

# What are the performances of joint bearings?

## performance

Because the structure and working mechanism of the joint [bearing](#) are completely different from that of the rolling [bearing](#), the joint [bearing](#) has its own technical characteristics and maintenance requirements.

## working temperature

The allowable working temperature of the joint [bearing](#) is mainly determined by the matching material between the bearing sliding surfaces, especially the plastic sliding surface of the self-lubricating joint [bearing](#). At high temperature, the [bearing](#) capacity of the joint [bearing](#) will decrease. If the sliding surface material of lubricated joint [bearing](#) is steel/steel, its allowable working temperature depends on the allowable working temperature of lubricant. But for all lubricated and self-lubricated joint [bearings](#), they can be used in the temperature range of - 30 ~ + 80 ~C, and maintain the correct [bearing](#) capacity.

## Dip angle

The inclination angle of the joint [bearing](#) is much larger than that of the general adjustable rolling [bearing](#). It is very suitable for the support parts with low concentricity requirement. The inclination angle of the joint [bearing](#) varies with the [bearing](#) structure size, type, sealing device and support form. The inclination angle range of the general centripetal joint [bearing](#) is 3 ~15 degrees, and the angular contact joint [bearing](#). The inclination range of thrust joint [bearings](#) is from 2 to 3 degrees, and the inclination range of thrust joint [bearings](#) is from 6 to 9 degrees.

## Coordination

In any case, the matching selection of the joint [bearing](#) shall not cause uneven deformation of the ring. The matching nature and grade of the joint bearing shall be determined according to the working conditions such as [bearing](#) type, support form and load size.

## Handling

The loading and unloading of joint bearings should follow the following principles: the force exerted by assembly and disassembly can not be transmitted directly through the spherical sliding surface. In addition, auxiliary loading and unloading tools, such as sleeves and dismantlers, should be used to apply the external loading and unloading force directly and evenly on the matching rings, or to carry out unloaded loading and unloading by heating and other auxiliary methods.

## install

When assembling the joint bearing series, it is necessary to pay special attention to the position of the outer ring partition surface. In order to avoid coincidence directly acting on the segmentation surface, it is necessary to maintain the segmentation surface at right angle with the coincidence direction.

## lubrication

The oil-fed joint bearing can be operated without lubrication when the load and swing motion are very small. Nevertheless, in general, grease supplements must be lifted. In the initial installation and operation, it is suggested that the lubrication cycle should be moderately shortened.

Oil-free joint [bearings](#) can be used without lubrication. However, if lithium soap-based grease is added before operation, the service life of the joint bearing can be prolonged. If grease is injected into the space around the [bearing](#), the joint [bearing](#) will be more effective in preventing

the invasion of dust and foreign bodies.