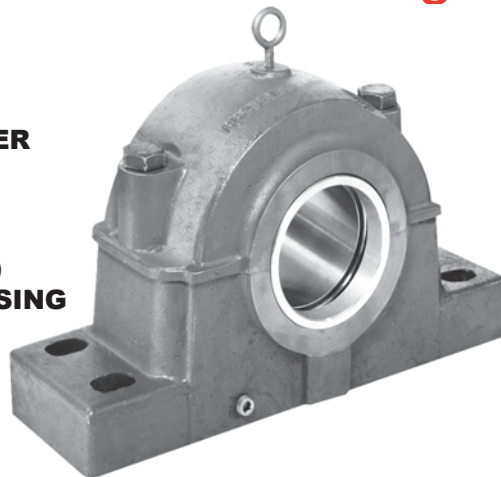
# 22500 Series

## Cast Steel Pillow Blocks

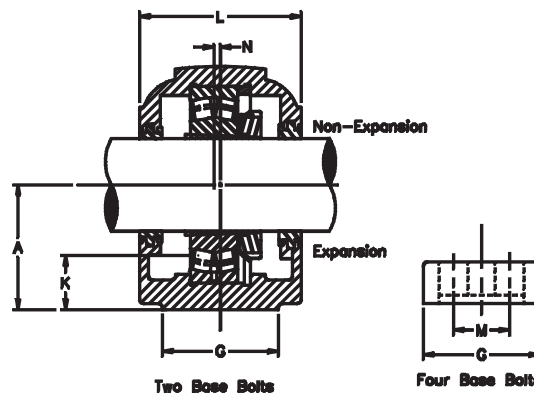
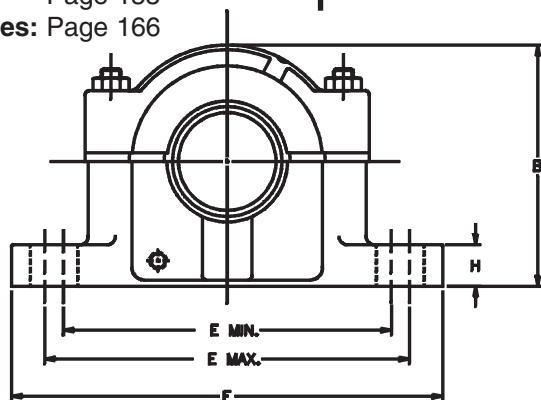
- Lock: Adapter Mount
- Seal: Triple Labyrinth
- Housing: Cast Steel
- Temperatures: -20° to 200° F
- Self Aligning: See Page 276
- Fitting: 1/4NPT for housings 515-528 and 216-228  
3/8NPT for housings 530 and above, and 230 and above
- Bearing Insert: 22200 CKW33C3
- Accessories: Page 147
- Ratings: Page 155
- Interchange Tables: Page 166

- S SPHERICAL ROLLER**
- P PILLOW**
- B BLOCK**
- T TWO BOLT BASE**
- (F FOUR BOLT BASE)**
- S CAST STEEL HOUSING**

- 2 22500**
- 2 BEARING SERIES**
- 5 ADAPTER MOUNT**
- 0 BEARING**
- 0 SIZE**



### Expansion and Non-Expansion



| PART NUMBERS               |                            |         | DIMENSIONS IN INCHES |          |        |        |        |       |        |         |          |       |      | Size  | Wt. Lbs. |
|----------------------------|----------------------------|---------|----------------------|----------|--------|--------|--------|-------|--------|---------|----------|-------|------|-------|----------|
| SHAFT SIZE                 | (1) Complete Pillow Block* | Housing | A                    | B        | E      |        | F      | G     | H      | K       | L        | M     | N    |       |          |
|                            |                            |         |                      |          | MIN.   | MAX.   |        |       |        |         |          |       |      |       |          |
| <b>TWO BASE BOLT TYPE</b>  |                            |         |                      |          |        |        |        |       |        |         |          |       |      |       |          |
| 2 7/16                     | SPBTS22515 X 2 7/16        | STS515  | 3 1/4                | 6 3/8    | 8 5/8  | 9 5/8  | 11 1/4 | 3 1/8 | 1 1/8  | 1 1/4   | 4 3/4    | -     | 3/16 | 5/8   | 30       |
| 2 11/16                    | SPBTS22516 X 2 11/16       | STS516  | 3 1/2                | 6 7/8    | 9 5/8  | 11     | 13     | 3 1/2 | 1 3/16 | 1 11/16 | 4 7/8    | -     | 3/16 | 3/4   | 37       |
| 2 15/16                    | SPBTS22517 X 2 15/16       | STS517  | 3 3/4                | 7 1/4    | 9 7/8  | 11     | 13     | 3 1/2 | 1 1/4  | 1 7/16  | 4 15/16  | -     | 3/16 | 3/4   | 40       |
| 3 3/16                     | SPBTS22518 X 3 3/16        | STS518  | 4                    | 7 3/4    | 10 3/4 | 11 5/8 | 13 3/4 | 3 7/8 | 1 1/2  | 1 17/32 | 6 1/4    | -     | 3/16 | 3/4   | 49       |
| 3 7/16                     | SPBTS22520 X 3 7/16        | STS520  | 4 1/2                | 8 11/16  | 11 5/8 | 13 1/8 | 15 1/4 | 4 3/8 | 1 3/4  | 1 3/4   | 6        | -     | 3/16 | 7/8   | 65       |
| <b>FOUR BASE BOLT TYPE</b> |                            |         |                      |          |        |        |        |       |        |         |          |       |      |       |          |
| 2 7/16                     | SPBFS22515 X 2 7/16        | SFS15   | 3 1/4                | 6 3/8    | 8 5/8  | 9 5/8  | 11 1/4 | 3 1/8 | 1 1/8  | 1 1/4   | 4 3/4    | 1 7/8 | 3/16 | 1/2   | 30       |
| 2 11/16                    | SPBFS22516 X 2 11/16       | SFS516  | 3 1/2                | 6 7/8    | 9 5/8  | 11     | 13     | 3 1/2 | 1 3/16 | 1 11/32 | 4 7/8    | 2 1/8 | 3/16 | 5/8   | 37       |
| 2 15/16                    | SPBFS22517 X 2 15/16       | SFS517  | 3 3/4                | 7 1/4    | 9 7/8  | 11     | 13     | 3 1/2 | 1 1/4  | 1 7/16  | 4 15/16  | 2 1/8 | 3/16 | 5/8   | 40       |
| 3 3/16                     | SPBFS22518 X 3 3/16        | SFS518  | 4                    | 7 3/4    | 10 3/8 | 11 5/8 | 13 3/4 | 3 7/8 | 1 1/2  | 1 17/32 | 6 1/4    | 2 1/8 | 3/16 | 5/8   | 65       |
| 3 7/16                     | SPBFS22520 X 3 7/16        | SFS520  | 4 1/2                | 8 11/16  | 11 5/8 | 13 1/8 | 15 1/4 | 4 3/8 | 1 3/4  | 1 3/4   | 6        | 2 3/8 | 3/16 | 3/4   | 65       |
| 3 15/16                    | SPBFS22522 X 3 15/16       | SFS522  | 4 15/16              | 9 9/16   | 12 5/8 | 14 1/2 | 16 1/2 | 4 3/4 | 2      | 1 7/8   | 6 3/8    | 2 3/4 | 3/16 | 3/4   | 81       |
| 4 3/16                     | SPBFS22524 X 4 3/16        | SFS524  | 5 1/4                | 10 1/4   | 13 1/4 | 14 1/2 | 16 1/2 | 4 3/4 | 2 1/8  | 1 15/16 | 7 3/8    | 2 3/4 | 3/16 | 3/4   | 94       |
| 4 7/16                     | SPBFS22526 X 4 7/16        | SFS526  | 6                    | 11 9/16  | 14 5/8 | 16     | 18 3/8 | 5 1/8 | 2 3/8  | 2 7/16  | 8        | 3 1/4 | 3/16 | 7/8   | 137      |
| 4 15/16                    | SPBFS22528 X 4 15/16       | SFS528  | 6                    | 11 3/4   | 16     | 17 1/8 | 20 1/8 | 5 7/8 | 2 3/8  | 2 1/8   | 7 3/4    | 3 3/8 | 3/16 | 1     | 159      |
| 5 3/16                     | SPBFS22530 X 5 3/16        | SFS530  | 6 5/16               | 12 1/2   | 17     | 18 1/4 | 21 1/4 | 6 1/4 | 2 1/2  | 2 3/16  | 8 3/8    | 3 3/4 | 3/16 | 1     | 189      |
| 5 7/16                     | SPBFS22532 X 5 7/16        | SFS532  | 6 11/16              | 13 5/16  | 17 3/8 | 19 1/4 | 22     | 6 1/4 | 2 5/8  | 2 3/16  | 8 3/4    | 3 3/4 | 3/16 | 1     | 225      |
| 5 15/16                    | SPBFS22534 X 5 15/16       | SFS534  | 7 1/16               | 14 9/16  | 19 3/8 | 21 5/8 | 24 3/4 | 6 3/4 | 2 3/4  | 2 5/16  | 9 3/8    | 4 1/4 | 3/16 | 1     | 300      |
| 6 7/16                     | SPBFS22536 X 6 7/16        | SFS536  | 7 1/2                | 15 1/2   | 20 7/8 | 23 5/8 | 26 3/4 | 7 1/8 | 3      | 2 9/16  | 9 11/16  | 4 5/8 | 3/16 | 1     | 330      |
| 6 15/16                    | SPBFS22538 X 6 15/16       | SFS538  | 7 7/8                | 15 11/16 | 21 5/8 | 24 3/8 | 28     | 7 1/2 | 3 1/8  | 2 5/8   | 10 3/4   | 4 1/2 | 3/16 | 1 1/4 | 375      |
| 7 3/16                     | SPBFS22540 X 7 3/16        | SFS540  | 8 1/4                | 17 3/16  | 22 1/2 | 25     | 29 1/2 | 8     | 3 3/8  | 2 11/16 | 10 13/16 | 5     | 3/16 | 1 1/4 | 445      |
| 7 15/16                    | SPBFS22544 X 7/15          | SFS544  | 9 1/2                | 19 5/8   | 24 3/4 | 27 7/8 | 32 3/4 | 8 3/4 | 3 3/4  | 3 3/8   | 11 1/2   | 5 1/4 | 3/16 | 1 1/2 | 615      |

\*Not available from stock - Contact Browning for delivery.

(1) This part number includes all components (housing, bearing, seal rings, stabilizing ring, adapter assembly, locknut and lockwasher) which are required to assemble a complete pillow block. Components are packaged separately.

Refer to pages 147-148 for bearing and adapter assemblies.

A stabilizing ring is furnished with each housing. **DO NOT** use for expansion bearing. **NOTE:** Only one non-expansion bearing should be used on a shaft; all others on the same shaft **MUST** be expansion type.

Non-expansion (fixed bearing is offset by "N" amount in relation to center line of housing.



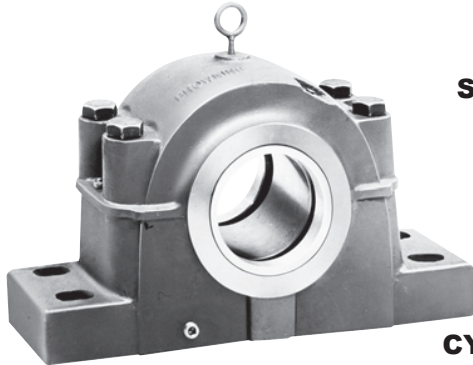
# Spherical Roller Bearings

Cylindrical



22200

## 22200 Series

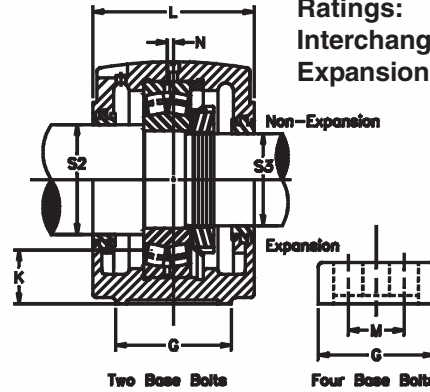
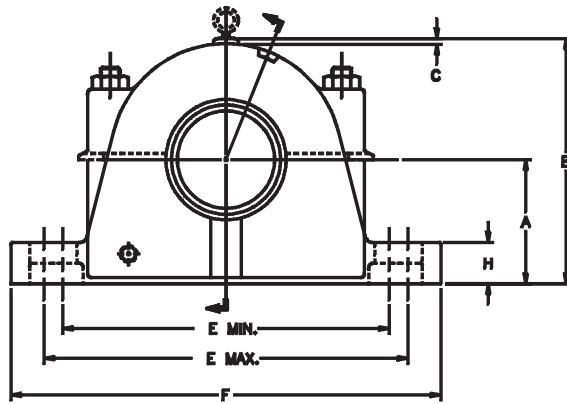


**SPHERICAL ROLLER** S  
**PILLOW** P  
**BLOCK** B  
**TWO BOLT BASE** T  
**FOUR BOLT BASE** (F)

**22000** 2  
**BEARING SERIES** 2  
**CYLINDRICAL MOUNT** 2  
**BEARING** 0  
**SIZE** 0

### Cast Iron Pillow Blocks

**Lock:** Cylindrical Mount  
**Seal:** Triple Labyrinth  
**Housing:** Cast Iron  
**Temperatures:** -20°F to 200°F  
**Self Aligning:** See Page 276  
**Fitting:** 1/4NPT for housings 515-528 and 216-228  
 3/8NPT for housings 530 and above, and 230 and above  
**Bearing Insert:** 22200 CW33C3  
**Accessories:** Page 147  
**Ratings:** Page 155  
**Interchange Tables:** Page 166  
**Expansion and Non-Expansion**



| SHAFT SIZE                 |         | PART NUMBERS               |         |               |               |                  |         | DIMENSIONS IN INCHES |      |        |        |        |       |       |       |          |       |      |           |          |
|----------------------------|---------|----------------------------|---------|---------------|---------------|------------------|---------|----------------------|------|--------|--------|--------|-------|-------|-------|----------|-------|------|-----------|----------|
| S2                         | S3      | (1) Complete Pillow Block* | Housing | S2 Seal Rings | S3 Seal Rings | Stabilizing Ring | A       | B                    | C    | E      |        | F      | G     | H     | K     | L        | M     | N    | Bolt Size | Wt. Lbs. |
|                            |         |                            |         |               |               |                  |         |                      |      | MIN.   | MAX.   |        |       |       |       |          |       |      |           |          |
| <b>TWO BASE BOLT TYPE</b>  |         |                            |         |               |               |                  |         |                      |      |        |        |        |       |       |       |          |       |      |           |          |
| 3 5/8                      | 3       | SPBT22216                  | ST216   | SR-310        | SR-300        | SR-16            | 3 1/2   | 7 1/16               | 3/16 | 9 5/8  | 11     | 13     | 3 1/2 | 1 3/8 | 1 3/8 | 5 3/8    | -     | 3/16 | 3/4       | 43       |
| 3 15/16                    | 3 3/16  | SPBT22217                  | ST217   | SRN-315       | SRN-303       | SR-17            | 3 3/4   | 7 1/4                | 3/16 | 9 7/8  | 11     | 13     | 3 1/2 | 1 1/4 | 1 1/2 | 4 15/16  | -     | 3/16 | 3/4       | 43       |
| 4 1/8                      | 3 3/8   | SPBT22218                  | ST218   | SR-402        | SR-306        | SR-18            | 4       | 7 3/4                | 1/4  | 10 3/8 | 11 5/8 | 13 3/4 | 3 7/8 | 1 1/2 | 1 5/8 | 6 1/4    | -     | 3/16 | 3/4       | 50       |
| 4 1/2                      | 3 13/16 | SPBT22220                  | ST220   | SR-408        | SR-313        | SR-20            | 4 1/2   | 8 11/16              | 1/4  | 11 5/8 | 13 1/8 | 15 1/4 | 4 3/8 | 1 3/4 | 1 3/4 | 6        | -     | 3/16 | 7/8       | 71       |
| <b>FOUR BASE BOLT TYPE</b> |         |                            |         |               |               |                  |         |                      |      |        |        |        |       |       |       |          |       |      |           |          |
| 3 5/8                      | 3       | SPBF22216                  | SF216   | SR-310        | SR-300        | SR-16            | 3 1/2   | 7 1/16               | 3/16 | 9 5/8  | 11     | 13     | 3 1/2 | 1 3/8 | 1 3/8 | 5 3/8    | 2 1/8 | 3/16 | 5/8       | 43       |
| 3 15/16                    | 3 3/16  | SPBF22217                  | SF217   | SRN-315       | SRN-303       | SR-17            | 3 3/4   | 7 1/4                | 3/16 | 9 7/8  | 11     | 13     | 3 1/2 | 1 1/4 | 1 1/2 | 4 15/16  | 2 1/8 | 3/16 | 5/8       | 43       |
| 4 1/8                      | 3 3/8   | SPBF22218                  | SF218   | SR-402        | SR-306        | SR-18            | 4       | 7 3/4                | 1/4  | 10 3/8 | 11 5/8 | 13 3/4 | 3 7/8 | 1 1/2 | 1 5/8 | 6 1/4    | 2 1/8 | 3/16 | 5/8       | 50       |
| 4 1/2                      | 3 13/16 | SPBF22220                  | SF220   | SR-408        | SR-313        | SR-20            | 4 1/2   | 8 11/16              | 1/4  | 11 5/8 | 13 1/8 | 15 1/4 | 4 3/8 | 1 3/4 | 1 3/4 | 6        | 2 3/8 | 3/16 | 3/4       | 71       |
| 4 7/8                      | 4 3/16  | SPBF22222                  | SF222   | SR-414        | SR-403        | SR-22            | 4 15/16 | 9 9/16               | 1/4  | 12 5/8 | 14 1/2 | 16 1/2 | 4 3/4 | 2     | 2     | 6 3/8    | 2 3/4 | 3/16 | 3/4       | 81       |
| 5 5/16                     | 4 9/16  | SPBF22224                  | SF224   | SR-505        | SR-409        | SR-24            | 5 1/4   | 10 1/4               | 1/4  | 13 1/4 | 14 1/2 | 16 1/2 | 4 3/4 | 2 1/8 | 2     | 7 3/8    | 2 3/4 | 3/16 | 3/4       | 90       |
| 5 7/8                      | 4 15/16 | SPBF22226                  | SF226   | SR-514        | SR-415        | SR-26            | 6       | 11 9/16              | 1/4  | 14 5/8 | 16     | 18 3/8 | 5 1/8 | 2 3/8 | 2 1/2 | 8        | 3 1/4 | 3/16 | 7/8       | 127      |
| 6 1/4                      | 5 5/16  | SPBF22228                  | SF228   | SR-604        | SR-505        | SR-28            | 6       | 11 3/4               | 1/4  | 16     | 17 1/8 | 20 1/8 | 5 7/8 | 2 3/8 | 2 1/4 | 7 3/4    | 3 3/8 | 3/16 | 1         | 149      |
| 6 5/8                      | 5 3/4   | SPBF22230                  | SF230   | SR-610        | SR-512        | SR-30            | 6 5/16  | 12 1/2               | 1/4  | 17     | 18 1/4 | 21 1/4 | 6 1/4 | 2 1/2 | 2 1/2 | 8 3/8    | 3 3/4 | 3/16 | 1         | 175      |
| 7                          | 6 1/16  | SPBF22232                  | SF232   | SR-700        | SR-601        | SR-32            | 6 11/16 | 13 5/16              | 1/4  | 17 3/8 | 19 1/4 | 22     | 6 1/4 | 2 5/8 | 1 7/8 | 8 3/4    | 3 3/4 | 3/16 | 1         | 210      |
| 7 7/16                     | 6 7/16  | SPBF22234                  | SF234   | SR-707        | SR-607        | SR-34            | 7 1/16  | 14 9/16              | 1/4  | 19 3/8 | 21 5/8 | 24 3/4 | 6 3/4 | 2 3/4 | 2     | 9 3/8    | 4 1/4 | 3/16 | 1         | 280      |
| 7 13/16                    | 6 7/8   | SPBF22236                  | SF236   | SR-713        | SR-614        | SR-36            | 7 1/2   | 15 1/2               | 3/8  | 20 7/8 | 23 5/8 | 26 3/4 | 7 1/8 | 3     | 2 3/8 | 9 11/16  | 4 5/8 | 3/16 | 1         | 305      |
| 8 3/8                      | 7 1/4   | SPBF22238                  | SF238   | SR-806        | SR-704        | SR-38            | 7 7/8   | 15 11/16             | 3/8  | 21 5/8 | 24 3/8 | 28     | 7 1/2 | 3 1/8 | 2 3/8 | 10 3/4   | 4 1/2 | 3/16 | 1 1/4     | 350      |
| 8 3/4                      | 7 5/8   | SPBF22240                  | SF240   | SR-812        | SR-710        | SR-40            | 8 1/4   | 17 3/16              | 3/8  | 22 1/2 | 25     | 29 1/2 | 8     | 3 3/8 | 2 5/8 | 10 13/16 | 5     | 3/16 | 1 1/4     | 420      |
| 9 9/16                     | 8 5/16  | SPBF22244                  | SF244   | SR-909        | SR-805        | SR-44            | 9 1/2   | 19 5/8               | 3/8  | 24 3/4 | 27 7/8 | 32 3/4 | 8 3/4 | 3 3/4 | 2 1/2 | 11 1/2   | 5 1/4 | 3/16 | 1 1/2     | 590      |

