



FAG

22314-E1A-XL-M

Spherical Roller Bearing

Spherical roller bearing 223..-E1A-XL-M,
symmetric 2 outer ribs

X-life

Technical information



Your current product variant

| | | |
|---------------------------|--------------|---------------------------|
| Design | E1A | Without central rip |
| Bore type | Z | Cylindrical |
| Cage | M | Brass Cage |
| Radial internal clearance | CN (Group N) | Normal internal clearance |
| Relubrication | Standard | |

Main Dimensions & Performance Data

| | | |
|-------------|-------------|-----------------------------------|
| d | 70 mm | Bore diameter |
| D | 150 mm | Outside diameter |
| B | 51 mm | Width |
| C_r | 390.000 N | Basic dynamic load rating, radial |
| C_{0r} | 390.000 N | Basic static load rating, radial |
| C_{ur} | 37.500 N | Fatigue load limit, radial |
| n_G | 4.800 1/min | Limiting speed |
| n_{gr} | 3.700 1/min | Reference speed |
| $\approx m$ | 4,266 kg | Weight |



Mounting dimensions

| | | |
|--------------|--------|--------------------------------------|
| $d_{a \min}$ | 82 mm | Minimum diameter shaft shoulder |
| $D_{a \max}$ | 138 mm | Maximum diameter of housing shoulder |
| $r_{a \max}$ | 2,1 mm | Maximum recess radius |



Dimensions

| | | |
|------------|---------|------------------------------------|
| r_{\min} | 2,1 mm | Minimum chamfer dimension |
| D_1 | 128 mm | Bore diameter outer ring |
| d_2 | 86,7 mm | Raceway diameter of the inner ring |
| d_s | 4,8 mm | Diameter lubrication hole |
| n_s | 9,5 mm | Width of lubricating groove |

Temperature range

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

Calculation factors

| | | |
|-------|------|--|
| e | 0,34 | Limiting value of F_a/F_r for the applicability of diff. Values of factors X and Y |
| Y_1 | 2 | Dynamic axial load factor |
| Y_2 | 2,98 | Dynamic axial load factor |
| Y_0 | 1,96 | Static axial load factor |