

**FAG****231/560-BEA-XL-K-MB1** [↗](#)

Spherical Roller Bearing

Spherical roller bearing 231...-BEA-XL-K-MB1, symmetric 2 outer ribs with rib washer

X-life

Technical information



Your current product variant

| | | |
|---------------------------|--------------|---------------------------|
| Design | BEA | With lose center lip ring |
| Bore type | K | Tapered, taper 1:12 |
| Cage | MB1 | Solid brass cage |
| Radial internal clearance | CN (Group N) | Normal internal clearance |
| Relubrication facility | Standard | |

Main Dimensions & Performance Data

| | | |
|----------|--------------|-----------------------------------|
| d | 560 mm | Bore diameter |
| D | 920 mm | Outside diameter |
| B | 280 mm | Width |
| C_r | 9.700.000 N | Basic dynamic load rating, radial |
| C_{0r} | 16.400.000 N | Basic static load rating, radial |
| C_{ur} | 1.060.000 N | Fatigue load limit, radial |
| n_G | 630 1/min | Limiting speed |
| n_{gr} | 300 1/min | Reference speed |
| m | 716 kg | Weight |



Mounting dimensions

| | | |
|--------------|--------|---------------------------------------|
| $d_{a \min}$ | 592 mm | Minimum diameter shaft shoulder |
| $D_{a \max}$ | 888 mm | Maximum diameter of housing shoulder |
| $r_{a \max}$ | 6 mm | Maximum recess radius |
| $d_{a \max}$ | 644 mm | Maximum diameter of shaft shoulder |
| $d_{b \min}$ | 589 mm | Minimum cavity diameter of the sleeve |
| $B_{a \min}$ | 18 mm | Minimum cavity width of the sleeve |

Dimensions

| | | |
|------------|----------|-----------------------------|
| r_{\min} | 7,5 mm | Minimum chamfer dimension |
| D_1 | 806,6 mm | Bore diameter outer ring |
| d_s | 12,5 mm | Diameter lubrication hole |
| n_s | 23,5 mm | Width of lubricating groove |

Temperature range

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

Calculation factors

| | | |
|-------|------|--|
| e | 0,29 | Limiting value of F_a/F_r for the applicability of diff. Values of factors X and Y |
| Y_1 | 2,32 | Dynamic axial load factor |
| Y_2 | 3,45 | Dynamic axial load factor |
| Y_0 | 2,26 | Static axial load factor |

Additional information

| | |
|-------------|-------------------|
| H31/560-HG | Adapter sleeve |
| AH31/560A-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