\*Not available from stock - Contact Browning for delivery.

(1) This part number includes all components (housing, bearing, seal rings, stabilizing ring, adapter assembly, locknut and lockwasher) which are required to assemble a complete pillow block. Components are packaged separately.

Refer to pages 149-150 for bearing and adapter assemblies.

A stabilizing ring is furnished with each housing. **DO NOT** use for expansion bearing. **NOTE:** Only one non-expansion bearing should be used on a shaft; all others on the same shaft **MUST** be expansion type.

Non-expansion (fixed bearing is offset by "N" amount in relation to center line of housing.

See page 156 for trademark acknowledgments.



# Browning®

## Spherical Roller Bearings

### 22200 Series

#### Cast Steel Pillow Blocks

**Lock:** Cylindrical Mount  
**Seal:** Triple Labyrinth  
**Housing:** Cast Steel  
**Temperatures:** - 20°F to 200° F  
**Self Aligning:** See Page 276  
**Fitting:** 1/4NPT for housings 515-528 and 216-228  
 3/8NPT for housings 530 and above, and 230 and above

**Bearing Insert:** 22200 CW33C3

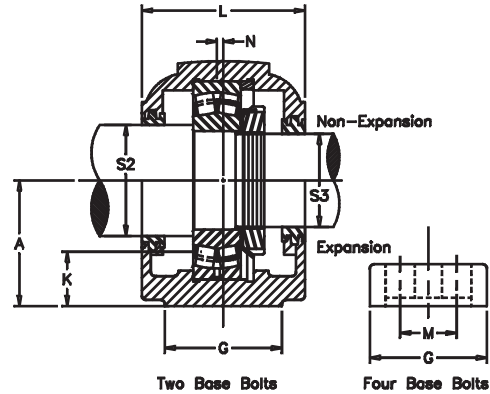
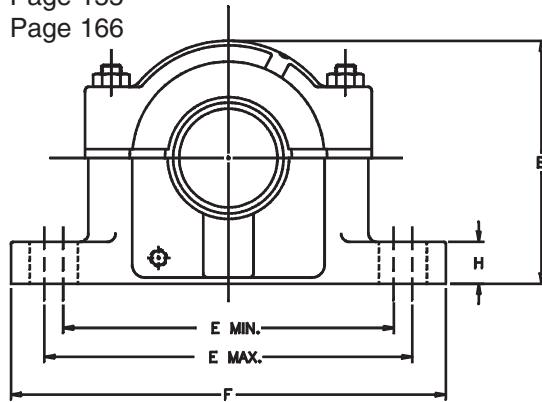
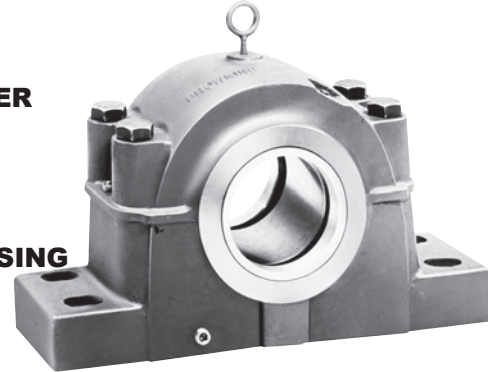
**Accessories:** Page 149

**Ratings:** Page 155

**Interchange Tables:** Page 166

**Expansion and Non-Expansion**

- S SPHERICAL ROLLER**
- P PILLOW**
- B BLOCK**
- T TWO BOLT BASE**
- (F) FOUR BOLT BASE**
- S CAST STEEL HOUSING**
  
- 2 22200**
- 2 BEARING SERIES**
- 2 CYLINDRICAL MOUNT**
- 0 BEARING**
- 0 SIZE**



| SHAFT SIZE                 |         | DIMENSIONS IN INCHES       |                                    |         |          |        |        |        |       |       |         |          |       |      |           |          |
|----------------------------|---------|----------------------------|------------------------------------|---------|----------|--------|--------|--------|-------|-------|---------|----------|-------|------|-----------|----------|
| S2                         | S3      | (1) Complete Pillow Block* | Housing only with Stabilizing Ring | A       | B        | E      |        | F      | G     | H     | K       | L        | M     | N    | Bolt Size | Wt. Lbs. |
|                            |         |                            |                                    | MIN.    | MAX.     |        |        |        |       |       |         |          |       |      |           |          |
| <b>TWO BASE BOLT TYPE</b>  |         |                            |                                    |         |          |        |        |        |       |       |         |          |       |      |           |          |
| 3 5/8                      | 3       | SPBTS22216                 | STS216                             | 3 1/2   | 6 7/8    | 9 5/8  | 11     | 13     | 3 1/2 | 1 3/8 | 1 11/32 | 4 7/8    | -     | 3/16 | 3/4       | 33       |
| 3 15/16                    | 3 3/16  | SPBTS22217                 | STS217                             | 3 3/4   | 7 1/4    | 9 7/8  | 11     | 13     | 3 1/2 | 1 1/4 | 1 7/16  | 4 15/16  | -     | 3/16 | 3/4       | 43       |
| 4 1/8                      | 3 3/8   | SPBTS22218                 | STS218                             | 4       | 7 3/4    | 10 3/8 | 11 5/8 | 13 3/4 | 3 7/8 | 1 1/2 | 1 17/32 | 6 1/4    | -     | 3/16 | 3/4       | 50       |
| 4 1/2                      | 3 13/16 | SPBTS22220                 | STS220                             | 4 1/2   | 8 11/16  | 11 5/8 | 13 1/8 | 15 1/4 | 4 3/8 | 1 3/4 | 1 3/4   | 6        | -     | 3/16 | 7/8       | 71       |
| <b>FOUR BASE BOLT TYPE</b> |         |                            |                                    |         |          |        |        |        |       |       |         |          |       |      |           |          |
| 3 5/8                      | 3       | SPBFS22216                 | SFS216                             | 3 1/2   | 6 7/8    | 9 5/8  | 11     | 13     | 3 1/2 | 3 3/8 | 1 11/32 | 4 7/8    | 2 1/8 | 3/16 | 5/8       | 33       |
| 3 15/16                    | 3 3/16  | SPBFS22217                 | SFS217                             | 3 3/4   | 7 1/4    | 9 7/8  | 11     | 13     | 3 1/2 | 1 1/4 | 1 7/16  | 4 15/16  | 2 1/8 | 3/16 | 5/8       | 43       |
| 4 1/8                      | 3 3/8   | SPBFS22218                 | SFS218                             | 4       | 7 3/4    | 10 3/8 | 11 5/8 | 13 3/4 | 3 7/8 | 1 1/2 | 1 17/32 | 6 1/4    | 2 1/8 | 3/16 | 5/8       | 50       |
| 4 1/2                      | 3 13/16 | SPBFS22220                 | SFS220                             | 4 1/2   | 8 11/16  | 11 5/8 | 13 1/8 | 15 1/4 | 4 3/8 | 1 3/4 | 1 3/4   | 6        | 2 3/8 | 3/16 | 3/4       | 71       |
| 4 7/8                      | 4 3/16  | SPBFS22222                 | SFS222                             | 4 15/16 | 9 9/16   | 12 5/8 | 14 1/2 | 16 1/2 | 4 3/4 | 2     | 1 7/8   | 6 3/8    | 2 3/4 | 3/16 | 3/4       | 81       |
| 5 5/16                     | 4 9/16  | SPBFS22224                 | SFS224                             | 5 1/4   | 10 1/4   | 13 1/4 | 14 1/2 | 16 1/2 | 4 3/4 | 2 1/8 | 1 15/16 | 7 3/8    | 2 3/4 | 3/16 | 3/4       | 90       |
| 5 7/8                      | 4 15/16 | SPBFS22226                 | SFS226                             | 6       | 11 9/16  | 14 5/8 | 16     | 18 3/8 | 5 1/8 | 2 3/8 | 2 7/16  | 8        | 3 1/4 | 3/16 | 7/8       | 127      |
| 6 1/4                      | 5 5/16  | SPBFS22228                 | SFS228                             | 6       | 11 3/4   | 16     | 17 1/8 | 20 1/8 | 5 7/8 | 2 3/8 | 2 1/8   | 7 3/4    | 3 3/8 | 3/16 | 1         | 149      |
| 6 5/8                      | 5 3/4   | SPBFS22230                 | SFS230                             | 6 5/16  | 12 1/2   | 17     | 18 1/4 | 21 1/4 | 6 1/4 | 2 1/2 | 2 3/16  | 8 3/8    | 3 3/4 | 3/16 | 1         | 175      |
| 7                          | 6 1/16  | SPBFS22232                 | SFS232                             | 6 11/16 | 13 5/16  | 17 3/8 | 19 1/4 | 22     | 6 1/4 | 2 5/8 | 2 3/16  | 8 3/4    | 3 3/4 | 3/16 | 1         | 210      |
| 7 7/16                     | 6 7/16  | SPBFS22234                 | SFS234                             | 7 1/16  | 14 9/16  | 19 3/8 | 21 5/8 | 24 3/4 | 6 3/4 | 2 3/4 | 2 5/16  | 9 3/8    | 4 1/4 | 3/16 | 1         | 280      |
| 7 13/16                    | 6 7/8   | SPBFS22236                 | SFS236                             | 7 1/2   | 15 1/2   | 20 7/8 | 23 5/8 | 26 3/4 | 7 1/8 | 3     | 2 9/16  | 9 11/16  | 4 5/8 | 3/16 | 1         | 305      |
| 8 3/8                      | 7 1/4   | SPBFS22238                 | SFS238                             | 7 7/8   | 15 11/16 | 21 5/8 | 24 3/8 | 28     | 7 1/2 | 3 1/8 | 2 5/8   | 10 3/4   | 4 1/2 | 3/16 | 1 1/4     | 350      |
| 8 3/4                      | 7 5/8   | SPBFS22240                 | SFS240                             | 8 1/4   | 17 3/16  | 22 1/2 | 25     | 29 1/2 | 8     | 3 3/8 | 2 11/16 | 10 13/16 | 5     | 3/16 | 1 1/4     | 420      |
| 9 9/16                     | 8 5/16  | SPBFS22244                 | SFS244                             | 9 1/2   | 19 5/8   | 24 3/4 | 27 7/8 | 32 3/4 | 8 3/4 | 3 3/4 | 3 3/8   | 11 1/2   | 5 1/4 | 3/16 | 1 1/2     | 590      |

\*Not available from stock - Contact Browning for delivery.

(1) This part number includes all components (housing, bearing, seal rings, stabilizing ring, adapter assembly, locknut and lockwasher) which are required to assemble a complete pillow block. Components are packaged separately.

Refer to pages 149-150 for bearing and adapter assemblies.

A stabilizing ring is furnished with each housing. **DO NOT** use for expansion bearing. **NOTE:** Only one non-expansion bearing should be used on a shaft; all others on the same shaft **MUST** be expansion type.

Non-expansion (fixed bearing is offset by "N" amount in relation to center line of housing.

# Browning®

## 22200 Adapter Mount Bearings

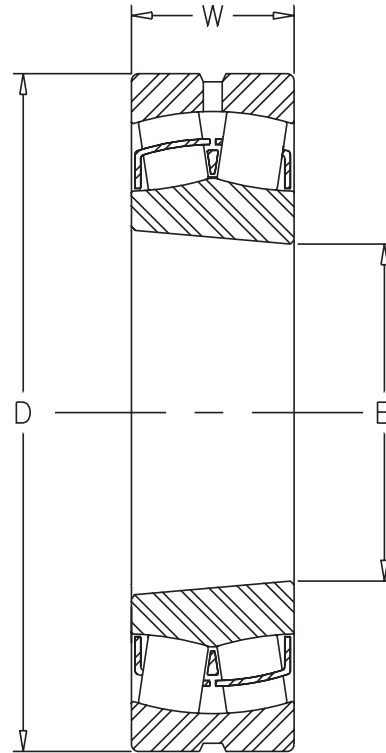
Cylindrical  
22200



**22200 SERIES 2**  
**ADAPTER 2**  
**MOUNT 2**  
**BEARINGS 0**  
**0**

**CENTER GUIDANCE C**  
**1-12 TAPER K**  
**LUBE W**  
**HOLES 3**  
**AND GROOVE 3**  
**ABMA C**  
**INTERNAL CLEARANCE 3**

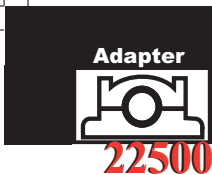
### 22200CKW33C3



| Shaft Size | Bearing Part Number | B   |        | D   |         | W   |        | Wt. Lbs. |
|------------|---------------------|-----|--------|-----|---------|-----|--------|----------|
|            |                     | mm  | inches | mm  | inches  | mm  | inches |          |
| 2 7/16     | 22215CKW33C3        | 75  | 2.9528 | 130 | 5.1181  | 31  | 1.2205 | 3.9      |
| 2 1/2      | 22215CKW33C3        | 75  | 2.9528 | 130 | 5.1181  | 31  | 1.2205 | 3.9      |
| 2 11/16    | 22216CKW33C3        | 80  | 3.1496 | 140 | 5.5118  | 33  | 1.2992 | 4.6      |
| 2 3/4      | 22216CKW33C3        | 80  | 3.1496 | 140 | 5.5118  | 33  | 1.2992 | 4.6      |
| 2 15/16    | 22217CKW33C3        | 85  | 3.3465 | 150 | 5.9055  | 36  | 1.4173 | 5.9      |
| 3          | 22217CKW33C3        | 85  | 3.3465 | 150 | 5.9055  | 36  | 1.4173 | 5.9      |
| 3 3/16     | 22218CKW33C3        | 90  | 3.5433 | 160 | 6.2992  | 40  | 1.5748 | 7.5      |
| 3 7/16     | 22220CKW33C3        | 100 | 3.9370 | 180 | 7.0866  | 46  | 1.8110 | 11.1     |
| 3 1/2      | 22220CKW33C3        | 100 | 3.9370 | 180 | 7.0866  | 46  | 1.8110 | 11.1     |
| 3 11/16    | 22222CKW33C3        | 110 | 4.3307 | 200 | 7.8740  | 53  | 2.0866 | 15.9     |
| 3 15/16    | 22222CKW33C3        | 110 | 4.3307 | 200 | 7.8740  | 53  | 2.0866 | 15.9     |
| 4          | 22222CKW33C3        | 110 | 4.3307 | 200 | 7.8740  | 53  | 2.0866 | 15.9     |
| 4 3/16     | 22224CKW33C3        | 120 | 4.7244 | 215 | 8.4646  | 58  | 2.2835 | 19.8     |
| 4 7/16     | 22226CKW33C3        | 130 | 5.1181 | 230 | 9.0551  | 64  | 2.5197 | 24.8     |
| 4 1/2      | 22226CKW33C3        | 130 | 5.1181 | 230 | 9.0551  | 64  | 2.5197 | 24.8     |
| 4 15/16    | 22228CKW33C3        | 140 | 5.5118 | 250 | 9.8425  | 68  | 2.6772 | 31.3     |
| 5          | 22228CKW33C3        | 140 | 5.5118 | 250 | 9.8425  | 68  | 2.6772 | 31.3     |
| 5 3/16     | 22230CKW33C3        | 150 | 5.9055 | 270 | 10.6299 | 73  | 2.8740 | 39.5     |
| 5 7/16     | 22232CKW33C3        | 160 | 6.2992 | 290 | 11.4173 | 80  | 3.1496 | 50.2     |
| 5 1/2      | 22232CKW33C3        | 160 | 6.2992 | 290 | 11.4173 | 80  | 3.1496 | 50.2     |
| 5 15/16    | 22234CKW33C3        | 170 | 6.6929 | 310 | 12.2047 | 86  | 3.3858 | 62.0     |
| 6          | 22234CKW33C3        | 170 | 6.6929 | 310 | 12.2047 | 86  | 3.3858 | 62.0     |
| 6 7/16     | 22236CKW33C3        | 180 | 7.0866 | 320 | 12.5984 | 86  | 3.3858 | 64.8     |
| 6 1/2      | 22236CKW33C3        | 180 | 7.0866 | 320 | 12.5984 | 86  | 3.3858 | 64.8     |
| 6 15/16    | 22238CKW33C3        | 190 | 7.4803 | 340 | 13.3858 | 92  | 3.6220 | 78.5     |
| 7          | 22238CKW33C3        | 190 | 7.4803 | 340 | 13.3858 | 92  | 3.6220 | 78.5     |
| 7 3/16     | 22240CKW33C3        | 200 | 7.8740 | 360 | 14.1732 | 98  | 3.8583 | 94.0     |
| 7 1/2      | 22244CKW33C3        | 220 | 8.6614 | 400 | 15.7480 | 108 | 4.2520 | 130.0    |
| 7 15/16    | 22244CKW33C3        | 220 | 8.6614 | 400 | 15.7480 | 108 | 4.2520 | 130.0    |
| 8          | 22244CKW33C3        | 220 | 8.6614 | 400 | 15.7480 | 108 | 4.2520 | 130.0    |

See page 156 for trademark acknowledgments.



