



FAG

22311-E1-XL

Spherical roller bearing

Schaeffler ID:
0167052200000Spherical roller bearings 223...-E1, main
dimensions to DIN 635-2

X-life

Technical information

**Main Dimensions & Performance Data**

| | | |
|----------|-------------|-----------------------------------|
| d | 55 mm | Bore diameter |
| D | 120 mm | Outside diameter |
| B | 43 mm | Width |
| C_r | 265,000 N | Basic dynamic load rating, radial |
| C_{0r} | 260,000 N | Basic static load rating, radial |
| C_{ur} | 24,600 N | Fatigue load limit, radial |
| n_G | 5,800 1/min | Limiting speed |
| n_{gr} | 4,500 1/min | Reference speed |
| | 2.354 kg | Weight |

Dimensions

| | | |
|-----------|----------|------------------------------------|
| r_{min} | 2 mm | Minimum chamfer dimension |
| D_1 | 101.4 mm | Bore diameter outer ring |
| d_2 | 68.9 mm | Raceway diameter of the inner ring |
| d_s | 3.2 mm | Diameter lubrication hole |
| n_s | 6.5 mm | Width of lubricating groove |

Mounting dimensions

| | | |
|-------------|--------|--------------------------------------|
| $d_{a min}$ | 66 mm | Minimum diameter shaft shoulder |
| $D_{a max}$ | 109 mm | Maximum diameter of housing shoulder |
| $r_{a max}$ | 2 mm | Maximum recess radius |

Additional information

| | | |
|-------|------|---|
| e | 0.36 | Limiting value of F_a/F_r for the applicability of diff. Values of factors X and Y |
| Y_1 | 1.89 | Dynamic axial load factor |
| Y_2 | 2.81 | Dynamic axial load factor |
| Y_0 | 1.84 | Static axial load factor |

Temperature range

| | | |
|------------------|--------|----------------------------|
| T _{min} | -30 °C | Operating temperature min. |
| T _{max} | 200 °C | Operating temperature max. |