



## SKF 3302 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                       | 15 mm    |
| Outside diameter                    | 42 mm    |
| Width                               | 19 mm    |
| Recess diameter inner ring shoulder | 23.7 mm  |
| Recess diameter outer ring shoulder | 35.65 mm |
| Chamfer dimension inner ring        | 1 mm     |
| Distance pressure point(s)          | 24 mm    |
| Contact angle                       | 30 °     |

| Abutment dimensions       |         |
|---------------------------|---------|
| Abutment diameter shaft   | 20.6 mm |
| Abutment diameter housing | 36.4 mm |
| Fillet radius             | 1 mm    |

| Calculation data          |             |
|---------------------------|-------------|
| Basic dynamic load rating | 15.1 kN     |
| Basic static load rating  | 9.3 kN      |
| Fatigue load limit        | 0.4 kN      |
| Reference speed           | 18000 r/min |
| Limiting speed            | 16000 r/min |
| Calculation factor        | 0.07        |
| 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 | 15.1 kN     |
| Basic static load rating  | 9.3 kN      |
| Reference speed           | 18000 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 | 0.45 kg CO <sub>2</sub> e |

| Logistics          |             |
|--------------------|-------------|
| Product net weight | 0.125 kg    |
| eClass code        | 23-05-08-03 |
| UNSPSC code        | 31171531    |

**SKF drawings**