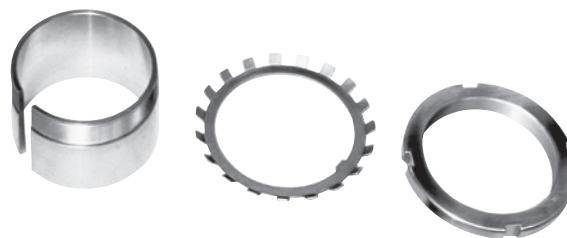
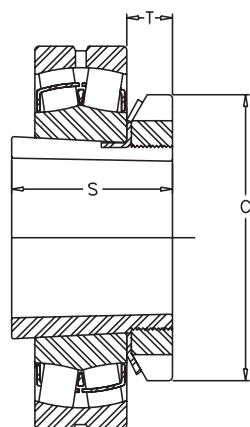


# Browning®

## 22500 Adapter Assemblies

### SNW

**S SLEEVE**  
**N NUT**  
**W WASHER**



| Shaft Size* | Adapter Part Number | C       | S     | T       | Wt. Lbs. |
|-------------|---------------------|---------|-------|---------|----------|
| 2 7/16      | SNW15 X 2 7/16      | 3 7/8   | 2.296 | 43/64   | 2.3      |
| 2 1/2       | SNW15 X 2 1/2       | 3 7/8   | 2.296 | 43/64   | 2.2      |
| 2 11/16     | SNW16 X 2 11/16     | 4 5/32  | 2.376 | 43/64   | 2.4      |
| 2 3/4       | SNW16 X 2 3/4       | 4 5/32  | 2.376 | 43/64   | 2.3      |
| 2 15/16     | SNW17 X 2 15/16     | 4 13/32 | 2.486 | 45/64   | 2.9      |
| 3           | SNW17 X 3           | 4 13/32 | 2.486 | 45/64   | 2.8      |
| 3 3/16      | SNW18 X 3 3/16      | 4 21/32 | 2.646 | 25/32   | 3.1      |
| 3 7/16      | SNW20 X 3 7/16      | 5 3/16  | 2.869 | 27/32   | 4.4      |
| 3 1/2       | SNW20 X 3 1/2       | 5 3/16  | 2.869 | 27/32   | 4.2      |
| 3 11/16     | SNW22 X 3 11/16     | 5 23/32 | 3.206 | 29/32   | 5.0      |
| 3 15/16     | SNW22 X 3 15/16     | 5 23/32 | 3.206 | 29/32   | 4.8      |
| 4           | SNW22 X 4           | 5 23/32 | 3.206 | 29/32   | 4.7      |
| 4 3/16      | SNW24 X 4 3/16      | 6 1/8   | 3.466 | 15/16   | 6.7      |
| 4 7/16      | SNW26 X 4 7/16      | 6 3/4   | 3.762 | 1       | 9.7      |
| 4 1/2       | SNW26 X 4 1/2       | 6 3/4   | 3.762 | 1       | 9.5      |
| 4 15/16     | SNW28 X 4 15/16     | 7 3/32  | 3.981 | 1 1/16  | 10.3     |
| 5           | SNW28 X 5           | 7 3/32  | 3.981 | 1 1/16  | 10.1     |
| 5 3/16      | SNW30 X 5 3/16      | 7 11/16 | 4.241 | 1 1/8   | 15.8     |
| 5 7/16      | SNW32 X 5 7/16      | 8 1/16  | 4.578 | 1 3/16  | 15.6     |
| 5 1/2       | SNW32 X 5 1/2       | 8 1/16  | 4.578 | 1 3/16  | 15.4     |
| 5 15/16     | SNW34 X 5 15/16     | 8 21/32 | 4.847 | 1 7/32  | 19.4     |
| 6           | SNW34 X 6           | 8 21/32 | 4.847 | 1 7/32  | 19.2     |
| 6 7/16      | SNW36 X 6 7/16      | 9 1/16  | 5.038 | 1 1/4   | 20.5     |
| 6 1/2       | SNW36 X 6 1/2       | 9 1/16  | 5.038 | 1 1/4   | 20.2     |
| 6 15/16     | SNW38 X 6 15/16     | 9 15/32 | 5.261 | 1 9/32  | 23.4     |
| 7           | SNW38 X 7           | 9 15/32 | 5.261 | 1 9/32  | 23.2     |
| 7 3/16      | SNW40 X 7 3/16      | 9 27/32 | 5.484 | 1 11/32 | 30.7     |
| 7 1/2       | SNW44 X 7 1/2       | 11      | 5.901 | 1 13/32 | 33.0     |
| 7 15/16     | SNW44 X 7 15/16     | 11      | 5.901 | 1 13/32 | 32.3     |
| 8           | SNW44 X 8           | 11      | 5.901 | 1 13/32 | 32.0     |

\*Recommended shaft tolerances for adapter mounting:  
 2 7/16" +.000, -.003      4" - 6" +.000, -.005  
 2 1/2" - 4 incl. +.000, -.004      6" - 8" incl. +.000, -.006



**Browning**

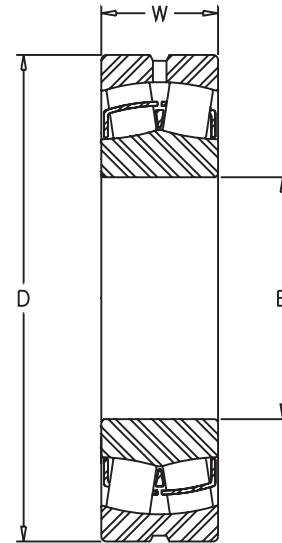
**22200 Cylindrical Bore Bearings**



**22200CW33C3**

**22200 2**  
**SERIES 2**  
**CYLINDRICAL 2**  
**MOUNT 0**  
**BEARING 0**

**CENTER GUIDANCE C**  
**LUBE HOLES W**  
**AND 3**  
**GROOVE 3**  
**ABMA C**  
**INTERNAL CLEARANCE 3**



| CYLINDRICAL BORE BEARINGS - 222 SERIES |         |                  |     |        |     |         |     |        |          |
|--|---------|------------------|-----|--------|-----|---------|-----|--------|----------|
| SHAFT SIZE                             |         | BEARING PART NO. | B   |        | D   |         | W   |        | Wt. Lbs. |
| S2                                     | S3      |                  | MM  | INCHES | MM  | INCHES  | MM  | INCHES |          |
| 3 5/8                                  | 3       | 22216CW33C3      | 80  | 3.1496 | 140 | 5.5118  | 33  | 1.2992 | 4.5      |
| 3 15/16                                | 3 3/16  | 22217CW33C3      | 85  | 3.3465 | 150 | 5.9055  | 36  | 1.4173 | 5.6      |
| 4 1/8                                  | 3 3/8   | 22218CW33C3      | 90  | 3.5433 | 160 | 6.2992  | 40  | 1.5748 | 7.2      |
| 4 1/2                                  | 3 13/16 | 22220CW33C3      | 100 | 3.9370 | 180 | 7.0866  | 46  | 1.8110 | 10.5     |
| 4 7/8                                  | 4 3/16  | 22222CW33C3      | 110 | 4.3307 | 200 | 7.8740  | 53  | 2.0866 | 15.5     |
| 5 5/16                                 | 4 9/16  | 22224CW33C3      | 120 | 4.7244 | 215 | 8.4646  | 58  | 2.2835 | 19       |
| 5 7/8                                  | 4 15/16 | 22226CW33C3      | 130 | 5.1181 | 230 | 9.0551  | 64  | 2.5197 | 24.5     |
| 6 1/4                                  | 5 5/16  | 22228CW33C3      | 140 | 5.5118 | 250 | 9.8425  | 68  | 2.6772 | 31.0     |
| 6 5/8                                  | 5 3/4   | 22230CW33C3      | 150 | 5.9055 | 270 | 10.6299 | 73  | 2.8740 | 39.5     |
| 7                                      | 6 1/16  | 22232CW33C3      | 160 | 6.2992 | 290 | 11.4173 | 80  | 3.1496 | 49.5     |
| 7 7/16                                 | 6 7/16  | 22234CW33C3      | 170 | 6.6929 | 310 | 12.2047 | 86  | 3.3858 | 63.0     |
| 7 13/16                                | 6 7/8   | 22236CW33C3      | 180 | 7.0866 | 320 | 12.5984 | 86  | 3.3858 | 65.0     |
| 8 3/8                                  | 7 1/4   | 22238CW33C3      | 190 | 7.4803 | 340 | 13.3858 | 92  | 3.6220 | 80.5     |
| 8 3/4                                  | 7 5/8   | 22240CW33C3      | 200 | 7.7840 | 360 | 14.1732 | 98  | 3.8583 | 96.0     |
| 9 9/16                                 | 8 5/16  | 22244CW33C3      | 220 | 8.6614 | 400 | 15.7480 | 108 | 4.2520 | 135      |

See page 156 for trademark acknowledgments.

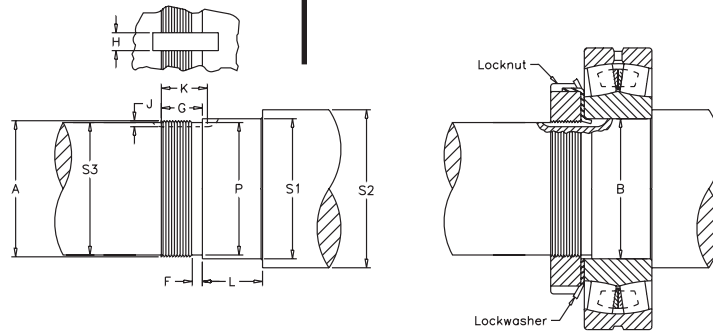


# Browning®

## 22200 CYLINDRICAL BORE LOCKNUT/WASHER

# ANW

**A PACKAGE OF  
N LOCKNUT  
W WASHER**



LOCKNUT/LOCKWASHER PACKAGES and SHAFT DIMENSIONS

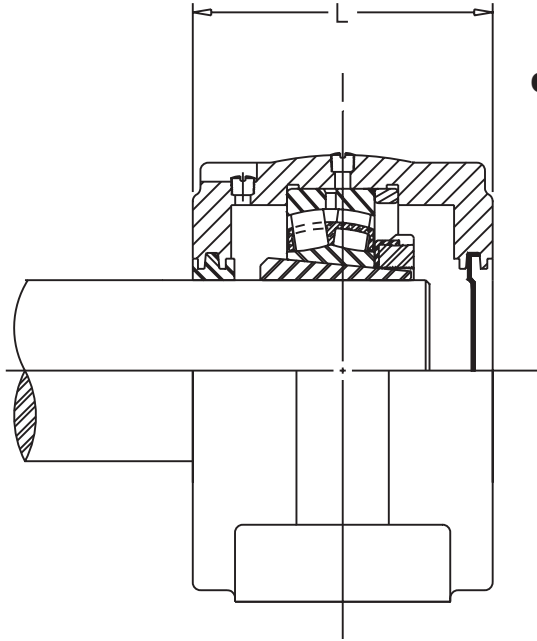
| Bearing Size | Locknut and Lockwasher Package | B Bearing Bore |        | Keyway              |                     |                     | Threads Per Inch | F Thread Relief +1/64" -0" | G Thread Length +1/64" -0" | L Bearing Seat +0" -1/64" | P Thread Relief Dia. +.010" |
|--------------|--------------------------------|----------------|--------|---------------------|---------------------|---------------------|------------------|----------------------------|----------------------------|---------------------------|-----------------------------|
|              |                                | MM             | INCHES | J Depth + 1/64" -0" | H Width + 1/64" -0" | K Full Depth Length |                  |                            |                            |                           |                             |
| 16           | AN16/W16 Pkg.                  | 80             | 3.1496 | 1/8                 | 3/8                 | 15/16               | 12               | 5/32                       | 11/16                      | 1 9/32                    | 3 1/32                      |
| 17           | AN17/W17 Pkg.                  | 85             | 3.3465 | 1/8                 | 3/8                 | 31/32               | 12               | 5/32                       | 23/32                      | 1 13/32                   | 3 13/64                     |
| 18           | AN18/W18 Pkg.                  | 90             | 3.5433 | 5/32                | 3/8                 | 1 1/16              | 12               | 5/32                       | 13/16                      | 1 9/16                    | 3 25/64                     |
| 20           | AN20/W20 Pkg.                  | 100            | 3.9370 | 5/32                | 3/8                 | 1 3/16              | 12               | 5/32                       | 7/8                        | 1 25/32                   | 3 25/32                     |
| 22           | AN22/W22 Pkg.                  | 110            | 4.3307 | 3/16                | 3/8                 | 1 17/32             | 12               | 5/32                       | 29/32                      | 2 1/16                    | 4 3/16                      |
| 24           | AN24/W24 Pkg.                  | 120            | 4.7244 | 3/16                | 3/8                 | 1 1/4               | 12               | 5/32                       | 15/16                      | 2 1/4                     | 4 37/64                     |
| 26           | AN26/W26 Pkg.                  | 130            | 5.1181 | 3/16                | 1/2                 | 1 5/16              | 12               | 5/32                       | 1                          | 2 1/2                     | 4 31/32                     |
| 28           | AN28/W28 Pkg.                  | 140            | 5.5118 | 3/16                | 5/8                 | 1 3/8               | 12               | 5/32                       | 1 1/16                     | 2 21/32                   | 5 23/64                     |
| 30           | AN30/W30 Pkg.                  | 150            | 5.9055 | 7/32                | 5/8                 | 1 1/2               | 12               | 5/32                       | 1 1/8                      | 2 27/32                   | 5 3/4                       |
| 32           | AN32/W32 Pkg.                  | 160            | 6.2992 | 15/64               | 5/8                 | 1 9/16              | 8                | 1/4                        | 1 3/16                     | 3 1/8                     | 6 3/32                      |
| 34           | AN34/W34 Pkg.                  | 170            | 6.6929 | 15/16               | 3/4                 | 1 19/32             | 8                | 1/4                        | 1 7/32                     | 3 11/32                   | 6 15/32                     |
| 36           | AN36/W36 Pkg.                  | 180            | 7.0866 | 15/64               | 3/4                 | 1 5/8               | 8                | 1/4                        | 1 1/4                      | 3 11/32                   | 6 7/8                       |
| 38           | AN38/W38 Pkg.                  | 190            | 7.4803 | 15/64               | 3/4                 | 1 21/32             | 8                | 1/4                        | 1 9/32                     | 3 19/32                   | 7 9/32                      |
| 40           | AN40/W40 Pkg.                  | 200            | 7.8740 | 15/64               | 7/8                 | 1 23/32             | 8                | 1/4                        | 1 11/32                    | 3 13/16                   | 7 21/32                     |
| 44           | AN44/W44 Pkg.                  | 220            | 8.6614 | 3/8                 | 1 1/16              | 1 9/16              | 8                | 1/4                        | 1 3/8                      | 4 7/32                    | 8 7/16                      |

| Bearing Size | THREAD DIAMETER |        |        |        |        | SHAFT DIAMETER   |        |                      |       |                     |       | Shaft Fillet Max. |
|--------------|-----------------|--------|--------|--------|--------|------------------|--------|----------------------|-------|---------------------|-------|-------------------|
|              | MAJOR A         |        | PITCH  |        | MINOR  | S 1 Bearing Seat |        | S 2 Backing Shoulder |       | S 3 Shaft Extension |       |                   |
|              | MAX.            | MIN.   | MAX.   | MIN.   | MAX.   | MAX.             | MIN.   | MAX.                 | MIN.  | MAX.                | MIN.  |                   |
| 16           | 3.137           | 3.1258 | 3.0829 | 3.0770 | 3.0348 | 3.1511           | 3.1504 | 3.625                | 3.621 | 3.000               | 2.996 | .079              |
| 17           | 3.340           | 3.3288 | 3.2859 | 3.2800 | 3.2378 | 3.3484           | 3.3475 | 3.938                | 3.934 | 3.188               | 3.184 | .079              |
| 18           | 3.527           | 3.5158 | 3.4729 | 3.4655 | 3.4248 | 3.5452           | 3.5443 | 4.125                | 4.120 | 3.375               | 3.371 | .079              |
| 20           | 3.918           | 3.9068 | 3.8639 | 3.8565 | 3.8158 | 3.9389           | 3.9380 | 4.500                | 4.495 | 3.813               | 3.809 | .079              |
| 22           | 4.325           | 4.3138 | 4.2709 | 4.2626 | 4.2228 | 4.3332           | 4.3323 | 4.875                | 4.870 | 4.188               | 4.183 | .079              |
| 24           | 4.716           | 4.7048 | 4.6619 | 4.6536 | 4.6138 | 4.7269           | 4.7260 | 5.313                | 5.308 | 4.563               | 4.558 | .079              |
| 26           | 5.106           | 5.0948 | 5.0519 | 5.0436 | 5.0038 | 5.1209           | 5.1199 | 5.875                | 5.870 | 4.938               | 4.933 | .098              |
| 28           | 5.497           | 5.4858 | 5.4429 | 5.4346 | 5.3948 | 5.5146           | 5.5136 | 6.250                | 6.244 | 5.313               | 5.308 | .098              |
| 30           | 5.888           | 5.8768 | 5.8339 | 5.8256 | 5.7858 | 5.9090           | 5.9080 | 6.625                | 6.619 | 5.750               | 5.745 | .098              |
| 32           | 6.284           | 6.2688 | 6.2028 | 6.1937 | 6.1306 | 6.3027           | 6.3017 | 7.000                | 6.994 | 6.063               | 6.057 | .098              |
| 34           | 6.659           | 6.6438 | 6.5778 | 6.5687 | 6.5056 | 6.6964           | 6.6954 | 7.438                | 7.432 | 6.438               | 6.432 | .118              |
| 36           | 7.066           | 7.0508 | 6.9848 | 6.9757 | 6.9126 | 7.0901           | 7.0891 | 7.813                | 7.807 | 6.875               | 6.869 | .118              |
| 38           | 7.472           | 7.4568 | 7.3908 | 7.3817 | 7.3186 | 7.4845           | 7.4833 | 8.375                | 8.368 | 7.250               | 7.244 | .118              |
| 40           | 7.847           | 7.8318 | 7.7658 | 7.7544 | 7.6936 | 7.8742           | 7.8770 | 8.750                | 8.743 | 7.625               | 7.619 | .118              |
| 44           | 8.628           | 8.6128 | 8.5468 | 8.5347 | 8.4746 | 8.6662           | 8.6644 | 9.563                | 9.556 | 8.313               | 8.306 | .118              |





