

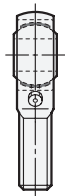
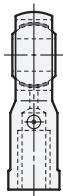
Rod end bearings

Spherical plain bearings

Tapped type

With threaded stem

Without housing



Steel version	Application features
Type N Steel housing, zinc plated Pairings: Steel internal ring, hardened Brass bearing socket Lubrication possible	For universal application conditions, especially with high alternating and shock loads in radial and in particular in axial direction.
Type W Steel housing, zinc plated Pairings: Steel internal ring, hardened Steel bearing socket, zinc plated, with PTFE insert Self-lubricating	For universal application conditions, especially with dynamic load; axial load capacity lower than for type N.

Stainless steel version	Application features
Type NH Stainless steel housing Pairings: Steel internal ring, hardened, hard chrome plated Bronze bearing socket Lubrication possible	As Type N in areas exposed to corrosion.
Type WH Stainless steel housing Pairings: Steel internal ring, hardened Bronze bearing socket, with PTFE insert Self-lubricating	As Type W in areas exposed to corrosion.
Type WK Stainless steel housing Pairings: Stainless steel internal ring, hardened Stainless steel bearing socket, with PTFE insert Self-lubricating	As Type W in areas exposed to corrosion with high requirements on corrosion resistance, e.g. in the food industry.

Bearing play

Bearing play refers to the dimension by which the internal ring inside the bearing socket can be moved in a radial or an axial direction without lubrication.

Dimensions in: millimeters - *inches*

Types N, NH Lubrication possible		Types W, WH, WK Self-lubricating		Axial bearing play
d_1	Radial bearing play	d_1	Radial bearing play	
5 ... 10 <i>0.20 ... 0.39</i>	0.005 ... 0.035 <i>0.0002 ... 0.0014</i>	5 ... 10 <i>0.20 ... 0.39</i>	0.005 ... 0.030 <i>0.0002 ... 0.0012</i>	2 to 3 times radial play
12 ... 20 <i>0.47 ... 0.79</i>	0.010 ... 0.040 <i>0.0004 ... 0.0016</i>	12 ... 20 <i>0.47 ... 0.79</i>	0.005 ... 0.035 <i>0.0002 ... 0.0014</i>	
22 ... 30 <i>0.87 ... 1.18</i>	0.010 ... 0.050 <i>0.0004 ... 0.0020</i>	22 ... 30 <i>0.87 ... 1.18</i>	0.005 ... 0.055 <i>0.0002 ... 0.0022</i>	

Load applied to obtain the measured results: 22 lbf (100 N) at room temperature.

Lubrication

Rod end bearings of type **N** (lubrication possible) require regular lubrication. When delivered, the rod end bearings are not lubricated. The initial lubrication takes place when installed. Within the temperature range of -4 °F to +257 °F (-20 °C to +125 °C), a multipurpose grease has proven to be adequate. Under extreme conditions, a high quality grease such as Gleitmo 805 K should be used. Rod end bearings of type **W** (self-lubricating) **must not be lubricated**. The internal ring moves on a PTFE insert in the bearing socket.

Operating temperature

Rod end bearings of type **N** (lubrication possible) can be used within a temperature range of -58 °F to +392 °C (-50 °C to +200 °C) and if used with a high temperature grease, even higher. Rod end bearings of type **W** (self-lubricating) can be used from -58 °F to +392 °C (-50 °C to +200 °C). In general, use at higher temperatures is possible, but this reduces the service life.

Load values

Load values are bearing related values, derived from the material data of the material used. They are used to select a rod end bearing for a given load, but may have to be reduced in case of special operating conditions.

3.1
3.2
3.3
3.4
3.5
3.6
3.7
3.8
3.9
3.10