



FAG

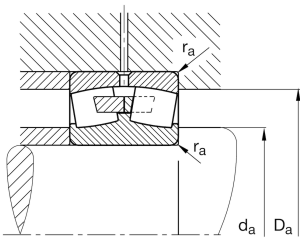
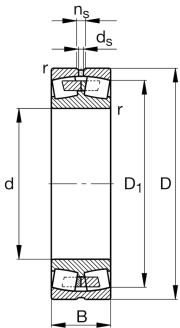
23036-E1A-XL-M>A [↗](#)

Spherical Roller Bearing

Spherical roller bearings 230...-E1A, main dimensions to DIN 635-2

X-life

Technical information



Your current product variant

| | | |
|---------------|----------|---------------------|
| Design | E1A | Without central rip |
| Bore type | Z | Cylindrical |
| Cage | M | Brass Cage |
| Relubrication | Standard | |

Main Dimensions & Performance Data

| | | |
|----------|-------------|-----------------------------------|
| d | 180 mm | Bore diameter |
| D | 280 mm | Outside diameter |
| B | 74 mm | Width |
| C_r | 1.040.000 N | Basic dynamic load rating, radial |
| C_{0r} | 1.450.000 N | Basic static load rating, radial |
| C_{ur} | 173.000 N | Fatigue load limit, radial |
| n_G | 2.600 1/min | Limiting speed |
| n_{gr} | 1.760 1/min | Reference speed |
| m | 16,473 kg | Weight |

Mounting dimensions

| | | |
|--------------|----------|--------------------------------------|
| $d_{a \min}$ | 190,2 mm | Minimum diameter shaft shoulder |
| $D_{a \max}$ | 269,8 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 | 254,3 mm | Bore diameter outer ring |
| d_s | 8 mm | Diameter lubrication hole |
| n_s | 15 mm | Width of lubricating groove |

Temperature range

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

Calculation factors

| | | |
|-------|------|--|
| e | 0,23 | Limiting value of F_a/F_r for the applicability of diff. Values of factors X and Y |
| Y_1 | 2,9 | Dynamic axial load factor |
| Y_2 | 4,31 | Dynamic axial load factor |
| Y_0 | 2,83 | Static axial load factor |

Characteristics

| | |
|---|--|
|  | Radial load |
|  | Axial load in one direction |
|  | Axial load in two directions |
|  | Grease Lubrication |
|  | Oil Lubrication |
|  | Not sealed |
|  | Static angular error and misalignment |
|  | Dynamic angular error and misalignment |