# 22500 TACONITE SEALS & ENDCOVERS



**END E  
COVERS C**

## 22500/22200 EC END COVERS

| Part Number            | Dim.<br>L |
|------------------------|-----------|
| SPBT22515 X 2 7/16 EC  | 4.750     |
| SPBT22515 X 2 1/2 EC   | 4.750     |
| SPBT22516 X 2 11/16 EC | 5.375     |
| SPBT22516 X 2 3/4 EC   | 5.375     |
| SPBT22517 X 2 15/16 EC | 5.375     |
| SPBT22517 X 3 EC       | 5.375     |
| SPBT22518 X3 3/16 EC   | 6.250     |
| SPBT22520 X 3 7/16 EC  | 6.000     |
| SPBT22520 X3 1/2 EC    | 6.250     |
| SPBF22515 X 2 7/16 EC  | 4.750     |
| SPBF22515 X 2 1/2 EC   | 4.750     |
| SPBF22516 X 2 11/16 EC | 5.375     |
| SPBF22516 X 2 3/4 EC   | 5.375     |
| SPBF22517 X 2 15/16 EC | 5.375     |
| SPBF22517 X 3 EC       | 5.375     |
| SPBF22518 X 3 3/16 EC  | 6.250     |
| SPBF22520 X 3 7/16 EC  | 6.000     |
| SPBF22520 X 3 1/2 EC   | 6.250     |
| SPBF22522 X 3 11/16 EC | 6.500     |
| SPBF22522 X 3 15/16 EC | 6.500     |
| SPBF22522 X 4 EC       | 6.500     |
| SPBF22524 X 4 3/16 EC  | 7.375     |
| SPBF22526 X 4 7/16 EC  | 8.000     |
| SPBF22526 X 4 1/2 EC   | 8.000     |
| SPBF22528 X 4 15/16 EC | 7.500     |
| SPBF22528 X 5 EC       | 7.500     |
| SPBF22530 X 5 3/16 EC  | 8.375     |
| SPBF22532 X 5 7/16 EC  | 8.750     |
| SPBF22532 X 5 1/2 EC   | 8.750     |
| SPBF22534 X 5 15/16 EC | 9.625     |
| SPBF22534 X 6 EC       | 9.625     |
| SPBF22536 X 6 7/16 EC  | 10.000    |
| SPBF22536 X 6 1/2 EC   | 10.000    |
| SPBF22538 X 6 15/16 EC | 10.750    |
| SPBF22538 X 7 EC       | 10.750    |
| SPBF22540 X 7 3/16 EC  | 11.250    |
| SPBF22544 X 7 1/2 EC   | 12.000    |
| SPBF22544 X 7 15/16 EC | 12.000    |
| SPBF22544 X 8 EC       | 12.000    |
| SPBF22544 X 8 EC       | 12.000    |

| End Cover<br>Part No. | For use with Housing Part No. |              |
|-----------------------|-------------------------------|--------------|
|                       | 22500 Series                  | 22200 Series |
| EC-15                 | ST515                         | -            |
|                       | SF515                         | -            |
| EC-16                 | ST516                         | -            |
|                       | SF516                         | -            |
| EC-17                 | ST517                         | ST216        |
|                       | SF517                         | SF216        |
| EC-18                 | ST518                         | ST218        |
|                       | SF518                         | SF218        |
| EC-20                 | ST520                         | -            |
|                       | SF520                         | -            |
| EC-22                 | SF522                         | -            |
|                       | SF524                         | SF222        |
| EC-26                 | SF526                         | SF224        |
|                       | SF528                         | SF226        |
| EC-30                 | SF530                         | SF228        |
|                       | SF532                         | -            |
| EC-34                 | SF534                         | SF232        |
|                       | SF536                         | SF234        |
| EC-38                 | SF538                         | SF236        |
|                       | SF540                         | SF238        |
| EC-44                 | SF544                         | -            |

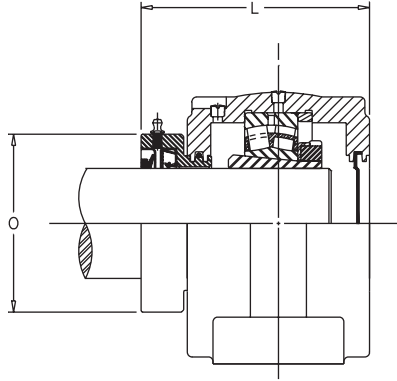
See page 156 for trademark acknowledgments.



# Browning®

## 22500 Taconite & End Cover Combinations

### TE



**E END COVER  
C AND ONE STANDARD  
LABYRINTH SEAL**

**T TACONITE  
E AND END COVER**

**T TACONITE  
C SEALS**

| * Part Number          | DIMENSIONS |       | * Part Number          | DIMENSIONS |       |
|------------------------|------------|-------|------------------------|------------|-------|
|                        | L          | O     |                        | L          | O     |
| SPBT22516 X 2 7/16 TE  | 5 13/16    | 3 7/8 | SPBF22522 X 3 15/16 TE | 7 9/16     | 5 3/4 |
| SPBT22516 X 2 11/16 TE | 6 7/16     | 4 1/2 | SPBF22524 X 4 3/16 TE  | 8 1/2      | 6     |
| SPBT22517 X 2 15/16 TE | 6 7/16     | 4 3/4 | SPBF22526 X 4 7/16 TE  | 9 3/16     | 6 1/4 |
| SPBT22518 X 3 3/16 TE  | 6 13/16    | 5     | SPBF22528 X 4 15/16 TE | 8 3/4      | 6 3/4 |
| SPBT22520 X 3 7/16 TE  | 7 5/16     | 5 1/4 | SPBF22532 X 5 7/16 TE  | 10         | 7 3/8 |
| SPBF22515 X 2 7/16 TE  | 5 13/16    | 3 7/8 | SPBF22534 X 5 15/16 TE | 10 3/4     | 7 3/4 |
| SPBF22516 X 2 11/16 TE | 6 7/16     | 4 1/2 | SPBF22536 X 6 7/16 TE  | 11 3/16    | 8 1/4 |
| SPBF22517 X 2 15/16 TE | 6 7/16     | 4 3/4 | SPBF22538 X 6 15/16 TE | 12 3/16    | 8 7/8 |
| SPBF22518 X 3 3/16 TE  | 6 13/16    | 5     | SPBF22544 X 7 15/16 TE | 13 7/16    | 9 7/8 |
| SPBF22520 X 3 7/16 TE  | 7 5/16     | 5 1/4 |                        |            |       |

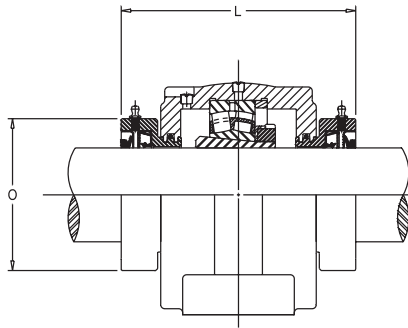
Components included - When ordering part number SPBT22515 X 2 7/16 TE, for example, all of the following components are furnished:

- 1 - ST515 Housing
- 1 - SNW x 2 7/16 Adapter assembly
- 1 - EC15 End cover
- 1 - 2215CWK33C3 Bearing
- 1 - TC515207 Taconite Seal

Components are packaged individually.

\* Not available from stock - contact Browning for delivery.

### TC



| * Part Number          | DIMENSIONS |       | * Part Number          | DIMENSIONS |       |
|------------------------|------------|-------|------------------------|------------|-------|
|                        | L          | O     |                        | L          | O     |
| SPBT22515 X 2 7/16 TC  | 6 7/8      | 3 7/8 | SPBF22522 X 3 15/16 TC | 8 11/16    | 5 3/4 |
| SPBT22516 X 2 11/16 TC | 7 1/2      | 4 1/2 | SPBF22524 X 4 3/16 TC  | 9 11/16    | 6     |
| SPBT22517 X 2 15/16 TC | 7 1/2      | 4 3/4 | SPBF22526 X 4 7/16 TC  | 10 7/16    | 6 1/4 |
| SPBT22518 X 3 3/16 TC  | 7 15/16    | 5     | SPBF22528 X 4 15/16 TC | 10 1/16    | 6 3/4 |
| SPBT22520 X 3 7/16 TC  | 8 7/16     | 5 1/4 | SPBF22532 X 5 7/16 TC  | 11 5/16    | 7 3/8 |
| SPBF22515 X 2 7/16 TC  | 6 7/8      | 3 7/8 | SPBF22534 X 5 15/16 TC | 11 15/16   | 7 3/4 |
| SPBF22516 X 2 11/16 TC | 7 1/2      | 4 1/2 | SPBF22536 X 6 7/16 TC  | 12 7/16    | 8 1/4 |
| SPBF22517 X 2 15/16 TC | 7 1/2      | 4 3/4 | SPBF22538 X 6 15/16 TC | 13 11/16   | 8 7/8 |
| SPBF22518 X 3 3/16 TC  | 7 15/16    | 5     | SPBF22544 X 7 15/16 TC | 14 15/16   | 9 7/8 |
| SPBF22520 X 3 7/16 TC  | 8 7/16     | 5 1/4 |                        |            |       |

Components included - When ordering part number SPBT22515 X 2 7/16 TE, for example, all of the following components are furnished:

- 1 - ST515 Housing
- 1 - SNW x 2 7/16 Adapter assembly
- 1 - TC515207 Taconite Seal
- 1 - 22215CWK33C3 Bearing

Components are packaged individually.

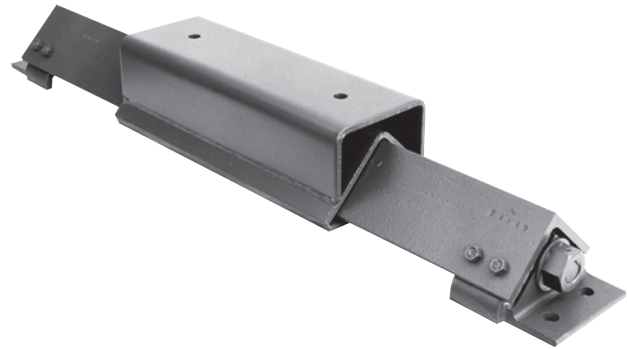
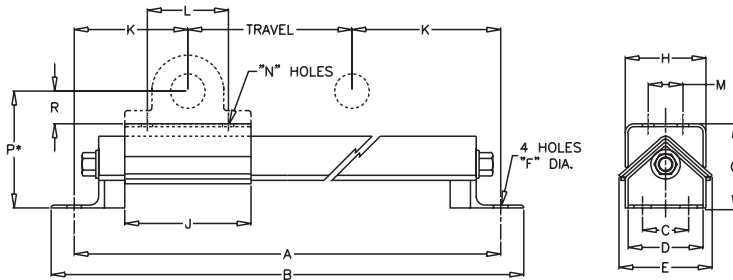
\* Not available from stock - contact Browning for delivery.

# Browning®

## 22200 Series

# T2000-2 BOLT

TAKE-UP FRAME T  
 22200 2  
 SPHERICAL 0  
 BEARING 0  
 BEARING SERIES 0  
 SHAFT DIA CODE A  
 TWO BOLT MOUNTINGS 2



| SHAFT DIA. IN | FRAME PART NO. | TRAVEL    | Dimensions In Inches |        |        |       |        |        |       |       |        |        |         |         |   | UNIT WT. |     |
|---------------|----------------|-----------|----------------------|--------|--------|-------|--------|--------|-------|-------|--------|--------|---------|---------|---|----------|-----|
|               |                |           | A                    | B      | C      | D     | E      | F      | G     | H     | J      | K      | L       | M       | N |          |     |
|               |                |           | No.                  | Dia.   |        |       |        |        |       |       |        |        |         |         |   |          |     |
| 1 7/16        | 12T2000A2      | 12        | 29                   | 31     | 2 1/2  | 4 1/2 | 6 3/16 | 11/16  | 5 1/4 | 4     | 11     | 8 1/2  | 6 5/8   | 0       | 2 | 9/16     | 55  |
|               | 18T2000A2      | 18        | 35                   | 37     | 2 1/2  | 4 1/2 | 6 3/16 | 11/16  | 5 1/4 | 4     | 11     | 8 1/2  | 6 5/8   | 0       | 2 | 9/16     | 60  |
|               | 24T2000A2      | 24        | 41                   | 43     | 2 1/2  | 4 1/2 | 6 3/16 | 11/16  | 5 1/4 | 4     | 11     | 8 1/2  | 6 5/8   | 0       | 2 | 9/16     | 65  |
|               | 30T2000A2      | 30        | 47                   | 49     | 2 1/2  | 4 1/2 | 6 3/16 | 11/16  | 5 1/4 | 4     | 11     | 8 1/2  | 6 5/8   | 0       | 2 | 9/16     | 69  |
|               | 36T2000A2      | 36        | 53                   | 55     | 2 1/2  | 4 1/2 | 6 3/16 | 11/16  | 5 1/4 | 4     | 11     | 8 1/2  | 6 5/8   | 0       | 2 | 9/16     | 75  |
| 1 11/16       | 12T2000B2      | 12        | 29                   | 31     | 2 1/2  | 4 1/2 | 6 3/16 | 11/16  | 5 1/4 | 4     | 11     | 8 1/2  | 6 3/4   | 0       | 2 | 9/16     | 55  |
|               | 18T2000B2      | 18        | 35                   | 37     | 2 1/2  | 4 1/2 | 6 3/16 | 11/16  | 5 1/4 | 4     | 11     | 8 1/2  | 6 3/4   | 0       | 2 | 9/16     | 60  |
|               | 24T2000B2      | 24        | 41                   | 43     | 2 1/2  | 4 1/2 | 6 3/16 | 11/16  | 5 1/4 | 4     | 11     | 8 1/2  | 6 3/4   | 0       | 2 | 9/16     | 65  |
|               | 30T2000B2      | 30        | 47                   | 49     | 2 1/2  | 4 1/2 | 6 3/16 | 11/16  | 5 1/4 | 4     | 11     | 8 1/2  | 6 3/4   | 0       | 2 | 9/16     | 69  |
|               | 36T2000B2      | 36        | 53                   | 55     | 2 1/2  | 4 1/2 | 6 3/16 | 11/16  | 5 1/4 | 4     | 11     | 8 1/2  | 6 3/4   | 0       | 2 | 9/16     | 75  |
| 1 15/16       | 12T2000C2      | 12        | 29                   | 31     | 2 1/2  | 4 1/2 | 6 3/16 | 11/16  | 5 1/4 | 4     | 11     | 8 1/2  | 7 5/8   | 0       | 2 | 11/16    | 55  |
|               | 18T2000C2      | 18        | 35                   | 37     | 2 1/2  | 4 1/2 | 6 3/16 | 11/16  | 5 1/4 | 4     | 11     | 8 1/2  | 7 5/8   | 0       | 2 | 11/16    | 60  |
|               | 24T2000C2      | 24        | 41                   | 43     | 2 1/2  | 4 1/2 | 6 3/16 | 11/16  | 5 1/4 | 4     | 11     | 8 1/2  | 7 5/8   | 0       | 2 | 11/16    | 65  |
|               | 30T2000C2      | 30        | 47                   | 49     | 2 1/2  | 4 1/2 | 6 3/16 | 11/16  | 5 1/4 | 4     | 11     | 8 1/2  | 7 5/8   | 0       | 2 | 11/16    | 69  |
|               | 36T2000C2      | 36        | 53                   | 55     | 2 1/2  | 4 1/2 | 6 3/16 | 11/16  | 5 1/4 | 4     | 11     | 8 1/2  | 7 5/8   | 0       | 2 | 11/16    | 75  |
| 2 3/16        | 18T2000D2      | 18        | 38 3/4               | 41 1/4 | 3      | 5 1/8 | 7 1/16 | 11/16  | 6 1/4 | 4 3/4 | 13 1/4 | 10 3/8 | 8 7/8   | 0       | 2 | 3/4      | 86  |
|               | 24T2000D2      | 24        | 44 3/4               | 47 1/4 | 3      | 5 1/8 | 7 1/16 | 11/16  | 6 1/4 | 4 3/4 | 13 1/4 | 10 3/8 | 8 7/8   | 0       | 2 | 3/4      | 88  |
|               | 30T2000D2      | 30        | 50 3/4               | 53 1/4 | 3      | 5 1/8 | 7 1/16 | 11/16  | 6 1/4 | 4 3/4 | 13 1/4 | 10 3/8 | 8 7/8   | 0       | 2 | 3/4      | 90  |
|               | 36T2000D2      | 36        | 56 3/4               | 59 1/4 | 3      | 5 1/8 | 7 1/16 | 11/16  | 6 1/4 | 4 3/4 | 13 1/4 | 10 3/8 | 8 7/8   | 0       | 2 | 3/4      | 96  |
|               | 2 7/16         | 18T2000E2 | 18                   | 38 3/4 | 41 1/4 | 3     | 5 1/8  | 7 1/16 | 11/16 | 6 1/4 | 4 3/4  | 13 1/4 | 10 3/8  | 8 7/8   | 0 | 2        | 3/4 |
| 24T2000E2     |                | 24        | 44 3/4               | 47 1/4 | 3      | 5 1/8 | 7 1/16 | 11/16  | 6 1/4 | 4 3/4 | 13 1/4 | 10 3/8 | 8 7/8   | 0       | 2 | 3/4      | 88  |
| 30T2000E2     |                | 30        | 50 3/4               | 53 1/4 | 3      | 5 1/8 | 7 1/16 | 11/16  | 6 1/4 | 4 3/4 | 13 1/4 | 10 3/8 | 8 7/8   | 0       | 2 | 3/4      | 90  |
| 36T2000E2     |                | 36        | 56 3/4               | 59 1/4 | 3      | 5 1/8 | 7 1/16 | 11/16  | 6 1/4 | 4 3/4 | 13 1/4 | 10 3/8 | 8 7/8   | 0       | 2 | 3/4      | 96  |
| 2 11/16       |                | 18T2000F2 | 18                   | 41 1/2 | 44 1/4 | 3     | 6      | 8 5/8  | 13/16 | 7     | 5      | 14 1/4 | 11 3/4  | 10 7/16 | 0 | 2        | 7/8 |
|               | 24T2000F2      | 24        | 47 1/2               | 50 1/4 | 3      | 6     | 8 5/8  | 13/16  | 7     | 5     | 14 1/4 | 11 3/4 | 10 7/16 | 0       | 2 | 7/8      | 148 |
|               | 30T2000F2      | 30        | 53 1/2               | 56 1/4 | 3      | 6     | 8 5/8  | 13/16  | 7     | 5     | 14 1/4 | 11 3/4 | 10 7/16 | 0       | 2 | 7/8      | 155 |
|               | 36T2000F2      | 36        | 59 1/2               | 62 1/4 | 3      | 6     | 8 5/8  | 13/16  | 7     | 5     | 14 1/4 | 11 3/4 | 10 7/16 | 0       | 2 | 7/8      | 168 |
|               | 48T2000F2      | 48        | 71 1/2               | 74 1/4 | 3      | 6     | 8 5/8  | 13/16  | 7     | 5     | 14 1/4 | 11 3/4 | 10 7/16 | 0       | 2 | 7/8      | 185 |
| 2 15/16       | 18T2000G2      | 18        | 41 1/2               | 44 1/4 | 3      | 6     | 8 5/8  | 13/16  | 7     | 5     | 14 1/4 | 11 3/4 | 10 7/16 | 0       | 2 | 7/8      | 138 |
|               | 24T2000G2      | 24        | 47 1/2               | 50 1/4 | 3      | 6     | 8 5/8  | 13/16  | 7     | 5     | 14 1/4 | 11 3/4 | 10 7/16 | 0       | 2 | 7/8      | 148 |
|               | 30T2000G2      | 30        | 53 1/2               | 56 1/4 | 3      | 6     | 8 5/8  | 13/16  | 7     | 5     | 14 1/4 | 11 3/4 | 10 7/16 | 0       | 2 | 7/8      | 155 |
|               | 36T2000G2      | 36        | 59 1/2               | 62 1/4 | 3      | 6     | 8 5/8  | 13/16  | 7     | 5     | 14 1/4 | 11 3/4 | 10 7/16 | 0       | 2 | 7/8      | 168 |
|               | 48T2000G2      | 48        | 71 1/2               | 74 1/4 | 3      | 6     | 8 5/8  | 13/16  | 7     | 5     | 14 1/4 | 11 3/4 | 10 7/16 | 0       | 2 | 7/8      | 185 |
| 3 3/16        | 18T2000H2      | 18        | 43 1/4               | 46     | 3      | 6     | 8 5/8  | 13/16  | 7     | 6     | 16     | 12 5/8 | 11      | 0       | 2 | 7/8      | 150 |
|               | 24T2000H2      | 24        | 49 1/4               | 52     | 3      | 6     | 8 5/8  | 13/16  | 7     | 6     | 16     | 12 5/8 | 11      | 0       | 2 | 7/8      | 160 |
|               | 30T2000H2      | 30        | 55 1/4               | 58     | 3      | 6     | 8 5/8  | 13/16  | 7     | 6     | 16     | 12 5/8 | 11      | 0       | 2 | 7/8      | 170 |
|               | 36T2000H2      | 36        | 61 1/4               | 64     | 3      | 6     | 8 5/8  | 13/16  | 7     | 6     | 16     | 12 5/8 | 11      | 0       | 2 | 7/8      | 180 |
|               | 48T2000H2      | 48        | 73 1/4               | 76     | 3      | 6     | 8 5/8  | 13/16  | 7     | 6     | 16     | 12 5/8 | 11      | 0       | 2 | 7/8      | 200 |
| 3 7/16        | 18T2000J2      | 18        | 43 1/4               | 46     | 3      | 6     | 8 5/8  | 13/16  | 7     | 6     | 16     | 12 5/8 | 12 3/8  | 0       | 2 | 1        | 150 |
|               | 24T2000J2      | 24        | 49 1/4               | 52     | 3      | 6     | 8 5/8  | 13/16  | 7     | 6     | 16     | 12 5/8 | 12 3/8  | 0       | 2 | 1        | 160 |
|               | 30T2000J2      | 30        | 55 1/4               | 58     | 3      | 6     | 8 5/8  | 13/16  | 7     | 6     | 16     | 12 5/8 | 12 3/8  | 0       | 2 | 1        | 170 |
|               | 36T2000J2      | 36        | 61 1/4               | 64     | 3      | 6     | 8 5/8  | 13/16  | 7     | 6     | 16     | 12 5/8 | 12 3/8  | 0       | 2 | 1        | 180 |
|               | 48T2000J2      | 48        | 73 1/4               | 76     | 3      | 6     | 8 5/8  | 13/16  | 7     | 6     | 16     | 12 5/8 | 12 3/8  | 0       | 2 | 1        | 200 |

