

TECHNICAL DATA

RADIAL PLAY

Radial bearing play is a measure taken at room temperature and used to determine the degree by which the inner ring can be shifted relative to the outer ring in radial direction from one end position to the opposite end position.

| d ₁ | Radial play [mm] | |
|----------------|------------------|-------|
| | min. | max |
| 5 | 0,005 | 0,030 |
| 6 | 0,005 | 0,030 |
| 8 | 0,005 | 0,030 |
| 10 | 0,005 | 0,030 |
| 12 | 0,005 | 0,035 |
| 14 | 0,005 | 0,035 |
| 16 | 0,005 | 0,035 |
| 18 | 0,005 | 0,035 |
| 20 | 0,005 | 0,045 |
| 22 | 0,005 | 0,045 |
| 25 | 0,005 | 0,045 |

TEMPERATURE RANGE FOR USE

The temperature range for use is -50°C to 150°C.

CARRYING FIGURES

Carrying figures are properties that are bearing-specific and derived from the material data of the material used. They are used as an aid to select rod ends. Increasing or alternating loads require that the dynamic bearing capacity of the rod end housing be considered separately.

STATIC CARRYING FIGURE C₀

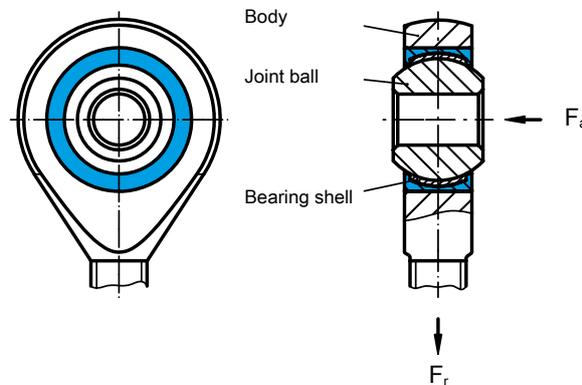
C₀ identifies the permissible radial load at standstill and with the load at rest which a rod end is capable of withstanding at the weakest cross section without deforming. The specified C₀ values are determined by way of calculation based on the respective material properties and verified by subjecting a representative quantity of rod ends to a tensile test at room temperature: each test was assuming 80% utilization of the yield strength, incorporating a 1.25 margin of safety.

The static carrying figure C₀ also serves as a means to calculate the permissible axial load, which is limited by additional bending stresses occurring at the rod shaft, but, primarily, by the axial attachment of the inner part.

Push-out tests were used to establish the maximum axial force.

$$F_a = 0,4 \times C_0$$

RADIAL AND AXIAL FORCES



DYNAMIC FIGURE C

The specified dynamic carrying figures form the basis for the calculation of the service life rod ends will be able to enjoy when subjected to dynamic stresses, i.e. loads exerted by swinging or tipping. However, these figures merely refer to the bearing and can therefore not be applied to the rod end housing.

LUBRICATION

Maintenance-free rod ends must not be re-lubricated. The inner ring slides on a PTFE fabric embedded in the bearing shell.

TILT ANGLE

The tilt angle varies with every version. You will find the corresponding values in the product data table.

