Bronzoil Bearings
Instruction Manual

These instructions must be read thoroughly before installation or operation. This instruction manual was accurate at the time of printing. Please see **dodgeindustrial.com** for updated instruction manuals.

OPERATION LIMITS

180° F maximum operating temperature
500 psi maximum radial load capacity = p
750 fpm maximum speed limit = v
50,000 maximum = pv

Ambient Temperature	Oil Grade*
75° F to 110° F	SAE 50
35° F to 75°F	SAE 30
0° F to 35° F	SAE 10
-30° F to 0° F	Spec. Low Temp. Oil

*Oil should be a turbine grade straight mineral oil with rust and oxidation inhibitors only (non-detergent).

LUBRICATION

The capillary Bronze Bushings used in Bronzoil pillow blocks and flange bearings has a capacity of one-third of its volume in oil. A large reservoir is packed with an absorbent filler which surrounds the bushing and feeds a supply of oil to the shaft as needed, preventing over lubrication. Lubrication is provided as the rotating shaft generates heat.

Bronzoil bearings are factory lubricated with an adequate amount of oil to insure satisfactory operation at start-up. However, to insure maximum life, oil should be added at initial start-up and several times during the first few hours of operation to bring the oil in the reservoir to its capacity.

WARNING: Because of the possible danger to person(s) or property from accidents which may result from the improper use of products, it is important that correct procedures be followed. Products must be used in accordance with the engineering information specified in the catalog. Proper installation, maintenance and operation procedures must be observed. The instructions in the instruction manuals must be followed. Inspections should be made as necessary to assure safe operation under prevailing conditions. Proper guards and other suitable safety devices or procedures as may be desirable or as may be specified in safety codes should be provided, and are neither provided by Dodge® nor are the responsibility of Dodge. This unit and its associated equipment must be installed, adjusted and maintained by qualified personnel who are familiar with the construction and operation of all equipment in the system and the potential hazards involved. When risk to persons or property may be involved, a holding device must be an integral part of the driven equipment beyond the speed reducer output shaft.

INSTALLATION

Shaft Preparation

The shaft should be clean and free of burrs and nicks, and coated with a small amount of oil. The shaft should be held to a minimum amount of taper and as little eccentricity as possible so a uniformly distributed surface can be maintained.

Pillow Block Assembly

1. Slide the assembled pillow block on the shaft.
2. Align the pillow block on the shaft and tighten the hold-down bolts. Shim the pillow block base if necessary.

NOTE: Spherical surfaces provide for static misalignment of ±2°.

Flange Bearings

1. Slide the flange bearing onto the shaft.
2. Tighten the hold-down bolts.

Thrust Loads

Shaft location collars may be used to accommodate a maximum thrust load of 20 lbs. The bushing has a shoulder which provides a self-lubricating surface on which the thrust collar rides. Total collar to bearing clearance should be .010 to .020 inches or .005 to .010 inches per collar.

Running In

Bearing temperature is a sure sign of correct operations. Check temperature initially for high readings. High temperatures indicate inadequate lubrication, faulty installation, or improper lubricants. A detergent or light oil will promote oil leakage.

Optional Rubber Grommets

Rubber static and oil resistant grommets are available for use where sound isolation or static electricity protection is required.

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