\*\*P\*\* = "G" + "R" = shaft height of manufacturer's pillow block.  
 Other pillow block mounting hole patterns are available on request.  
 Type of manufacturer's pillow block and number of mounting holes should be stated on purchase order.  
 For sizes of take-up frames not listed, contact the Browning Engineering Department.

See page 156 for trademark acknowledgments.

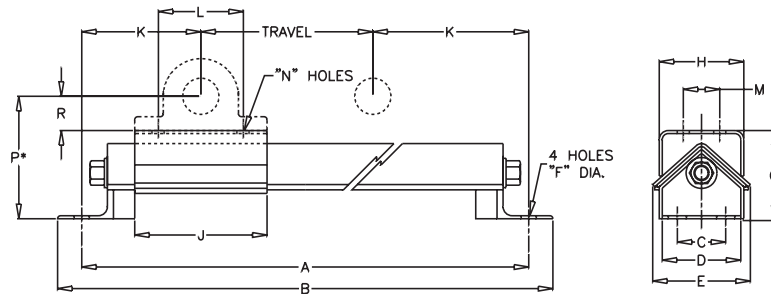
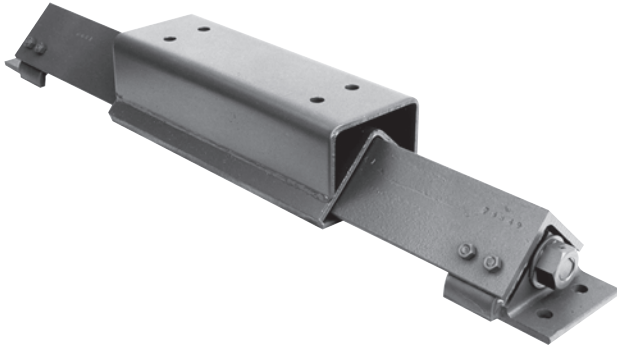


# Browning®

## 22200 Series

### T2000-4 BOLT

**T TAKE-UP FRAME**  
**2 22200**  
**0 SPHERICAL**  
**0 BEARING**  
**0 SERIES**  
**A SHAFT PIN CODE**  
**4 FOUR BOLT MOUNTING**



| SHAFT DIA. IN | FRAME PART NO. | TRAVEL | Dimensions In Inches |        |   |       |        |       |       |       |        |        |         |       |     | N     |     | UNIT WT. |
|---------------|----------------|--------|----------------------|--------|---|-------|--------|-------|-------|-------|--------|--------|---------|-------|-----|-------|-----|----------|
|               |                |        | A                    | B      | C | D     | E      | F     | G     | H     | J      | K      | L       | M     | No. | Dia.  |     |          |
|               |                |        |                      |        |   |       |        |       |       |       |        |        |         |       |     |       |     |          |
| 2 3/16        | 18T2000D4      | 18     | 38 3/4               | 41 1/4 | 3 | 5 1/8 | 7 1/16 | 11/16 | 6 1/4 | 4 3/4 | 13 1/4 | 10 3/8 | 8 7/8   | 2     | 4   | 5/8   | 86  |          |
|               | 24T2000D4      | 24     | 44 3/4               | 47 1/4 | 3 | 5 1/8 | 7 1/16 | 11/16 | 6 1/4 | 4 3/4 | 13 1/4 | 10 3/8 | 8 7/8   | 2     | 4   | 5/8   | 88  |          |
|               | 30T2000D4      | 30     | 50 3/4               | 53 1/4 | 3 | 5 1/8 | 7 1/16 | 11/16 | 6 1/4 | 4 3/4 | 13 1/4 | 10 3/8 | 8 7/8   | 2     | 4   | 5/8   | 90  |          |
|               | 36T2000D4      | 36     | 56 3/4               | 59 1/4 | 3 | 5 1/8 | 7 1/16 | 11/16 | 6 1/4 | 4 3/4 | 13 1/4 | 10 3/8 | 8 7/8   | 2     | 4   | 5/8   | 96  |          |
| 2 7/16        | 18T2000E4      | 18     | 38 3/4               | 41 1/4 | 3 | 5 1/8 | 7 1/16 | 11/16 | 6 1/4 | 4 3/4 | 13 1/4 | 10 3/8 | 8 7/8   | 1 7/8 | 4   | 5/8   | 86  |          |
|               | 24T2000E4      | 24     | 44 3/4               | 47 1/4 | 3 | 5 1/8 | 7 1/16 | 11/16 | 6 1/4 | 4 3/4 | 13 1/4 | 10 3/8 | 8 7/8   | 1 7/8 | 4   | 5/8   | 88  |          |
|               | 30T2000E4      | 30     | 50 3/4               | 53 1/4 | 3 | 5 1/8 | 7 1/16 | 11/16 | 6 1/4 | 4 3/4 | 13 1/4 | 10 3/8 | 8 7/8   | 1 7/8 | 4   | 5/8   | 90  |          |
|               | 36T2000E4      | 36     | 56 3/4               | 59 1/4 | 3 | 5 1/8 | 7 1/16 | 11/16 | 6 1/4 | 4 3/4 | 13 1/4 | 10 3/8 | 8 7/8   | 1 7/8 | 4   | 5/8   | 96  |          |
| 2 11/16       | 18T2000F4      | 18     | 41 1/2               | 44 1/4 | 3 | 6     | 8 5/8  | 13/16 | 7     | 5     | 14 1/4 | 11 3/4 | 10 7/16 | 2 1/8 | 4   | 3/4   | 138 |          |
|               | 24T2000F4      | 24     | 47 1/2               | 50 1/4 | 3 | 6     | 8 5/8  | 13/16 | 7     | 5     | 14 1/4 | 11 3/4 | 10 7/16 | 2 1/8 | 4   | 3/4   | 148 |          |
|               | 30T2000F4      | 30     | 53 1/2               | 56 1/4 | 3 | 6     | 8 5/8  | 13/16 | 7     | 5     | 14 1/4 | 11 3/4 | 10 7/16 | 2 1/8 | 4   | 3/4   | 155 |          |
|               | 36T2000F4      | 36     | 59 1/2               | 62 1/4 | 3 | 6     | 8 5/8  | 13/16 | 7     | 5     | 14 1/4 | 11 3/4 | 10 7/16 | 2 1/8 | 4   | 3/4   | 168 |          |
| 2 15/16       | 48T2000F4      | 48     | 71 1/2               | 74 1/4 | 3 | 6     | 8 5/8  | 13/16 | 7     | 5     | 14 1/4 | 11 3/4 | 10 7/16 | 2 1/8 | 4   | 3/4   | 185 |          |
|               | 18T2000G4      | 18     | 41 1/2               | 44 1/4 | 3 | 6     | 8 5/8  | 13/16 | 7     | 5     | 14 1/4 | 11 3/4 | 10 7/16 | 2 1/8 | 4   | 3/4   | 138 |          |
|               | 24T2000G4      | 24     | 47 1/2               | 50 1/4 | 3 | 6     | 8 5/8  | 13/16 | 7     | 5     | 14 1/4 | 11 3/4 | 10 7/16 | 2 1/8 | 4   | 3/4   | 148 |          |
|               | 30T2000G4      | 30     | 53 1/2               | 56 1/4 | 3 | 6     | 8 5/8  | 13/16 | 7     | 5     | 14 1/4 | 11 3/4 | 10 7/16 | 2 1/8 | 4   | 3/4   | 155 |          |
| 3 3/16        | 36T2000G4      | 36     | 59 1/2               | 62 1/4 | 3 | 6     | 8 5/8  | 13/16 | 7     | 5     | 14 1/4 | 11 3/4 | 10 7/16 | 2 1/8 | 4   | 3/4   | 168 |          |
|               | 48T2000G4      | 48     | 71 1/2               | 74 1/4 | 3 | 6     | 8 5/8  | 13/16 | 7     | 5     | 14 1/4 | 11 3/4 | 10 7/16 | 2 1/8 | 4   | 3/4   | 185 |          |
|               | 18T2000H4      | 18     | 43 1/4               | 46     | 3 | 6     | 8 5/8  | 13/16 | 7     | 6     | 16     | 12 5/8 | 11      | 2 1/8 | 4   | 3/4   | 150 |          |
|               | 24T2000H4      | 24     | 49 1/4               | 52     | 3 | 6     | 8 5/8  | 13/16 | 7     | 6     | 16     | 12 5/8 | 11      | 2 1/8 | 4   | 3/4   | 160 |          |
| 3 7/16        | 30T2000H4      | 30     | 55 1/4               | 58     | 3 | 6     | 8 5/8  | 13/16 | 7     | 6     | 16     | 12 5/8 | 11      | 2 1/8 | 4   | 3/4   | 170 |          |
|               | 36T2000H4      | 36     | 61 1/4               | 64     | 3 | 6     | 8 5/8  | 13/16 | 7     | 6     | 16     | 12 5/8 | 11      | 2 1/8 | 4   | 3/4   | 180 |          |
|               | 48T2000H4      | 48     | 73 1/4               | 76     | 3 | 6     | 8 5/8  | 13/16 | 7     | 6     | 16     | 12 5/8 | 11      | 2 1/8 | 4   | 3/4   | 200 |          |
|               | 18T2000J4      | 18     | 43 1/4               | 46     | 3 | 6     | 8 5/8  | 13/16 | 7     | 6     | 16     | 12 5/8 | 12 3/8  | 2 3/8 | 4   | 7/8   | 150 |          |
| 3 15/16       | 24T2000J4      | 24     | 49 1/4               | 52     | 3 | 6     | 8 5/8  | 13/16 | 7     | 6     | 16     | 12 5/8 | 12 3/8  | 2 3/8 | 4   | 7/8   | 160 |          |
|               | 30T2000J4      | 30     | 55 1/4               | 58     | 3 | 6     | 8 5/8  | 13/16 | 7     | 6     | 16     | 12 5/8 | 12 3/8  | 2 3/8 | 4   | 7/8   | 170 |          |
|               | 36T2000J4      | 36     | 61 1/4               | 64     | 3 | 6     | 8 5/8  | 13/16 | 7     | 6     | 16     | 12 5/8 | 12 3/8  | 2 3/8 | 4   | 7/8   | 180 |          |
|               | 48T2000J4      | 48     | 73 1/4               | 76     | 3 | 6     | 8 5/8  | 13/16 | 7     | 6     | 16     | 12 5/8 | 12 3/8  | 2 3/8 | 4   | 7/8   | 200 |          |
| 4 7/16        | 18T2000K4      | 18     | 47 1/4               | 50     | 3 | 6     | 8 5/8  | 13/16 | 7     | 7 1/4 | 20     | 14 5/8 | 13 9/16 | 2 3/4 | 4   | 7/8   | 177 |          |
|               | 24T2000K4      | 24     | 53 1/4               | 56     | 3 | 6     | 8 5/8  | 13/16 | 7     | 7 1/4 | 20     | 14 5/8 | 13 9/16 | 2 3/4 | 4   | 7/8   | 187 |          |
|               | 30T2000K4      | 30     | 59 1/4               | 62     | 3 | 6     | 8 5/8  | 13/16 | 7     | 7 1/4 | 20     | 14 5/8 | 13 9/16 | 2 3/4 | 4   | 7/8   | 197 |          |
|               | 36T2000K4      | 36     | 65 1/4               | 68     | 3 | 6     | 8 5/8  | 13/16 | 7     | 7 1/4 | 20     | 14 5/8 | 13 9/16 | 2 3/4 | 4   | 7/8   | 207 |          |
| 4 15/16       | 48T2000K4      | 48     | 77 1/4               | 80     | 3 | 6     | 8 5/8  | 13/16 | 7     | 7 1/4 | 20     | 14 5/8 | 13 9/16 | 2 3/4 | 4   | 7/8   | 226 |          |
|               | 18T2000M4      | 18     | 53                   | 55 1/2 | 4 | 7     | 10 1/4 | 15/16 | 7 3/4 | 8 1/2 | 23 1/2 | 17 1/2 | 15 5/16 | 3 1/4 | 4   | 1     | 280 |          |
|               | 24T2000M4      | 24     | 59                   | 61 1/2 | 4 | 7     | 10 1/4 | 15/16 | 7 3/4 | 8 1/2 | 23 1/2 | 17 1/2 | 15 5/16 | 3 1/4 | 4   | 1     | 296 |          |
|               | 30T2000M4      | 30     | 65                   | 67 1/2 | 4 | 7     | 10 1/4 | 15/16 | 7 3/4 | 8 1/2 | 23 1/2 | 17 1/2 | 15 5/16 | 3 1/4 | 4   | 1     | 306 |          |
| 4 15/16       | 36T2000M4      | 36     | 71                   | 73 1/2 | 4 | 7     | 10 1/4 | 15/16 | 7 3/4 | 8 1/2 | 23 1/2 | 17 1/2 | 15 5/16 | 3 1/4 | 4   | 1     | 318 |          |
|               | 48T2000M4      | 48     | 83                   | 85 1/2 | 4 | 7     | 10 1/4 | 15/16 | 7 3/4 | 8 1/2 | 23 1/2 | 17 1/2 | 15 5/16 | 3 1/4 | 4   | 1     | 345 |          |
|               | 18T2000N4      | 18     | 53                   | 55 1/2 | 4 | 7     | 10 1/4 | 15/16 | 7 3/4 | 8 1/2 | 23 1/2 | 17 1/2 | 16 9/16 | 3 3/8 | 4   | 1 1/8 | 280 |          |
|               | 24T2000N4      | 24     | 59                   | 61 1/2 | 4 | 7     | 10 1/4 | 15/16 | 7 3/4 | 8 1/2 | 23 1/2 | 17 1/2 | 16 9/16 | 3 3/8 | 4   | 1 1/8 | 296 |          |
| 4 15/16       | 30T2000N4      | 30     | 65                   | 67 1/2 | 4 | 7     | 10 1/4 | 15/16 | 7 3/4 | 8 1/2 | 23 1/2 | 17 1/2 | 16 9/16 | 3 3/8 | 4   | 1 1/8 | 306 |          |
|               | 36T2000N4      | 36     | 71                   | 73 1/2 | 4 | 7     | 10 1/4 | 15/16 | 7 3/4 | 8 1/2 | 23 1/2 | 17 1/2 | 16 9/16 | 3 3/8 | 4   | 1 1/8 | 318 |          |
|               | 48T2000N4      | 48     | 83                   | 85 1/2 | 4 | 7     | 10 1/4 | 15/16 | 7 3/4 | 8 1/2 | 23 1/2 | 17 1/2 | 16 9/16 | 3 3/8 | 4   | 1 1/8 | 345 |          |

\*\*P\* = "G" + "R" = shaft height of manufacturer's pillow block.  
 Other pillow block mounting hole patterns are available on request.  
 Type of manufacturer's pillow block and number of mounting holes should be stated on purchase order.  
 For sizes of take-up frames not listed, contact the Browning Engineering Department.



