



## SKF 1310 EKTN9

### Self-aligning ball bearing with tapered bore

Self-aligning ball bearings, with a tapered bore, have two rows of balls, a common sphered raceway in the outer ring and two deep uninterrupted raceway grooves in the inner ring. They are insensitive to angular misalignment of the shaft relative to the housing, which can be caused, for example, by shaft deflection. The tapered bore facilitates ease of mounting via adapter sleeves or withdrawal sleeves.

## Technical specifications

|           |              |
|-----------|--------------|
| Bore type | Tapered 1:12 |
|-----------|--------------|

| Dimensions                   |         |
|------------------------------|---------|
| Bore diameter                | 50 mm   |
| Outside diameter             | 110 mm  |
| Width                        | 27 mm   |
| Shoulder diameter inner ring | 70.3 mm |
| Shoulder diameter outer ring | 92.6 mm |
| Chamfer dimension            | 2 mm    |

| Abutment dimensions       |       |
|---------------------------|-------|
| Abutment diameter housing | 99 mm |
| Fillet radius             | 2 mm  |

| Calculation data                 |             |
|----------------------------------|-------------|
| Basic dynamic load rating        | 43.6 kN     |
| Basic static load rating         | 14 kN       |
| Fatigue load limit               | 0.72 kN     |
| Reference speed                  | 12000 r/min |
| Limiting speed                   | 8000 r/min  |
| Permissible angular misalignment | 3 °         |
| Calculation factor               | 0.04        |
| Limiting value                   | 0.24        |
| Calculation factor               | 2.8         |
| Calculation factor               | 2.6         |
| Calculation factor               | 4.1         |

| Performance               |             |
|---------------------------|-------------|
| Basic dynamic load rating | 43.6 kN     |
| Basic static load rating  | 14 kN       |
| Reference speed           | 12000 r/min |
| Limiting speed            | 8000 r/min  |

| Properties                                  |                          |
|---------------------------------------------|--------------------------|
| Retaining feature, inner ring               | None                     |
| Locating feature, bearing outer ring        | Without                  |
| Number of rows                              | 2                        |
| Bore type                                   | Tapered 1:12             |
| Cage                                        | Non-metallic             |
| Radial internal clearance                   | CN                       |
| Tolerance class                             | Normal                   |
| Material, bearing                           | Bearing steel            |
| Coating                                     | Without                  |
| Sealing                                     | Without                  |
| Lubricant                                   | None                     |
| Relubrication feature                       | Without                  |
| Indicative carbon footprint for new product | 4.2 kg CO <sub>2</sub> e |

| Logistics          |             |
|--------------------|-------------|
| Product net weight | 1.16 kg     |
| eClass code        | 23-05-08-06 |
| UNSPSC code        | 31171532    |

**SKF drawings**