



FEATURES/BENEFITS

GENERAL OPERATING CHARACTERISTICS

Though originally designed for the exacting requirements of the air handling industry, R Series SLEEVOIL pillow blocks are suitable for a wide range of industrial applications where a precision built, split, babbitted, ring-oiled bearing is required which is self aligning and quiet in operation.

SLEEVOIL pillow blocks have good cooling capabilities. Water cooled (WC) and externally cooled (XC) types operate at higher speeds and load ranges than plain units and function well near high temperature sources.

For standard SLEEVOIL bearings, the shaft tolerance is $+0.000'' / -0.002''$ with a surface finish of 32 micro-inches or better.

WHERE SLEEVOIL BEARINGS ARE CURRENTLY USED

- Fans & Blowers
- Generators
- Test Stands
- Pumps
- Motors
- Dynamometers
- Compressors
- Turbines

FEATURES AND BENEFITS SLEEVOIL

- **Fully split housing** for trouble-free assembly and disassembly
- **Rugged construction** using gray iron housing and liner for durability
- **Babbitt lining** offers conformability and shaft protection
- **Completely self-aligning** as a result of ball and socket mounting between liner and base
- **Dependable oil ring lubrication** with self-contained oil supply
- **Convenient oil gage** can be positioned on either side of housing
- **Proven reliability** and dependable performance guard against catastrophic failures.
- **Extended life** is a plus with no metal-to-metal contact during operation. More than ten times the theoretical life of anti-friction bearings
- **High speed capabilities** because of self-pressurized full oil film
- **Adequate vibration dampening** is handled by the hydrodynamic oil film which absorbs shock
- **Effective heat transfer** accomplished by journal surrounded by improved coolant chambers
- **Quiet operation** accomplished by full separation of mating parts

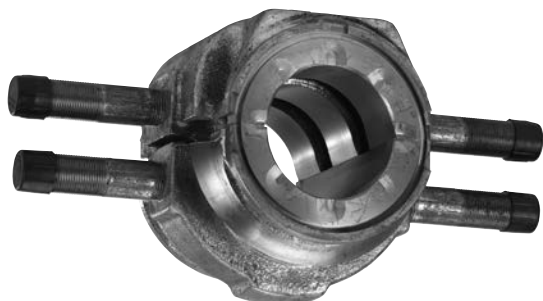
FEATURES/BENEFITS



SLEEVOIL

R Series Pillow Block

- 1-7/16" size is stocked as a Plain pillow block
- 1-11/16" - 3-7/16" sizes are stocked as Plain/Water cooled (PLWC) pillow block
- 3-15/16" - 8" sizes are stocked as Plain/Externally Cooled (PLXC) pillow blocks (standard and short series)
- PLXC Liner Only



**PLXC Liner Assembly
(Plain/Externally Cooled)**



**PLWC Pillow Block
(Plain/Water Cooled)**



STL (Standard)



SSL (Short Series)

NOTE:

Water Cooled Replacement Liners (WC Repl) are also available for housings made prior to 1973 with smaller coolant pipes.



FEATURES/BENEFITS

SLEEVOIL

R Series Pillow Block

- 9" - 14" sizes



Plain Pillow Block



XC Pillow Block

SLEEVOIL

R Series Pillow Block

- All R series jacketed liners designated as XC can be air, oil, or water cooled.
- Thrust collars convert the expansion bearing into a non-expansion bearing.
- Short series housings require less shaft space and are for expansion bearings only.
- 3-7/16, and larger bore housings are pre-machined for thermocouples, heaters, thermostats, vibration detector adapter kits, auxiliary seal kits, end cap kits and circulating oil kits.
- 3-15/16 - 8, water cooled replacement (WC repl) liners fit in the R series housings. WC repl liners have small pipes.
- PLXC Liners will not fit in old WC housings (prior to 1973); R Series housing is required.

SLEEVOIL

RTL Series Pillow Block

3-7/16" - 12" Sizes

General Operating Characteristics

RTL pillow block blocks offer excellent radial and thrust load capacities. Large coolant chambers provide especially effective heat dissipation when used with circulating coolant systems. This provides exceptionally strong bearing performance near high heat sources or gases.

The inner liner of the RTL has a center cavity which provides flooding lubrication to the thrust plates. This cavity acts as a reservoir to provide lubrication even during start-up and divides the radial area into two individual load sections. A single thrust collar is required. If a split collar is used, a shaft recess is necessary.

Coolant chambers, which cool both the thrust plates and radial load sections, are of sufficient size to allow the use of water, air, or oil as the internal coolant.

Expansion pillow blocks are furnished as standard. When non-expansion blocks are specified, a thrust collar and thrust plate kit are required.



RTL Series Pillow Block

- Reliable high speed operation.
- Three times the thrust load capability of the R series.
- Suitable for operation near high heat sources.
- Pre-machined for thermocouples, circulating oil kit, vibration detector adapter kit, auxiliary seal kits, end cap kit, heater and thermostat.

FEATURES/BENEFITS



Dodge SLEEVOIL Bearing Isolator RTL AND R-SERIES PILLOW BLOCKS

The Dodge SLEEVOIL bearing isolator is a fully split multi-labyrinth contact sealing system. The stator forms a complex labyrinth with the rotor to isolate the bearing from contamination keeping the lubricating oil clean. The tortuous labyrinth path between the stator and rotor also contains internal non-metallic seals to limit direct penetration of liquid or particulate.

The SLEEVOIL isolator is IP56 rated and all seal components including rotor stator and o-rings are fully split for ease of assembly and disassembly.

O-rings in the bore of the rotor provide sealing along the shaft and allow for axial shaft expansion as needed.

The isolator seal is designed to retrofit an existing SLEEVOIL housing with dovetail grooves on either end.



- ① Setscrew provides additional clamping to the housing
- ② Seal Stator
- ③ Housing O-ring Seals
- ④ Rotor Locating Seals
- ⑤ Shaft O-ring Seals
- ⑥ Seal Rotor
- ⑦ Expulsion port expels contaminants from seals