# Browning®

## Spherical Roller Bearings

### Spherical Roller Bearings 22200 and 22500 Series

This chart displays the Browning 22200 and 22500 Series Spherical Roller Bearing's load capacity for a given L10 life, speed and shaft size. Values in the table represent loads at ideal conditions. For combined load determination, see **THE BEARING SELECTION SECTION**, page 269. Areas designated by "-" exceed maximum speed value.

#### Match Bore Size

| Size  | Rating  | L10 Hours | REVOLUTIONS PER MINUTE |        |        |        |       |       |       |       |       |       |       |      |      |
|-------|---------|-----------|------------------------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|------|------|
|       |         |           | 50                     | 100    | 150    | 250    | 500   | 750   | 1000  | 1500  | 1750  | 2000  | 2500  | 3000 | 3500 |
| 22215 | 47,700  | 5000      | 13966                  | 13966  | 13966  | 13966  | 10609 | 9394  | 8618  | 7631  | 7286  | 7000  | 6546  | 6198 | —    |
|       |         | 10000     | 13966                  | 13966  | 12367  | 10609  | 8618  | 7631  | 7000  | 6198  | 5918  | 5685  | 5317  | 5034 | —    |
|       |         | 30000     | 12367                  | 10045  | 8894   | 7631   | 6198  | 5488  | 5034  | 4458  | 4256  | 4089  | 3824  | 3621 | —    |
|       |         | 50000     | 10609                  | 8618   | 7631   | 6546   | 5317  | 4708  | 4319  | 3824  | 3652  | 3508  | 3281  | 3106 | —    |
|       |         | 100000    | 8618                   | 7000   | 6198   | 5317   | 4319  | 3824  | 3508  | 3106  | 2966  | 2849  | 2665  | 2523 | —    |
| 22216 | 53,100  | 5000      | 15550                  | 15550  | 14540  | 11811  | 10458 | 9593  | 8494  | 8111  | 7792  | 7288  | 6900  | —    |      |
|       |         | 10000     | 15550                  | 15550  | 13767  | 11811  | 9593  | 8494  | 7792  | 6900  | 6588  | 6329  | 5919  | 5604 | —    |
|       |         | 30000     | 13767                  | 11182  | 9901   | 8494   | 6900  | 6109  | 5604  | 4962  | 4738  | 4552  | 4257  | 4031 | —    |
|       |         | 50000     | 11811                  | 9593   | 8494   | 7288   | 5919  | 5241  | 4808  | 4257  | 4065  | 3905  | 3652  | 3458 | —    |
|       |         | 100000    | 9593                   | 7792   | 6900   | 5919   | 4808  | 4257  | 3905  | 3458  | 3302  | 3172  | 2967  | 2809 | —    |
| 22217 | 55,100  | 5000      | 16134                  | 16134  | 16134  | 15088  | 12255 | 10852 | 9954  | 8814  | 8416  | 8086  | 7562  | 7159 | —    |
|       |         | 10000     | 16134                  | 16134  | 14285  | 12255  | 9954  | 8814  | 8086  | 7159  | 6836  | 6567  | 6142  | 5815 | —    |
|       |         | 30000     | 14285                  | 11603  | 10274  | 8814   | 7159  | 6339  | 5815  | 5149  | 4917  | 4723  | 4418  | 4183 | —    |
|       |         | 50000     | 12255                  | 9954   | 8814   | 7562   | 6142  | 5439  | 4989  | 4418  | 4218  | 4052  | 3790  | 3588 | —    |
|       |         | 100000    | 9954                   | 8086   | 7159   | 6142   | 4989  | 4418  | 4052  | 3588  | 3426  | 3292  | 3078  | 2915 | —    |
| 22218 | 73,100  | 5000      | 21405                  | 21405  | 21405  | 20017  | 16259 | 14397 | 13206 | 11694 | 11165 | 10727 | 10032 | —    |      |
|       |         | 10000     | 21405                  | 21405  | 18952  | 16259  | 13206 | 11694 | 10727 | 9498  | 9069  | 8713  | 8149  | —    |      |
|       |         | 30000     | 18952                  | 15394  | 13630  | 11694  | 9498  | 8410  | 7715  | 6831  | 6523  | 6267  | 5861  | —    |      |
|       |         | 50000     | 16259                  | 13206  | 11694  | 10032  | 8149  | 7215  | 6619  | 5861  | 5596  | 5376  | 5028  | —    |      |
|       |         | 100000    | 13206                  | 10727  | 9498   | 8149   | 6619  | 5861  | 5376  | 4760  | 4545  | 4367  | 4084  | —    |      |
| 22220 | 95,500  | 5000      | 27965                  | 27965  | 26151  | 21241  | 18808 | 17253 | 15277 | 14587 | 14014 | —     | —     | —    |      |
|       |         | 10000     | 27965                  | 27965  | 24759  | 21241  | 17253 | 15277 | 14014 | 12409 | 11848 | 11383 | —     | —    |      |
|       |         | 30000     | 24759                  | 20111  | 17807  | 15277  | 12409 | 10988 | 10079 | 8925  | 8521  | 8187  | —     | —    |      |
|       |         | 50000     | 21241                  | 17253  | 15277  | 13107  | 10646 | 9427  | 8647  | 7657  | 7311  | 7024  | —     | —    |      |
|       |         | 100000    | 17253                  | 14014  | 12409  | 10646  | 8647  | 7657  | 7024  | 6219  | 5938  | 5705  | —     | —    |      |
| 22222 | 105,000 | 5000      | 30745                  | 30745  | 30745  | 28752  | 23354 | 20679 | 18969 | 16797 | 16038 | 15408 | —     | —    |      |
|       |         | 10000     | 30745                  | 30745  | 27222  | 23354  | 18969 | 16797 | 15408 | 13643 | 13027 | 12515 | —     | —    |      |
|       |         | 30000     | 27222                  | 22111  | 19579  | 16797  | 13643 | 12081 | 11082 | 9813  | 9369  | 9001  | —     | —    |      |
|       |         | 50000     | 23354                  | 18969  | 16797  | 14410  | 11705 | 10364 | 9507  | 8418  | 8038  | 7722  | —     | —    |      |
|       |         | 100000    | 18969                  | 15408  | 13643  | 11705  | 9507  | 8418  | 7722  | 6838  | 6529  | 6272  | —     | —    |      |
| 22224 | 121,000 | 5000      | 35430                  | 35430  | 35430  | 33134  | 26913 | 23831 | 21860 | 19356 | 18482 | —     | —     |      |      |
|       |         | 10000     | 35430                  | 35430  | 31370  | 26913  | 21860 | 19356 | 17756 | 15722 | 15012 | —     | —     |      |      |
|       |         | 30000     | 31370                  | 25480  | 22562  | 19356  | 15722 | 13922 | 12770 | 11308 | 10797 | —     | —     |      |      |
|       |         | 50000     | 26913                  | 21860  | 19356  | 16606  | 13488 | 11944 | 10956 | 9701  | 9263  | —     | —     |      |      |
|       |         | 100000    | 21860                  | 17756  | 15722  | 13488  | 10956 | 9701  | 8899  | 7880  | 7524  | —     | —     |      |      |
| 22226 | 142,000 | 5000      | 41580                  | 41580  | 41580  | 38884  | 31584 | 27966 | 25654 | 22716 | 21689 | —     | —     |      |      |
|       |         | 10000     | 41580                  | 41580  | 36814  | 31584  | 25654 | 22716 | 20837 | 18451 | 17617 | —     | —     |      |      |
|       |         | 30000     | 36814                  | 29903  | 26478  | 22716  | 18451 | 16338 | 14987 | 13270 | 12671 | —     | —     |      |      |
|       |         | 50000     | 31584                  | 25654  | 22716  | 19488  | 15829 | 14016 | 12857 | 11385 | 10870 | —     | —     |      |      |
|       |         | 100000    | 25654                  | 20837  | 18451  | 15829  | 12857 | 11385 | 10443 | 9247  | 8829  | —     | —     |      |      |
| 22228 | 160,000 | 5000      | 46850                  | 46850  | 46850  | 43813  | 35587 | 31511 | 28906 | 25595 | —     | —     | —     |      |      |
|       |         | 10000     | 46850                  | 46850  | 41481  | 35587  | 28906 | 25595 | 23479 | 20790 | —     | —     | —     |      |      |
|       |         | 30000     | 41481                  | 33693  | 29834  | 25595  | 20790 | 18409 | 16887 | 14952 | —     | —     | —     |      |      |
|       |         | 50000     | 35587                  | 28906  | 25595  | 21959  | 17836 | 15793 | 14487 | 12828 | —     | —     | —     |      |      |
|       |         | 100000    | 28906                  | 23479  | 20790  | 17836  | 14487 | 12828 | 11767 | 10420 | —     | —     | —     |      |      |
| 22230 | 191,000 | 5000      | 55930                  | 55930  | 55930  | 52302  | 42482 | 37617 | 34506 | 30554 | —     | —     | —     |      |      |
|       |         | 10000     | 55930                  | 55930  | 49518  | 42482  | 34506 | 30554 | 28028 | 24818 | —     | —     | —     |      |      |
|       |         | 30000     | 49518                  | 40221  | 35614  | 30554  | 24818 | 21975 | 20158 | 17850 | —     | —     | —     |      |      |
|       |         | 50000     | 42482                  | 34506  | 30554  | 26213  | 21292 | 18853 | 17294 | 15313 | —     | —     | —     |      |      |
|       |         | 100000    | 34506                  | 28028  | 24818  | 21292  | 17294 | 15313 | 14047 | 12438 | —     | —     | —     |      |      |
| 22232 | 225,000 | 5000      | 65885                  | 65885  | 65885  | 61612  | 50045 | 44313 | 40649 | 35993 | —     | —     | —     |      |      |
|       |         | 10000     | 65885                  | 65885  | 58333  | 50045  | 40649 | 35993 | 33017 | 29236 | —     | —     | —     |      |      |
|       |         | 30000     | 58333                  | 47381  | 41954  | 35993  | 29236 | 25887 | 23747 | 21027 | —     | —     | —     |      |      |
|       |         | 50000     | 50045                  | 40649  | 35993  | 30879  | 25082 | 22209 | 20373 | 18039 | —     | —     | —     |      |      |
|       |         | 100000    | 40649                  | 33017  | 29236  | 25082  | 20373 | 18039 | 16548 | 14653 | —     | —     | —     |      |      |
| 22234 | 252,000 | 5000      | 73790                  | 73790  | 73790  | 69006  | 56050 | 49630 | 45527 | —     | —     | —     | —     |      |      |
|       |         | 10000     | 73790                  | 73790  | 65333  | 56050  | 45527 | 40312 | 36979 | —     | —     | —     | —     |      |      |
|       |         | 30000     | 65333                  | 53067  | 46989  | 40312  | 32744 | 28994 | 26596 | —     | —     | —     | —     |      |      |
|       |         | 50000     | 56050                  | 45527  | 40312  | 34585  | 28092 | 24874 | 22817 | —     | —     | —     | —     |      |      |
|       |         | 100000    | 45527                  | 36979  | 32744  | 28092  | 22817 | 20204 | 18534 | —     | —     | —     | —     |      |      |
| 22236 | 265,000 | 5000      | 77600                  | 77600  | 77600  | 69006  | 56050 | 49630 | 45527 | —     | —     | —     | —     |      |      |
|       |         | 10000     | 77600                  | 77600  | 65333  | 56050  | 45527 | 40312 | 36979 | —     | —     | —     | —     |      |      |
|       |         | 30000     | 65333                  | 53067  | 46989  | 40312  | 32744 | 28994 | 26596 | —     | —     | —     | —     |      |      |
|       |         | 50000     | 56050                  | 45527  | 40312  | 34585  | 28092 | 24874 | 22817 | —     | —     | —     | —     |      |      |
|       |         | 100000    | 45527                  | 36979  | 32744  | 28092  | 22817 | 20204 | 18534 | —     | —     | —     | —     |      |      |
| 22238 | 250,000 | 5000      | 73198                  | 73198  | 73198  | 68458  | 55605 | 49237 | 45165 | —     | —     | —     | —     |      |      |
|       |         | 10000     | 73198                  | 73198  | 64814  | 55605  | 45165 | 39993 | 36686 | —     | —     | —     | —     |      |      |
|       |         | 30000     | 64814                  | 52645  | 46616  | 39993  | 32484 | 28764 | 26385 | —     | —     | —     | —     |      |      |
|       |         | 50000     | 55605                  | 25654  | 22716  | 19488  | 15829 | 14016 | 12857 | —     | —     | —     | —     |      |      |
|       |         | 100000    | 45165                  | 36686  | 32484  | 27869  | 22636 | 20044 | 18386 | —     | —     | —     | —     |      |      |
| 22240 | 328,000 | 5000      | 96045                  | 96045  | 96045  | 89817  | 72954 | 64598 | 59257 | —     | —     | —     | —     |      |      |
|       |         | 10000     | 96045                  | 96045  | 85036  | 72954  | 59257 | 52470 | 48132 | —     | —     | —     | —     |      |      |
|       |         | 30000     | 85036                  | 69071  | 61160  | 52470  | 42619 | 37738 | 34617 | —     | —     | —     | —     |      |      |
|       |         | 50000     | 72954                  | 59257  | 52470  | 45015  | 36564 | 32376 | 29699 | —     | —     | —     | —     |      |      |
|       |         | 100000    | 59257                  | 48132  | 42619  | 36564  | 29699 | 26297 | 24123 | —     | —     | —     | —     |      |      |
| 22244 | 396,000 | 5000      | 115960                 | 115960 | 115960 | 108437 | 88079 | 77991 | —     | —     | —     | —     | —     |      |      |
|       |         | 10000     | 115960                 | 115960 | 102666 | 88079  | 71542 | 63348 | —     | —     | —     | —     | —     |      |      |
|       |         | 30000     | 102666                 | 83390  | 73839  | 63348  | 51455 | 45561 | —     | —     | —     | —     | —     |      |      |
|       |         | 50000     | 88079                  | 71542  | 63348  | 54347  | 44144 | 39088 | —     | —     | —     | —     | —     |      |      |
|       |         | 100000    | 71542                  | 58110  | 51455  | 44144  | 35856 | 31749 | —     | —     | —     | —     | —     |      |      |

See page 156 for trademark acknowledgments.



## **BALL BEARING HEAD-TO-HEAD OVERVIEW PAGES 154-161**

Take some time to review the first half of this section to convince yourself that Browning ball bearings are the **best** general purpose mounted ball bearing available. You will see that Browning Ball Bearings consist of all the necessary design features required for typical operation. When Browning goes “head-to-head” with other brands it is clear that Browning has all the value added extras. This is why Browning ball bearings perform reliably and you can be confident about the same dependable manufacturing known for over a hundred years. Let us take you to a new level of value and dependability you can count on! Take Browning “head-to-head” and you will see for yourself . . . we are winning!

|                                     |        |
|-------------------------------------|--------|
| DODGE SC vs. BROWNING VPS           | Pg 158 |
| FAFNIR YAS vs. BROWNING VPS         | Pg 160 |
| MB C-25 vs. BROWNING VPS            | Pg 162 |
| LINK-BELT P3-U200N vs. BROWNING VPS | Pg 164 |

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BROWNING, SEALMASTER, and MULTI-TRAP are registered trademarks of Emerson Power Transmission.

# ALPHA-NUMERIC BALL AND ROLLER BEARING INTERCHANGE BY PART DESCRIPTION OR PART NUMBER

## PAGES 166-259

This interchange section matches units by five characteristics:

1. Series (light duty, intermediate duty, normal duty, medium duty)
2. Housing material (cast iron, malleable or ductile, stamped steel)
3. Housing style (pillow block, two bolt flange, tapped base, etc.)
4. Bore size (size)
5. Critical dimension by housing (see table below)

### Example

| Part# Description | Size     | Manufacturer | Browning Part# Description | Note Code |
|-------------------|----------|--------------|----------------------------|-----------|
| 023206            | 3"       | Dodge        | PB-950NE-3                 | L,M,1,4   |
| More #'s          | More #'s | More #'s     | More #'s                   | More #'s  |
| YTU 7/8           | 7/8      | Fafnir       | VTWS-214                   | =         |
| ZA-2211           | 2 11/16" | Rexnord      | SPB-1000NE-2 11/16         | G,X       |

The part number or part description of the unit to interchange

The bore size

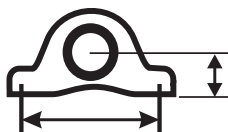
The manufacturer of the unit in column one

The Browning part description that replaces the unit in column one

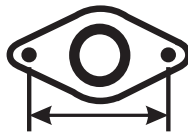
The note code identifies slight differences between units (See Table below for details)

## CRITICAL DIMENSIONS

Pillow Block



2 Bolt Flange



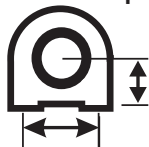
3 Bolt Flange



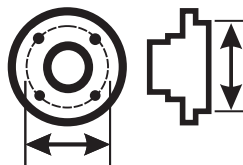
4 Bolt Flange



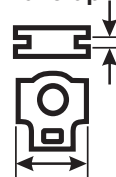
Tapped Base and Bolt Tap



Flange Cartridge



Take-up



Cartridge



## NOTE CODE

The note code identifies slight differences between interchanged units. Browning Manufacturing does not assume responsibility for the accuracy of this document. The information contained herein is based upon current published data available at the time of printing. All interchanges should be compared with actual, current manufacturing drawings. See EPT standard terms and conditions at the back of this catalog. For more information, contact Applications Engineering at 219-465-2211.

|   |                                       |       |  |
|---|---------------------------------------|-------|--|
| A | Bolt Centers or OD within 1/64        | S     | Slot Width within 1/8                    |
| B | Bolt Centers or OD within 1/16        | T     | Bolt Tap Differs                         |
| C | OD Within 1/8                         | U     | Slot Spacing within 1/64                 |
| D | Bolt Centers greater than 1/8         | V     | Slot Spacing within 1/16                 |
| E | Bolt Circle within 1/64               | W     | Bolt Spacing Maximum within 1/64         |
| F | Bolt Spacing Minimum within 1/64      | X     | Bolt Spacing Maximum within 1/8          |
| G | Bolt Spacing Minimum within 1/8       | Y     | Bolt Spacing Maximum within 1/4          |
| H | Bolt Spacing Minimum within 1/4       | Z     | Bolt Spacing Maximum within 1/2          |
| J | Bolt Spacing Minimum within 1/2       | \$    | Bolt Spacing Short Dimension within 1/64 |
| K | Pilot within 1/64                     | \$\$  | Bolt Spacing Short Dimension within 1/16 |
| L | Bolt Spacing Minimum Greater than 1/2 | =     | EXACT                                    |
| M | Bolt Spacing Maximum Greater than 1/2 | 1     | Different Locking Devices                |
| N | Base to Center with 1/64              | 2     | Different Rolling Elements               |
| P | Base to Center with 1/16              | 3     | Only One Has a Split Housing             |
| Q | Slot Width within 1/16                | 4     | Different Housing Materials              |
| R | Slot Width within 1/64                | Black | Ball Bearings                            |
|   |                                       | Red   | Roller Bearings                          |

See page 156 for trademark acknowledgments.

