



SKF 3203 ATN9

Double row angular contact ball bearing

Double row angular contact ball bearings correspond, in their design and operation, to a pair of single row angular contact ball bearings in a back-to-back arrangement, while requiring less axial space. They can operate at high speeds and are more suitable than deep groove ball bearings for supporting large axial forces in both directions.

Technical specifications

| Dimensions | |
|-------------------------------------|----------|
| Bore diameter | 17 mm |
| Outside diameter | 40 mm |
| Width | 17.5 mm |
| Recess diameter inner ring shoulder | 23.3 mm |
| Recess diameter outer ring shoulder | 34.95 mm |
| Chamfer dimension inner ring | 0.6 mm |
| Distance pressure point(s) | 23 mm |
| Contact angle | 30 ° |

| Abutment dimensions | |
|---------------------------|---------|
| Abutment diameter shaft | 21.4 mm |
| Abutment diameter shaft | 23 mm |
| Abutment diameter housing | 35.6 mm |
| Fillet radius | 0.6 mm |

| Calculation data | |
|---------------------------|-------------|
| Basic dynamic load rating | 14.3 kN |
| Basic static load rating | 8.8 kN |
| Fatigue load limit | 0.365 kN |
| Reference speed | 19000 r/min |
| Limiting speed | 16000 r/min |
| Calculation factor | 0.06 |
| Limiting value | 0.8 |
| Calculation factor | 0.63 |
| Calculation factor | 0.66 |
| Calculation factor | 0.78 |
| Calculation factor | 1.2 |

| Performance | |
|---------------------------|-------------|
| Basic dynamic load rating | 14.3 kN |
| Basic static load rating | 8.8 kN |
| Reference speed | 19000 r/min |
| Limiting speed | 16000 r/min |

| Properties | |
|---|------------------------------------|
| Contact type | Normal contact (two-point contact) |
| Number of rows | 2 |
| Locating feature, bearing outer ring | Without |
| Ring type | One-piece inner and outer rings |
| Cage | Non-metallic |
| Arrangement of contact angle (double-row bearing) | Back-to-back (O) |
| Matched arrangement | No |
| Universal matching bearing | No |
| Axial internal clearance | CN |
| Material, bearing | Bearing steel |
| Coating | Without |
| Sealing | Without |

| | |
|---|---------------------------|
| Lubricant | None |
| Relubrication feature | Without |
| Indicative carbon footprint for new product | 0.34 kg CO ₂ e |

| Logistics | |
|--------------------|-------------|
| Product net weight | 0.095 kg |
| eClass code | 23-05-08-03 |
| UNSPSC code | 31171531 |

SKF drawings

