

Spherical Plain Bearing Lubrication

Metal-On-Metal Bearings

For spherical plain bearings requiring maintenance (metal-on-metal), the purpose of the lubrication is primarily to reduce wear, which inherently also reduces friction and noise, and increase the bearings life. Secondly, the lubrication provides a barrier against corrosion.

Each metal-on-metal bearing is phosphate coated for an additional layer of corrosion resistance. The spherical surfaces of the bearings are coated in MoS₂ to provide the initial lubrication. A metal-on-metal bearing must be lubricated before being placed into use. The frequency of re-lubrication of the bearing during its operation will substantially extend the bearing's service life.

Steel-On-PTFE Bearings

For steel-on-PTFE lined (fabric or composite) spherical plain bearings, there should not be any additional lubrication added. Any lubrication of the sliding contact surfaces could disturb the internal self-lubricating properties and shorten bearing life. Therefore, lubrication of these bearings is not advisable.

When operating conditions are such that enhanced sealing and protection against corrosion are required, it is recommended that the space surrounding the bearing is filled with lithium base grease.