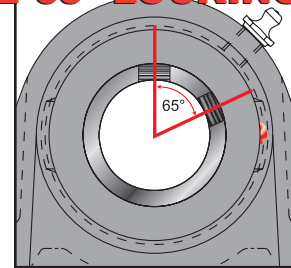
# Browning® Bearings

## DODGE FEATURES

### PRODUCT COMPARISON

| BROWNING          |           |            | BOA™      |           |             | DODGE             |           |            | BROWNING |           | Dodge |                   |  |
|-------------------|-----------|------------|-----------|-----------|-------------|-------------------|-----------|------------|----------|-----------|-------|-------------------|--|
| Set Screw         | Eccentric | Concentric | Set Screw | Eccentric | Concentric  | Set Screw         | Eccentric | Concentric | AH/NK    | AH/NK     |       |                   |  |
| <b>200 Series</b> |           |            |           |           |             | <b>200 Series</b> |           |            |          |           |       | <b>200 Series</b> |  |
| VPS               | VPE       | VPB        | P2B-SC    | P2B-SXR   | P2B-DL/DLAH | VPS AH            | P2B-SCAH  |            | VPS AH   | P2B-SCAH  |       |                   |  |
| VPLS              | VPLE      | VPLB       | P2B-SCB   | P2B-SXRB  | P2B-DLB     | VPLS AH           | P2B-SCBAH |            | VPLS AH  | P2B-SCBAH |       |                   |  |
| VTBS              | VTBE      | VTBB       | TB-SC     | -         | TB-DL       | VF2S AH           | F2B-SCAH  |            | VF2S AH  | F2B-SCAH  |       |                   |  |
| -                 | -         | -          | -         | -         | -           | VF4S AH           | F4B-SCAH  |            | VF4S AH  | F4B-SCAH  |       |                   |  |
| -                 | -         | -          | -         | -         | -           | VPS NK            | P2B-SCNP  |            | VPS NK   | P2B-SCNP  |       |                   |  |
| VF2S              | VF2E      | VF2B       | F2B-SC    | F2B-SXR   | F2B-DL      | VPE NK            | -         |            | VPE NK   | -         |       |                   |  |
| VF4S              | VF4E      | VF4B       | F4B-SC    | F4B-SXR   | F4B-DL      | VPLS NK           | P2B-SCBNP |            | VPLS NK  | P2B-SCBNP |       |                   |  |
| -                 | -         | -          | -         | -         | -           | VPLE NK           | -         |            | VPLE NK  | -         |       |                   |  |
| VFBS              | -         | VFBB       | FB-SC     | -         | FB-DL       | VTBS NK           | TB-SCNP   |            | VTBS NK  | TB-SCNP   |       |                   |  |
| -                 | -         | -          | -         | -         | -           | VF2S NK           | F2B-SCNP  |            | VF2S NK  | F2B-SCNP  |       |                   |  |
| VTWS              | VTWE      | -          | WSTU-SC   | WSTU-SXR  | -           | VF4S NK           | F4B-SCNP  |            | VF4S NK  | F4B-SCNP  |       |                   |  |
| -                 | -         | -          | -         | -         | -           | VFBS NK*          | FB-SCNP   |            | VFBS NK* | FB-SCNP   |       |                   |  |
| -                 | -         | -          | -         | -         | -           | VTWS NK           | WSTU-SCNP |            | VTWS NK  | WSTU-SCNP |       |                   |  |
| VS                | VE        | VB         | INS-SC    | INS-SXR   | INS-DL      | VTNS NK*          | NSTU-SCNP |            | VTNS NK* | NSTU-SCNP |       |                   |  |
| -                 | -         | -          | -         | -         | -           |                   |           |            |          |           |       |                   |  |
| VER               | -         | -          | -         | -         | -           |                   |           |            |          |           |       |                   |  |
| <b>300 Series</b> |           |            |           |           |             | <b>300 Series</b> |           |            |          |           |       | <b>300 Series</b> |  |
| VPS               | -         | VPB        | P2B-SCM   | -         | P2B-DLM     | VPS AH            | P2B-SCMAH |            | VPS AH   | P2B-SCMAH |       |                   |  |
| VF2S              | -         | VF2B       | F2B-SCM   | -         | F2B-DLM     | VF2S AH           | F2B-SCMAH |            | VF2S AH  | F2B-SCMAH |       |                   |  |
| VF4S              | -         | VF4B       | F4B-SCM   | -         | F4B-DLM     | VF4S AH           | F4B-SCMAH |            | VF4S AH  | F4B-SCMAH |       |                   |  |
| VFCS              | -         | VFCB       | FC-SCM    | -         | FC-DLM      |                   |           |            |          |           |       |                   |  |
| VTWS              | -         | VTWB       | WSTU-SCM  | -         | -           |                   |           |            |          |           |       |                   |  |
| -                 | -         | -          | -         | -         | -           |                   |           |            |          |           |       |                   |  |
| -                 | -         | -          | -         | -         | -           |                   |           |            |          |           |       |                   |  |
| VS                | -         | VB         | INS-SCM   | -         | INS-DLM     |                   |           |            |          |           |       |                   |  |
| <b>100 Series</b> |           |            |           |           |             | <b>100 Series</b> |           |            |          |           |       |                   |  |
| VPS               | VPE       | -          | P2B-VSC   | P2B-SXV   | -           |                   |           |            |          |           |       |                   |  |
| VPLS              | VPLE      | -          | P2B-VSCB  | P2B-SXVB  | -           |                   |           |            |          |           |       |                   |  |
| -                 | -         | -          | -         | -         | -           |                   |           |            |          |           |       |                   |  |
| VF2S              | VF2E      | -          | F2B-VSC   | F2B-SXV   | -           |                   |           |            |          |           |       |                   |  |
| VF4S              | VF4E      | -          | F4B-VSC   | F4B-SXV   | -           |                   |           |            |          |           |       |                   |  |
| VTWS              | VTWE      | -          | WSTU-VSC  | WSTU-SXV  | -           |                   |           |            |          |           |       |                   |  |
| -                 | -         | -          | -         | -         | -           |                   |           |            |          |           |       |                   |  |
| VPS-M             | VPE-M     | -          | -         | -         | -           |                   |           |            |          |           |       |                   |  |
| VF2S-M            | VF2E-M    | -          | LFT-SC    | -         | -           |                   |           |            |          |           |       |                   |  |
| VF3S-M            | VF3E-M    | -          | LF-SC     | -         | -           |                   |           |            |          |           |       |                   |  |
| SSPS              | SSPE      | -          | P2B-SL    | P2B-SLX   | -           |                   |           |            |          |           |       |                   |  |
| SSF2S             | SSF2E     | -          | F2B-SL    | F2B-SLX   | -           |                   |           |            |          |           |       |                   |  |
| SSF3S             | SSF3E     | -          | F3B-SL    | F3B-SLX   | -           |                   |           |            |          |           |       |                   |  |
| SSF4S             | SSF4E     | -          | F4B-SL    | F4B-SLX   | -           |                   |           |            |          |           |       |                   |  |
| SSF3TS            | SSF3TE    | -          | -         | -         | -           |                   |           |            |          |           |       |                   |  |
| SSRPS             | SSRPE     | -          | -         | -         | -           |                   |           |            |          |           |       |                   |  |
| RUBRS             | RUBRE     | RUBRB      | -         | -         | -           |                   |           |            |          |           |       |                   |  |
| SLS               | SLE       | -          | -         | -         | -           |                   |           |            |          |           |       |                   |  |
| LS                | LE        | -          | -         | -         | -           |                   |           |            |          |           |       |                   |  |
| VS                | VE        | -          | INS-VSC   | INS-SXV   | -           |                   |           |            |          |           |       |                   |  |

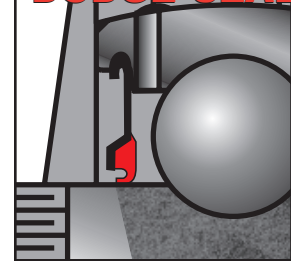
### DODGE 65° LOCKING



### DODGE INNER



### DODGE SEAL

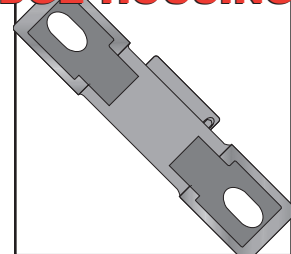


### DODGE SCREW



### CUP POINT

### DODGE HOUSING

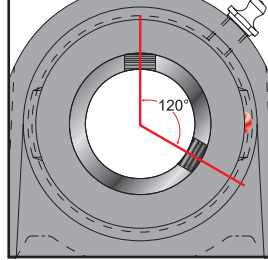


Based on Browning complete offering.

# Browning vs. Dodge HEAD-TO-HEAD... ...AND WINNING

## BROWNING FEATURES

### BROWNING 120° LOCKING



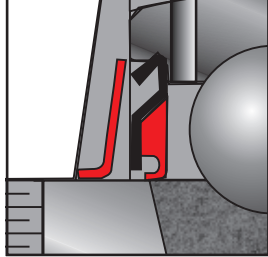
Browning 120° set screw locking provides a balanced three point contact for the highest concentricity available with set screw locking. For truly concentric clamping see BOA™ page 52.

### BROWNING INNER



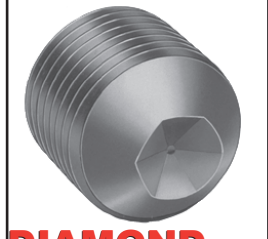
Browning's wider inner ring contributes to higher shaft stability, quieter operation and reduced vibration.

### BROWNING SEAL



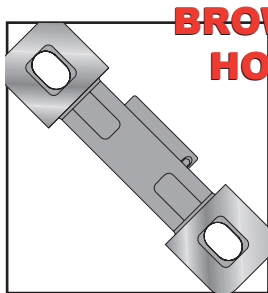
The Browning shielded single lip contact seal is proven as an effective barrier to contamination. The auxiliary flinger is a value added extra. The flinger "slings" debris away from the sealing area as it spins with the inner ring to increase seal life.

### BROWNING SCREW



The Browning set screw has precision ground threads and a diamond faceted point. This anchors the shaft to the bearing for superior shaft hold and minimal set screw back out.

### DIAMOND



### BROWNING HOUSING

The rugged semi-solid base design provides an excellent mounting foundation. This is integral to prevent sheet metal "buckling."

## Browning vs. Dodge HEAD-TO-HEAD... ...AND WINNING

### FEATURE COMPARISON

|                       | Browning                         | Dodge                        |
|-----------------------|----------------------------------|------------------------------|
| Inner Length          | 1.6875                           | 1.531                        |
| Inner Hardening       | Zone Hardening                   | Zone Hardening               |
| Set Screw Spacing     | 120°                             | 65°                          |
| Set Screw Type        | Precision Ground Diamond Faceted | Cup Point                    |
| Sealing               | Shielded Single Lip Contacts     | Shielded Single Lip Contacts |
| Flinger               | Yes                              | No                           |
| Retainer Type         | Ball Riding                      | Ball Riding                  |
| Retainer Material     | Nylon                            | Nylon                        |
| Outer Width           | 0.748                            | 0.748                        |
| Anti-Rotation         | Rivet in Outer Race              | Rivet in Outer Race          |
| Lube Method           | Grease Groove in Housing         | Grease Groove in Outer Race  |
| Ball Grade            | 10                               | 10                           |
| Grease                | Lithium Complex NLGI #2          | Lithium Complex NLGI #2      |
| Housing Base          | Semi-Solid                       | Semi-Solid                   |
| Other Locks Available | Eccentric/BOA                    | Eccentric/D-LOK              |
| Ballpath Finishing    | Honed                            | Honed                        |

Based on 1 7/16" normal duty set screw pillow blocks.

**Ball and Roller Bearing Interchange Tables Pg 166**

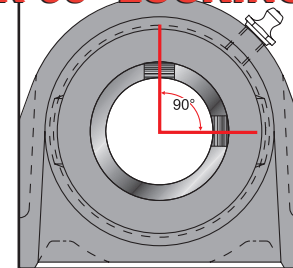
# Browning® Bearings

## PRODUCT COMPARISON

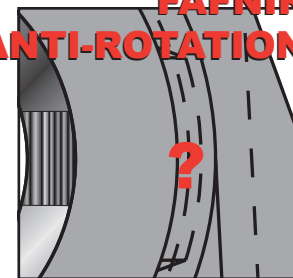
| Browning          |           | BOA™       | Fafnir            |             |
|-------------------|-----------|------------|-------------------|-------------|
| Set Screw         | Eccentric | Concentric | Set Screw         | Eccentric   |
| <b>200 Series</b> |           |            | <b>200 Series</b> |             |
| VPS               | VPE       | VPB        | YAS/RASC          | RAS         |
| VPLS              | VPLE      | VPLB       | YAK               | RAK         |
| VTBS              | VTBE      | VTBB       | -                 | -           |
| -                 | -         | -          | -                 | -           |
| VF2S              | VF2E      | VF2B       | YCJT/RCJTC        | RCJT        |
| VF4S              | VF4E      | VF4B       | YCJ/RCJC          | RCJ         |
| -                 | -         | -          | -                 | -           |
| VFBS              | -         | VFBB       | -                 | -           |
| -                 | -         | -          | -                 | -           |
| VTWS              | VTWE      | -          | YTU               | RTU         |
| -                 | -         | -          | -                 | -           |
| -                 | -         | -          | -                 | RCH         |
| VS                | VE        | VB         | GY-KRRB           | G-KRRB      |
| -                 | -         | -          | -                 | -           |
| VER               | -         | -          | ER                | -           |
| <b>300 Series</b> |           |            | <b>300 Series</b> |             |
| VPS               | -         | VPB        | -                 | RAKH        |
| VF2S              | -         | VF2B       | YCJTM             | -           |
| VF4S              | -         | VF4B       | YCJM              | -           |
| VFCS              | -         | VFCB       | -                 | -           |
| VTWS              | -         | VTWB       | -                 | -           |
| -                 | -         | -          | -                 | -           |
| VS                | -         | VB         | -                 | G-KRRB      |
| <b>100 Series</b> |           |            | <b>100 Series</b> |             |
| VPS               | VPE       | -          | SAS               | VAS         |
| VPLS              | VPLE      | -          | -                 | VAK         |
| -                 | -         | -          | -                 | -           |
| VF2S              | VF2E      | -          | SCJT              | VCJT        |
| VF4S              | VF4E      | -          | SCJ               | VCJ         |
| VTWS              | VTWE      | -          | -                 | VTU         |
| -                 | -         | -          | -                 | -           |
| VPS-M             | VPE-M     | -          | -                 | -           |
| VF2S-M            | VF2E-M    | -          | -                 | GVFTD/GRFTD |
| VF3S-M            | VF3E-M    | -          | -                 | GVRFD/GVFDR |
| SSPS              | SSPE      | -          | -                 | PB          |
| SSF2S             | SSF2E     | -          | -                 | RAT         |
| SSF3S             | SSF3E     | -          | -                 | RA/RR       |
| SSF4S             | SSF4E     | -          | -                 | RR          |
| SSF3TS            | SSF3TE    | -          | -                 | RATR        |
| SSRPS             | SSRPE     | -          | -                 | RPB         |
| RUBRS             | RUBRE     | RUBRB      | -                 | RCSM        |
| SLS               | SLE       | -          | -                 | GRA-RR      |
| LS                | LE        | -          | -                 | -           |
| VS                | VE        | -          | GYA-RRB           | GRA-RRB     |

## FAFNIR FEATURES

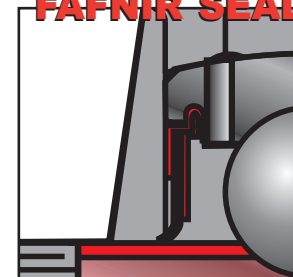
### FAFNIR 90° LOCKING



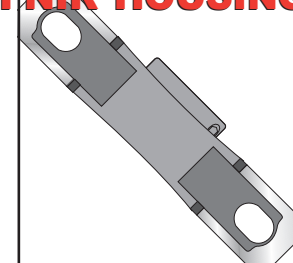
### FAFNIR ANTI-ROTATION



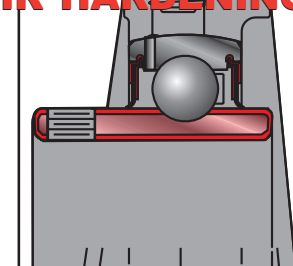
### FAFNIR SEAL



### FAFNIR HOUSING



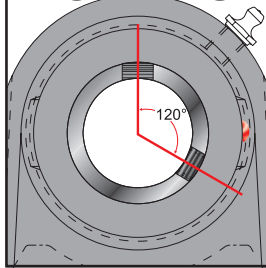
### FAFNIR HARDENING



**Browning vs. Fafnir  
HEAD-TO-HEAD...  
...AND WINNING**

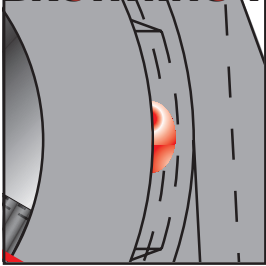
## BROWNING FEATURES

### BROWNING 120° LOCKING



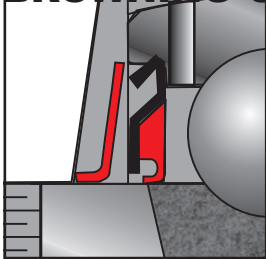
Browning 120° set screw locking provides a balanced three point contact for the highest concentricity available with set screw locking. For truly concentric clamping see BOA™ page 52.

### BROWNING ANTI-ROTATION



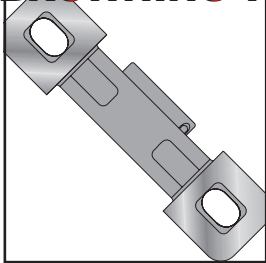
The Browning anti-rotation rivet prevents outer ring creep or rotation within the housing. This reduces heat buildup and prolongs useful bearing life.

