



SKF 7203 BE-2RZP

Single row angular contact ball bearing with 40° contact angle and non-contact

These single row angular contact ball bearings, with 40° contact angle and non-contact seals on both sides, accommodate radial and axial loads acting simultaneously, where the axial load acts in one direction only. They have a ball-centred glass-fibre reinforced PA66 cage. They are more suitable than deep groove ball bearings for supporting large axial forces acting in one direction.

Technical specifications

| Dimensions | |
|---|--------------|
| Bore diameter | 17 mm |
| Deviation limits of mid-range bore diameter | -0.008..0 mm |
| Outside diameter | 40 mm |
| Deviation limits of mid-range outside diameter | -0.011..0 mm |
| Width | 12 mm |
| Deviation limits of ring width | -0.12..0 mm |
| Shoulder diameter of inner ring (large side face) | 26.25 mm |
| Shoulder diameter of inner ring (small side face) | 21.66 mm |
| Recess diameter of outer ring (large side face) | 34 mm |
| Recess diameter of outer ring (small side face) | 36.5 mm |
| Distance side face to pressure point | 18 mm |
| Chamfer dimension | 0.6 mm |
| Chamfer dimension | 0.6 mm |
| ISO tolerance class for dimensions | Normal |
| Contact angle | 40 ° |

| Abutment dimensions | |
|------------------------------|----------|
| Diameter of shaft abutment | 21.2 mm |
| Diameter of shaft abutment | 26.25 mm |
| Abutment diameter housing | 35.8 mm |
| Diameter of housing abutment | 35.8 mm |
| Radius of fillet | 0.6 mm |
| Radius of fillet | 0.6 mm |

| Calculation data | |
|---|-------------|
| Basic dynamic load rating | 10.4 kN |
| Basic static load rating | 5.5 kN |
| Fatigue load limit | 0.236 kN |
| Reference speed | 22000 r/min |
| Limiting speed | 17000 r/min |
| Minimum axial load factor | 0.0006 |
| Minimum radial load factor | 0.1 |
| Limiting value | 1.1 |
| Calculation factor (single, tandem) | 0.35 |
| Calculation factor (single, tandem) | 0.26 |
| Calculation factor (single, tandem) | 0.57 |
| Calculation factor (back-to-back, face-to-face) | 0.57 |
| Calculation factor (back-to-back, face-to-face) | 0.52 |
| Calculation factor (back-to-back, face-to-face) | 0.55 |
| Calculation factor (back-to-back, face-to-face) | 0.93 |

| Tolerances of run-out | |
|--|--------|
| Range of section height at inner ring of assembled bearing | 10 µm |
| Range of section height at outer ring of assembled bearing | 20 µm |
| ISO tolerance class for geometrical tolerances | Normal |

| Performance | |
|-------------|--|
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|---------------------------|-------------|
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| Basic static load rating | 5.5 kN |
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| Limiting speed | 17000 r/min |

| Properties | |
|---|------------------------------------|
| Contact type | Normal contact (two-point contact) |
| Number of rows | 1 |
| Locating feature, bearing outer ring | Without |
| Ring type | One-piece inner and outer rings |
| Cage | Non-metallic |
| Matched arrangement | No |
| Universal matching bearing | No |
| Axial internal clearance | Not applicable |
| Tolerance class | Normal |
| Material, bearing | Bearing steel |
| Coating | Without |
| Sealing | Seal on both sides |
| Sealing type | Non-contact |
| Lubricant | Grease |
| Relubrication feature | Without |
| Indicative carbon footprint for new product | 0.23 kg CO ₂ e |

| Logistics | |
|--------------------|-------------|
| Product net weight | 0.065 kg |
| eClass code | 23-05-08-03 |
| UNSPSC code | 31171531 |

