

INSTRUCTIONS

M2000 Spherical Roller Bearings

with SKF® Spherical Roller Bearings

At Moline, our goal is to provide you with the most reliable products, helpful service, and expert support. We work to make our instruction sheets clear and easy to understand. But if you have further questions, please feel free to call 800.242.4633 or email support@molinebearing.com. We are here to help.

INSTALLATION INSTRUCTIONS

NON-EXPANSION BEARING

- 1 Clean shaft and bore of bearing. The shaft should be straight, free of burrs and nicks, and the correct size.
- 2 Lubricate shaft and bearing bore with grease or oil to facilitate assembly. Slip bearing into position. When light press fit is required, press against the end of the inner ring of bearing. Do not strike or exert pressure on the housing or seals.
- 3 Bolt bearing to support, using shims where necessary to align bearing so inner ring does not rub on housing bore. Use full shims which cover across the entire housing base.
- 4 Determine final shaft position and tighten screws in the locking collar(s) of non-expansion bearing firmly onto the shaft, while the other bearings remain free. Rotate the shaft slowly under load, if possible, to properly center the rolling elements with

respect to the raceways. Then tighten set screws in the locking collar of the remaining bearings to the recommended torque.

- 5 Check rotation. If there is any strain, irregular rotational torque or vibration, it could be due to incorrect alignment, bent shaft or bent supports. Installation should be re-checked and correction made where necessary.

EXPANSION BEARING

- 1-3 Same as Non-Expansion Bearing
- 4 Position expansion bearing in the housing. For normal expansion conditions, the bearing insert should be positioned in the center of the housing. To center bearing insert in housing, move bearing insert to extreme position and mark shaft. If maximum expansion is required, move bearing insert to the extreme position in the housing to permit full movement in direction of expansion. After expansion bearing has been positioned in the housing, tighten the set screws in the locking collar to the recommended torque.

- 5 Same as Non-Expansion Bearing

- **Bearing Maximum Total Expansion**

All Expansion Units have $\approx .100''$ Capacity
Misalignment Capacity = $\pm 1\frac{1}{2}^\circ$

LUBRICATION INSTRUCTIONS

This bearing is factory lubricated with No. 2 consistency lithium base grease which is suitable for most applications. However, extra protection is necessary if bearing is subjected to excessive moisture, dust, or corrosive vapor. In these cases, bearing should contain as much grease as speed will permit (a full bearing with consequent slight leakage through the seal is the best protection against contaminant entry).

In extremely dirty environments, the bearing should be purged daily to flush out contaminants. For added protection, it is advisable to shroud the bearing from falling material.

High Speed Operation—At higher operating speed, too much grease may cause overheating. In these cases, the amount of lubrication can only be determined by experience. If excess grease in the bearing causes overheating, it will be necessary to remove grease fittings and run for 10 minutes. This will allow excess grease to escape. Then wipe off excess grease and replace grease fittings.

In higher speed applications, a small amount of grease at frequent intervals is preferable to a large amount at long intervals. However, the proper volume and interval of lubrication can best be determined by experience.

The accompanying table is a general guide for normal operating conditions. However, some situations may require a change in lubricating periods as dictated by experience. If the bearing is exposed to unusual operating conditions, consult a reputable grease manufacturer.

Abnormal bearing temperatures may indicate insufficient lubrication. If the housing is too hot to touch for more than a few seconds, check the temperature by applying a thermometer at the top of the pillow block with the thermometer tip surrounded by putty.

LUBRICATION GUIDE

Read text above before establishing lubrication schedule.

Hours Run Per Day	8	16	24
1 to 250 RPM	12 weeks	12 weeks	12 weeks
251 to 500 RPM	12 weeks	7 weeks	5 weeks
501 to 750 RPM	10 weeks	5 weeks	3 weeks
751 to 1000 RPM	7 weeks	4 weeks	2 weeks
1001 to 1500 RPM	5 weeks	2 weeks	1 week
1501 to 2000 RPM	4 weeks	2 weeks	1 week
2001 to 2500 RPM	3 weeks	2 weeks	1 week
2501 to 3000 RPM	2 weeks	1 week	1 week

IMPORTANT NOTICE: *Because of the possible dangers to person(s) or property from accidents that may result from the 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 and maintenance operation procedures must be observed. The instructions in the instruction manuals must be followed. Inspections should be made as necessary to ensure 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 Moline nor are the responsibility of Moline.*

Because the thermometer reading will be approximately 10°F **lower** than the actual bearing temperature, add ten degrees to the reading and compare to the temperature rating of your grease. If the bearing temperature reading is consistent and operating within the recommended limits of your grease, the bearing is operating satisfactorily.

If equipment will be idle for some time, **before** shutting down, add grease to the bearing until grease purges from the seals. This will ensure protection of the bearing, particularly when exposed to severe environmental conditions. After storage or idle period, add fresh grease to the bearing before starting.

Special Operating Conditions—Refer acid, chemical, extreme or other special operating conditions to the Moline Bearing Company, 800.242.4633.

TECHNICAL SUPPORT

Call 800.242.4633, or email at support@molinebearing.com



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