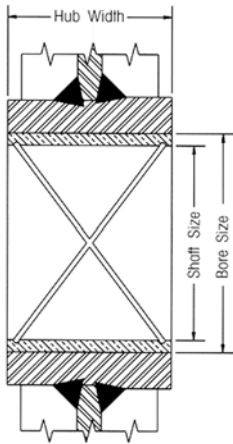


McKissick® Sheave Bearings Application Information

(B) Bronze Bushing



Bronze Bushings with "Figure 8" oil grooves are made from S.A.E. 660 bronze for cold finished shafts.

Bronze Bushing-

Slow line speed, moderate load and moderate use,
 Maximum Bearing Pressure (BP): 31N/mm²
 Maximum Velocity at Bearing (BV): 366m/min
 Maximum Pressure Velocity Factor (PV): 114

$$\text{Formula for BP} = \frac{\text{Line Pull} \times \text{Angle Factor (See Page 361)}}{\text{Shaft Size} \times \text{Hub Width (See example)}}$$

Example:

Using a 356 mm sheave (917191) with a 20,000 N line pull and an 80 degree angle between lines, determine maximum allowable line speed.

$$\text{BP} = \frac{20,000 \text{ N} \times 1.53 \div (38 \times 41)}{\text{(Line Pull)} \text{ (Angle Factor)} \text{ (Hub Width)} \text{ (Shaft Size)}} = 19,64 \text{ N/m}^2$$

$$\text{BV} = \frac{114 \div 19,64}{\text{(PV Factor)} \text{ (BP)}} = 5,8 \text{ m/min}$$

Note: For underwater sheave applications, special bronze bushings are available.

Note: Consult the bearing manufacturer for applicable load.

STANDARD STRAIGHT ROLLER BEARINGS

Heavier loads, higher speeds, more frequent use, radial loads only

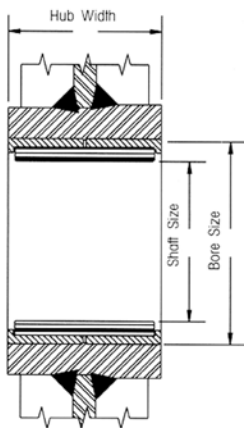
TAPERED ROLLER BEARINGS

Heavy loads, high speeds, continuous operation, axial and radial loads

FULL COMPLEMENT, DOUBLE ROW, ROLLER BEARING

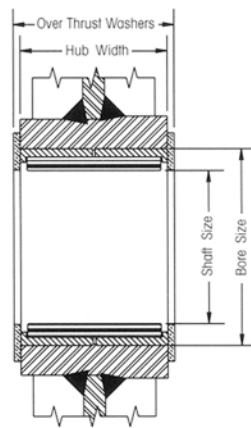
Heavy load, high speeds, continuous operation, axial and radial loads

(R) Roller Bearings



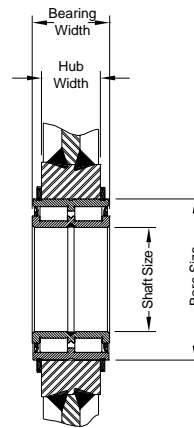
Roller bearings are designed to operate on shafts carburized to 60 Rockwell "C" and groove to +/- .0005 of shaft size.

(W) Roller Bearing with Thrust Washers



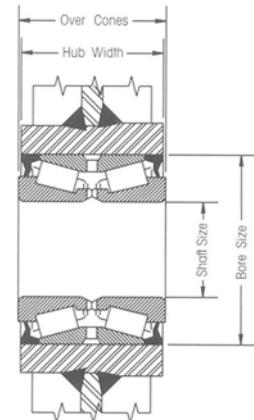
Roller bearings without inner races are designed to operate on shafts carburized to 60 Rockwell "C" and grooved to +/- .0005 of shaft size.

(C) Full Complement Cylindrical Roller Bearing



Cylindrical roller bearings with snap ring grooves are complete units with outer and inner rings, rib guided cylindrical rollers and sealing rings. They can support axial forces in both directions as well as radial forces. They have high dynamic and static load ratings.

(T) Tapered Roller Bearing



Tapered bearings are designed to operate on shafts machined to +/- .0005 of shaft size. Applications should provide for tightening separator plates against bearing cones to adjust and insure proper function of bearings.

Custom sheaves are available. See page 281 for ordering details.