



FAG

24164-BE-XL-K30-C3

Spherical Roller Bearing

Spherical roller bearings 241...-BE-K30, main dimensions to DIN 635-2, with tapered bore, taper 1:30

X-life

Technical information



Your current product variant

| | | |
|---------------------------|--------------|-----------------------------------|
| Design | BE | With lose center lip ring |
| Bore type | K30 | Tapered, taper 1:30 |
| Cage | JPB | Sheet metal cage |
| Radial internal clearance | C3 (Group 3) | Internal clearance larger than CN |
| Relubrication | Standard | |

Main Dimensions & Performance Data

| | | |
|----------|-------------|-----------------------------------|
| d | 320 mm | Bore diameter |
| D | 540 mm | Outside diameter |
| B | 218 mm | Width |
| C_r | 4.600.000 N | Basic dynamic load rating, radial |
| C_{0r} | 7.300.000 N | Basic static load rating, radial |
| C_{ur} | 570.000 N | Fatigue load limit, radial |
| n_G | 1.010 1/min | Limiting speed |
| n_{gr} | 415 1/min | Reference speed |
| m | 196 kg | Weight |



Mounting dimensions

| | | |
|--------------|--------|--------------------------------------|
| $d_{a \min}$ | 340 mm | Minimum diameter shaft shoulder |
| $D_{a \max}$ | 520 mm | Maximum diameter of housing shoulder |
| $r_{a \max}$ | 4 mm | Maximum recess radius |

Dimensions

| | | |
|------------|----------|------------------------------------|
| r_{\min} | 5 mm | Minimum chamfer dimension |
| D_1 | 455,5 mm | Bore diameter outer ring |
| d_2 | 359 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 | 0,4 | Limiting value of F_a/F_r for the applicability of diff. Values of factors X and Y |
| Y_1 | 1,69 | Dynamic axial load factor |
| Y_2 | 2,52 | Dynamic axial load factor |
| Y_0 | 1,65 | Static axial load factor |

Additional information

| | |
|-----------|-------------------|
| AH24164-H | 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