



22309 E

- Popular item
- SKF Explorer

Spherical roller bearings

Bearing data

[Tolerances,](#)

Normal, P6, P5, tapered bore 1:12,
tapered bore 1:30,

[Radial internal clearance,](#)

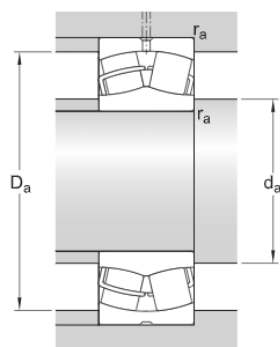
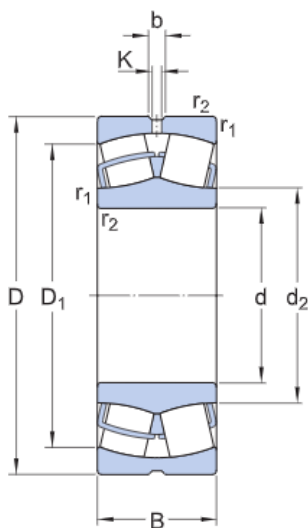
cylindrical bore, tapered bore

Bearing interfaces

[Seat tolerances for standard conditions,](#)

[Tolerances and resultant fit](#)

Technical specification



DIMENSIONS

| | | |
|------------------|-------------|--|
| d | 45 mm | Bore diameter |
| D | 100 mm | Outside diameter |
| B | 36 mm | Width |
| d ₂ | ≈ 57.6 mm | Shoulder diameter of inner ring |
| D ₁ | ≈ 83.4 mm | Shoulder/recess diameter of outer ring |
| b | 6 mm | Width of lubrication groove |
| K | 3 mm | Diameter of lubrication hole |
| r _{1,2} | min. 1.5 mm | Chamfer dimension |

ABUTMENT DIMENSIONS

| | | |
|----------------|-------------|------------------------------|
| d _c | min. 54 mm | Diameter of shaft abutment |
| D _i | max. 91 mm | Diameter of housing abutment |
| r _a | max. 1.5 mm | Radius of fillet |

CALCULATION DATA

| | | |
|---------------------------|----------------|-------------|
| Basic dynamic load rating | C | 190 kN |
| Basic static load rating | C ₀ | 183 kN |
| Fatigue load limit | P _u | 19.6 kN |
| Reference speed | | 5 300 r/min |
| Limiting speed | | 7 000 r/min |
| Limiting value | e | 0.37 |
| Axial load factor | Y ₁ | 1.8 |
| Axial load factor | Y ₂ | 2.7 |
| Axial load factor | Y ₀ | 1.8 |

MASS

| | | |
|------|--|--------|
| Mass | | 1.4 kg |
|------|--|--------|

More information

| Product details | Engineering information | Tools |
|---------------------------------------|---|--|
| Designs and variants | Principles of rolling bearing selection | SimPro Quick |
| Bearing data | General bearing knowledge | Bearing Select |
| Loads | Bearing selection process | Engineering Calculator |
| Temperature limits | Bearing failure and how to prevent it | Housing Select |
| Permissible speed | | LubeSelect for SKF greases |
| Design considerations | | Drive-up Method Program |
| Mounting | | Heater selection tool |
| Designation system | | Oil Injection Method Program |
| | | Rolling bearings mounting and dismounting instructions |
| | | Tool and Accessory Selector for sleeves and shafts |

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