### BROWNING SEAL



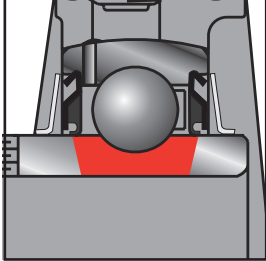
The Browning shielded single lip contact seal is proven as an effective barrier to reduce contamination. The auxiliary flinger is a value added extra. The flinger "slings" debris away from the sealing area as it spins with the inner ring to increase seal life.

### BROWNING HOUSING



The rugged, semi solid base design provides an excellent mounting foundation. This is integral to help prevent sheet metal "buckling."

### BROWNING HARDENING



The Browning inner ring zone hardening creates a hard ballpath to maximize steel integrity. The inner ring extensions remain softer to allow for post heat treat drilling and tapping where set screw holes do not distort. The softer steel mates closely to the inimitable precision ground set screws.

## Browning vs. Fafnir HEAD-TO-HEAD... ...AND WINNING

### FEATURE COMPARISON

|                       | Browning                         | FAFNIR                   |
|-----------------------|----------------------------------|--------------------------|
| Inner Length          | 1.6875                           | 1.6875                   |
| Inner Hardening       | Zone Hardening                   | Case Carburized          |
| Set Screw Spacing     | 120°                             | 90°                      |
| Set Screw Type        | Precision Ground Diamond Faceted | Standard Cup Point       |
| Sealing               | Single Lip Contact               | Single Lip Contact       |
| Flinger               | Yes                              | No                       |
| Retainer Type         | Ball Riding                      | Ball Riding              |
| Retainer Material     | Nylon                            | Nylon                    |
| Outer Width           | 0.748                            | 0.748                    |
| Anti-Rotation         | Rivet in Outer                   | None                     |
| Lube Method           | Grease Groove in Housing         | Grease Groove in Housing |
| Ball Grade            | 10                               | 10                       |
| Grease                | Lithium Complex NLGI #2          | Polyurea                 |
| Housing Base          | Semi-Solid                       | Hollow                   |
| Other Locks Available | Eccentric/BOA™                   | Eccentric                |
| Ballpath Finishing    | Honed                            | Honed                    |

Based on 1 7/16" normal duty set screw pillow blocks.

**Ball and Roller Bearing Interchange Tables Pg 166**

# Browning® Bearings

## PRODUCT COMPARISON

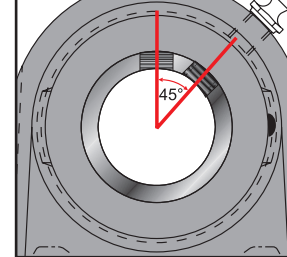
| Browning          |           |            | BOA™              |           |                 |
|-------------------|-----------|------------|-------------------|-----------|-----------------|
| Set Screw         | Eccentric | Concentric | Set Screw         | Eccentric | Concentric      |
| <b>200 Series</b> |           |            | <b>200 Series</b> |           |                 |
| VPS               | VPE       | VPB        | -                 | -         | KC-45           |
| VPLS              | VPLE      | VPLB       | -                 | -         | KCL-45          |
| VTBS              | VTBE      | VTBB       | TBC-25            | -         | -               |
| -                 | -         | -          | -                 | -         | -               |
| -                 | -         | -          | -                 | -         | -               |
| VF2S              | VF2E      | VF2B       | -                 | -         | -               |
| VF4S              | VF4E      | VF4B       | -                 | -         | -               |
| -                 | -         | -          | -                 | -         | -               |
| VFBS              | -         | VFBB       | MFB               | -         | -               |
| -                 | -         | -          | -                 | -         | -               |
| VTWS              | VTWE      | -          | -                 | -         | -               |
| -                 | -         | -          | -                 | -         | -               |
| -                 | -         | -          | -                 | -         | -               |
| VS                | VE        | VB         | MB-25             | -         | KMB-25/KMB-45   |
| EXP-VS            | EXP-VE    | EXP-VB     | -                 | -         | -               |
| VER               | -         | -          | ER                | -         | -               |
| <b>300 Series</b> |           |            | <b>300 Series</b> |           |                 |
| VPS               | -         | VPB        | C-35              | -         | KC-55           |
| VF2S              | -         | VF2B       | FC2-35            | -         | KFC2-35/KFC2-55 |
| VF4S              | -         | VF4B       | FC4-35            | -         | KFC4-35/KFC4-55 |
| VFCS              | -         | VFCB       | PFC4-35           | -         | -               |
| VTWS              | -         | VTWB       | TC-35             | -         | -               |
| -                 | -         | -          | -                 | -         | -               |
| -                 | -         | -          | -                 | -         | -               |
| VS                | -         | VB         | MB-35             | -         | KMB-35/KMB-55   |
| <b>100 Series</b> |           |            | <b>100 Series</b> |           |                 |
| VPS               | VPE       | -          | C-25              | -         | -               |
| VPLS              | VPLE      | -          | CL-25             | -         | -               |
| -                 | -         | -          | -                 | -         | -               |
| VF2S              | VF2E      | -          | FC2-25            | -         | -               |
| VF4S              | VF4E      | -          | FC4-25            | -         | -               |
| VTWS              | VTWE      | -          | TC-25             | -         | -               |
| -                 | -         | -          | -                 | -         | -               |
| VPS-M             | VPE-M     | -          | -                 | -         | -               |
| VF2S-M            | VF2E-M    | -          | -                 | -         | -               |
| VF3S-M            | VF3E-M    | -          | -                 | -         | -               |
| SSPS              | SSPE      | -          | PS                | -         | -               |
| SSF2S             | SSF2E     | -          | FPS2              | -         | -               |
| SSF3S             | SSF3E     | -          | FPS3              | -         | -               |
| SSF4S             | SSF4E     | -          | TFPS3             | -         | -               |
| SSF3TS            | SSF3TE    | -          | -                 | -         | -               |
| SSRPS             | SSRPE     | -          | -                 | -         | -               |
| RUBRS             | RUBRE     | RURRB      | RER               | -         | -               |
| SLS               | SLE       | -          | MSL/MSLN          | -         | -               |
| LS                | LE        | -          | -                 | -         | -               |
| VS                | VE        | -          | MB-25             | -         | -               |

NOTE: CHECK LENGTH-THRU-BORE FOR MB 25 SERIES (BETWEEN 100 & 200)

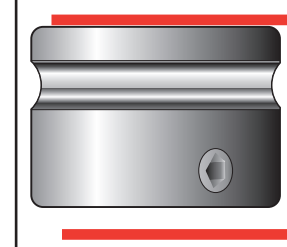
## Browning vs. MB HEAD-TO-HEAD... ...AND WINNING

## MB FEATURES

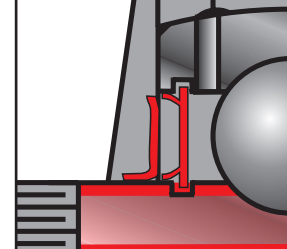
### MB 45° LOCKING



### MB INNER



### MB SEAL

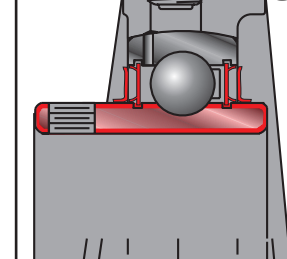


### MB SCREW



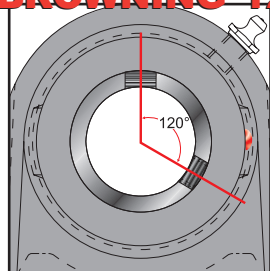
### INTERNALLY KNURLED

### MB HARDENING



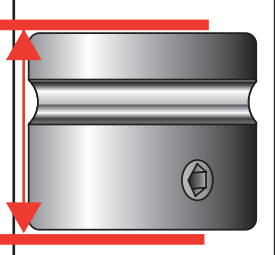
## BROWNING FEATURES

### BROWNING 120° LOCKING



Browning 120° set screw locking provides a balanced three point contact for the highest concentricity available with set screw locking. For truly concentric clamping see BOA™ page 52.

### BROWNING INNER



Browning's wider inner ring contributes to higher shaft stability, quieter operation and reduced vibration.

### BROWNING SEAL



The Browning shielded single lip contact seal is proven as an effective barrier to reduce contamination. The auxiliary flinger is a value added extra. The flinger "slings" debris away from the sealing area as it spins with the inner ring to increase seal life.

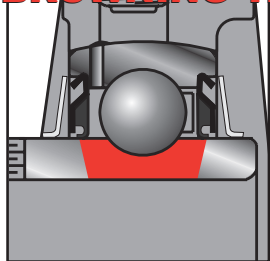
### BROWNING SCREW



The Browning set screw has precision ground threads and a diamond faceted point. This anchors the shaft to the bearing for superior shaft hold and minimal set screw back-out.

### DIAMOND

### BROWNING HARDENING



The Browning inner ring zone hardening creates a hard ballpath to maximize steel integrity. The inner ring extensions remain softer to allow for post heat treat drilling and tapping where set screw holes do not distort. The softer steel mates closely to the inimitable, precision ground set screws.

# Browning vs. MB HEAD-TO-HEAD... ...AND WINNING

## FEATURE COMPARISON

|                       | Browning                         | MB                            |
|-----------------------|----------------------------------|-------------------------------|
| Inner Length          | 1.6875                           | 1.5625                        |
| Inner Hardening       | Zone Hardening                   | Case Carburized               |
| Set Screw Spacing     | 120°                             | 45°                           |
| Set Screw Type        | Precision Ground Diamond Faceted | Internally Knurled            |
| Sealing               | Single Lip Contact               | Unshielded Single Lip Contact |
| Flinger               | Yes                              | Yes                           |
| Retainer Type         | Ball Riding                      | Ball Riding                   |
| Retainer Material     | Nylon                            | Metal                         |
| Outer Width           | 0.748                            | 0.766                         |
| Anti-Rotation         | Rivet in Outer                   | Rivet in Outer                |
| Lube Method           | Grease Groove in Housing         | Grease Groove in Housing      |
| Ball Grade            | 10                               | 10                            |
| Grease                | Lithium Complex NLGI #2          | Lithium Base                  |
| Housing Base          | Semi-Solid                       | Solid                         |
| Other Locks Available | Eccentric/BOA™                   | Centrik Lok                   |
| Ballpath Finishing    | Honed                            | Honed                         |

Based on 1 7/16" normal duty set screw pillow blocks (MB-25 series).

**Ball and Roller Bearing Interchange Tables Pg 166**

See page 156 for trademark acknowledgments.

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# Browning® Bearings

## LINK-BELT FEATURES

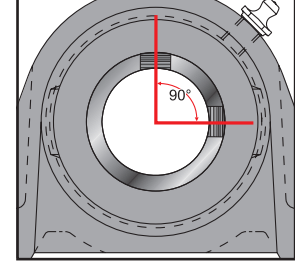
### PRODUCT COMPARISON

| Browning          |           |                    | Link-Belt         |            |
|-------------------|-----------|--------------------|-------------------|------------|
| Set Screw         | Eccentric | BOA™<br>Concentric | Set Screw         | Eccentric  |
| <b>200 Series</b> |           |                    | <b>200 Series</b> |            |
| VPS               | VPE       | VPB                | P3-U200N          | P3-Y200N   |
| VPLS              | VPLE      | VPLB               | PL3-U200N         | PL3-Y200N  |
| VTBS              | VTBE      | VTBB               | -                 | -          |
| -                 | -         | -                  | -                 | -          |
| VF2S              | VF2E      | VF2B               | FX3-U200N         | FX3-Y200N  |
| VF4S              | VF4E      | VF4B               | F3-U200N          | F3-Y200N   |
| -                 | -         | -                  | -                 | -          |
| VFBS              | -         | VFBB               | FB3-U200N         | -          |
| -                 | -         | -                  | -                 | -          |
| VTWS              | VTWE      | -                  | TH3-U200N         | -          |
| -                 | -         | -                  | -                 | -          |
| -                 | -         | -                  | -                 | -          |
| VS                | VE        | VB                 | UG2B-NL           | YG2B-NL    |
| -                 | -         | -                  | -                 | -          |
| VER               | -         | -                  | -                 | -          |
| <b>300 Series</b> |           |                    | <b>300 Series</b> |            |
| VPS               | -         | VPB                | -                 | -          |
| VF2S              | -         | VF2B               | -                 | -          |
| VF4S              | -         | VF4B               | -                 | -          |
| VFCS              | -         | VFCB               | -                 | -          |
| VTWS              | -         | VTWB               | -                 | -          |
| -                 | -         | VTNB               | -                 | -          |
| -                 | -         | -                  | -                 | -          |
| VS                | -         | VB                 | -                 | -          |
| <b>100 Series</b> |           |                    | <b>100 Series</b> |            |
| VPS               | VPE       | -                  | P3-S200E*         | P3-W200U   |
| VPLS              | VPLE      | -                  | PL3-S200E         | PL3-W200U  |
| -                 | -         | -                  | -                 | -          |
| VF2S              | VF2E      | -                  | FX3-S200E         | FX3-W200U  |
| VF4S              | VF4E      | -                  | F3-S200E          | F3-W200U   |
| VTWS              | VTWE      | -                  | -                 | -          |
| -                 | -         | -                  | -                 | -          |
| VPS-M             | VPE-M     | -                  | -                 | -          |
| VF2S-M            | VF2E-M    | -                  | FX-UG200N         | FX-YG200N  |
| VF3S-M            | VF3E-M    | -                  | F-UG200N**        | F-YG200N** |
| SSPS              | SSPE      | -                  | -                 | -          |
| SSF2S             | SSF2E     | -                  | MST               | MST        |
| SSF3S             | SSF3E     | -                  | MS***             | MS***      |
| SSF4S             | SSF4E     | -                  | MSC***            | MSC***     |
| SSF3TS            | SSF3TE    | -                  | MSTR***           | MSTR***    |
| SSRPS             | SSRPE     | -                  | -                 | -          |
| RUBRS             | RUBRE     | RUBRB              | -                 | -          |
| SLS               | SLE       | -                  | SB200EL           | WB200UL    |
| LS                | LE        | -                  | -                 | W200UL     |
| VS                | VE        | -                  | SG-EL             | WG2B-UL    |

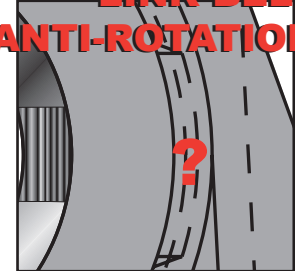
\*SPRING LOCKING COLLAR  
\*\*3-BOLT ONLY  
\*\*\*BEARINGS NOT INCLUDED

## Browning vs. Link-Belt HEAD-TO-HEAD... ... AND WINNING

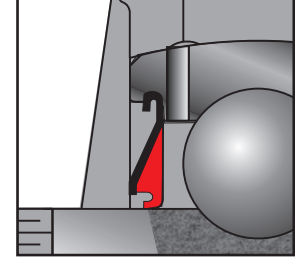
**LINK-BELT 90°**



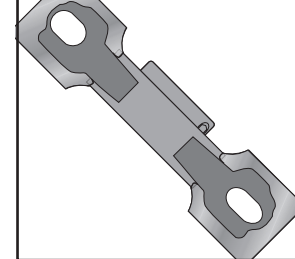
**LINK-BELT  
ANTI-ROTATION**



**LINK-BELT SEAL**



**LINK-BELT HOUSING**



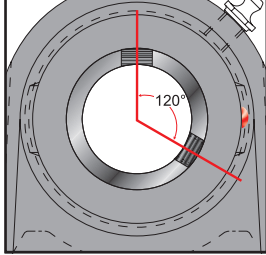
**LINK-BELT SCREW**



**INTERNALLY KNURLED**

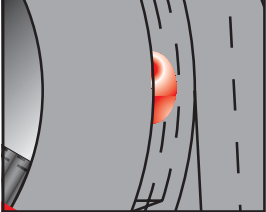
## BROWNING FEATURES

### BROWNING 120° LOCKING



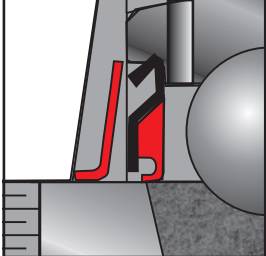
Browning 120° set screw locking provides a balanced three point contact for the highest concentricity available with set screw locking. For truly concentric clamping see BOA™ page 52.

### BROWNING ANTI-ROTATION



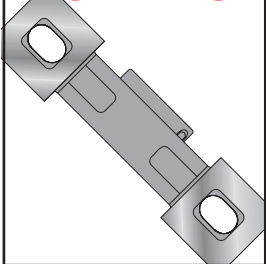
The Browning anti-rotation rivet prevents outer ring creep or rotation within the housing. This reduces heat build up and prolongs useful bearing life.

### BROWNING SEAL



The Browning shielded single lip contact seal is proven as an effective barrier to reduce contamination. The auxiliary flinger is a value added extra. The flinger "slings" debris away from the sealing area as it spins with the inner ring to increase seal life.

### BROWNING HOUSING



The rugged semi-solid base design provides an excellent mounting foundation. This is integral to help prevent sheet metal "buckling."

### BROWNING SCREW



The Browning set screw has precision ground threads and a diamond faceted point. This anchors the shaft to the bearing for superior shaft hold and minimal set screw back-out.

### DIAMOND

# Browning vs. Link-Belt HEAD-TO-HEAD... ...AND WINNING

## FEATURE COMPARISON

|                       | Browning                         | LINK-BELT                |
|-----------------------|----------------------------------|--------------------------|
| Inner Length          | 1.6875                           | 1.766                    |
| Inner Hardening       | Zone Hardened                    | Zone Hardened            |
| Set Screw Spacing     | 120°                             | 90°                      |
| Set Screw Type        | Precision Ground Diamond Faceted | Internally Knurled       |
| Sealing               | Single Lip Contact               | Single Lip Contact       |
| Flinger               | Yes                              | No                       |
| Retainer Type         | Ball Riding                      | Ball Riding              |
| Retainer Material     | Nylon                            | Polymeric                |
| Outer Width           | 0.748                            | .669                     |
| Anti-Rotation         | Rivet in Outer                   | None                     |
| Lube Method           | Grease Groove in Housing         | Grease Groove in Housing |
| Ball Grade            | 10                               | 10                       |
| Grease                | Lithium Complex NLGI #2          | Lithium Complex NLGI #2  |
| Housing Base          | Semi-Solid                       | Hollow                   |
| Other Locks Available | Eccentric/BOA™                   | Eccentric                |
| Ballpath Finishing    | Honed                            | Honed                    |

Based on 1 7/16" normal duty set screw pillow blocks.

Ball and Roller Bearing Interchange Tables Pg 166