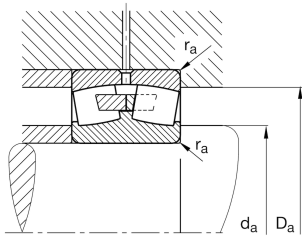
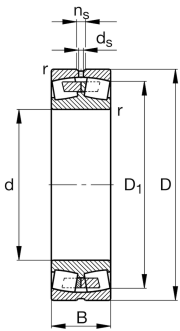
**FAG****23220-E1A-XL-M-C3**

Spherical Roller Bearing

Spherical roller bearings 232...-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 |
| Radial internal clearance | C3 (Group 3) | Internal clearance larger than CN |
| Relubrication feature | Standard | |

Main Dimensions & Performance Data

| | | |
|-----------------|-------------|-----------------------------------|
| d | 100 mm | Bore diameter |
| D | 180 mm | Outside diameter |
| B | 60.3 mm | Width |
| C _r | 560,000 N | Basic dynamic load rating, radial |
| C _{0r} | 660,000 N | Basic static load rating, radial |
| C _{ur} | 61,000 N | Fatigue load limit, radial |
| n _G | 3,750 1/min | Limiting speed |
| n _{gr} | 2,410 1/min | Reference speed |
| ≈m | 6.595 kg | Weight |

Mounting dimensions

| | | |
|--------------------|--------|--------------------------------------|
| d _{a min} | 112 mm | Minimum diameter shaft shoulder |
| D _{a max} | 168 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 | 156.7 mm | Bore diameter outer 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 | 0.31 | Limiting value of F_a/F_r for the applicability of diff. Values of factors X and Y |
| Y_1 | 2.15 | Dynamic axial load factor |
| Y_2 | 3.2 | Dynamic axial load factor |
| Y_0 | 2.1 | 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 |