



FAG

22244-BE-XL-K-C4

Spherical Roller Bearing

Spherical roller bearings 222...-E1-K, main dimensions to DIN 635-2, with tapered bore, taper 1:12

X-life

Technical information



Your current product variant

| | | |
|---------------------------|--------------|-----------------------------------|
| Design | BE | With lose center lip ring |
| Bore type | K | Tapered, taper 1:12 |
| Cage | JPB | Sheet metal cage |
| Radial internal clearance | C4 (Group 4) | Internal clearance larger than C3 |
| Relubrication | Standard | |

Main Dimensions & Performance Data

| | | |
|-------------|-------------|-----------------------------------|
| d | 220 mm | Bore diameter |
| D | 400 mm | Outside diameter |
| B | 108 mm | Width |
| C_r | 1.840.000 N | Basic dynamic load rating, radial |
| C_{0r} | 2.360.000 N | Basic static load rating, radial |
| C_{ur} | 216.000 N | Fatigue load limit, radial |
| n_G | 2.140 1/min | Limiting speed |
| n_{gr} | 1.350 1/min | Reference speed |
| $\approx m$ | 57,09 kg | Weight |



Mounting dimensions

| | | |
|--------------|--------|---------------------------------------|
| $d_{a \min}$ | 237 mm | Minimum diameter shaft shoulder |
| $d_{a \max}$ | 258 mm | Maximum diameter of shaft shoulder |
| $D_{a \max}$ | 383 mm | Maximum diameter of housing shoulder |
| $r_{a \max}$ | 3 mm | Maximum recess radius |
| $d_{b \min}$ | 233 mm | Minimum cavity diameter of the sleeve |
| $B_{a \min}$ | 22 mm | Minimum cavity width of the sleeve |

Dimensions

| | | |
|------------|----------|------------------------------------|
| r_{\min} | 4 mm | Minimum chamfer dimension |
| D_1 | 346,6 mm | Bore diameter outer ring |
| d_2 | 260,1 mm | Raceway diameter of the inner ring |
| d_s | 9,5 mm | Diameter lubrication hole |
| n_s | 17,7 mm | Width of lubricating groove |

Temperature range

| | | |
|------------|--------|----------------------------|
| T_{\min} | -30 °C | Operating temperature min. |
| T_{\max} | 200 °C | Operating temperature max. |

Calculation factors

| | | |
|-------|------|--|
| e | 0,26 | Limiting value of F_a/F_r for the applicability of diff. Values of factors X and Y |
| Y_1 | 2,57 | Dynamic axial load factor |
| Y_2 | 3,83 | Dynamic axial load factor |
| Y_0 | 2,52 | Static axial load factor |

Additional information

| | |
|--------|-------------------|
| H3144X | Adapter sleeve |
| AH2244 | Withdrawal sleeve |



Characteristics



Radial load



Axial load in one direction



Axial load in two directions



Grease Lubrication



Oil Lubrication



Not sealed



Large bearing



Static angular error and misalignment



Dynamic angular error and misalignment