



Image may differ from product. See technical specification for details.

3305 A

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.

- High-speed capability
- Accommodate relatively high radial loads, high axial loads in both directions and tilting moments
- Suitable where a stiff bearing arrangement is required
- Require less axial space than equivalent pair of single row angular contact ball bearings

Overview

Dimensions

| Bore diameter | 25 mm |
|------------------|---------|
| Outside diameter | 62 mm |
| Width | 25.4 mm |
| Contact angle | 30 ° |

Performance

| Basic dynamic load rating | 32.5 kN |
|---------------------------|--------------|
| Basic static load rating | 22 kN |
| Reference speed | 11 000 r/min |
| Limiting speed | 11 000 r/min |
| SKF performance class | SKF Explorer |

Properties

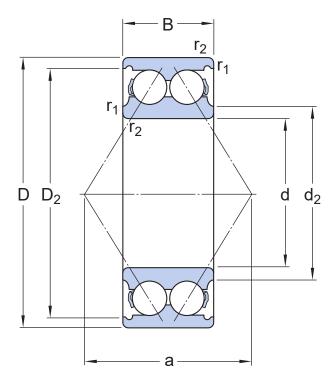
| Contact type | Normal contact (two-point contact) |
|---------------------------------------------------|------------------------------------|
| Number of rows | 2 |
| Locating feature, bearing outer ring | None |
| Ring type | One-piece inner and outer rings |
| Cage | Sheet metal |
| Arrangement 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 |

Logistics

| Product net weight | 0.351 kg |
|--------------------|-------------|
| eClass code | 23-05-08-03 |

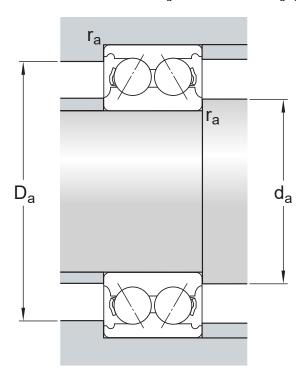
UNSPSC code 31171531

Technical specification



Dimensions

| d | 25 mm | Bore diameter |
|------------------|-------------|-------------------------------------|
| D | 62 mm | Outside diameter |
| В | 25.4 mm | Width |
| d ₂ | ≈ 35.7 mm | Recess diameter inner ring shoulder |
| D ₂ | ≈ 53.4 mm | Recess diameter outer ring shoulder |
| r _{1,2} | min. 1.1 mm | Chamfer dimension inner ring |
| a | 36 mm | Distance pressure point(s) |



Abutment dimensions

| d _a | min. 32 mm | Abutment diameter shaft |
|----------------|------------|---------------------------|
| D _a | max. 55 mm | Abutment diameter housing |
| r _a | max. 1 mm | Fillet radius |

Calculation data

| SKF performance class | | SKF Explorer |
|---------------------------|----------------|--------------|
| Basic dynamic load rating | С | 32.5 kN |
| Basic static load rating | C ₀ | 22 kN |
| Fatigue load limit | P _u | 0.93 kN |
| Reference speed | | 11 000 r/min |
| Limiting speed | | 11 000 r/min |
| Calculation factor | k _r | 0.07 |
| Limiting value | е | 0.8 |
| Calculation factor | Х | 0.63 |
| Calculation factor | Y ₀ | 0.66 |
| Calculation factor | Y ₁ | 0.78 |
| Calculation factor | Y ₂ | 1.24 |

Tolerances and clearances

GENERAL BEARING SPECIFICATIONS

- Tolerances: Normal, P6, P5
- Internal clearance: table, drawing no

BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fit

More Information

| Product details | Engineering information | ➢ Tools |
|--------------------------------|-----------------------------------------|------------------------------|
| Designs and variants | | SKF Product select |
| General bearing specifications | Principles of rolling bearing selection | SimPro Quick |
| Loads | General bearing knowledge | Bearing Frequency Calculator |
| Temperature limits | Bearing selection process | LubeSelect for SKF greases |
| Permissible speed | Bearing interfaces | Heater selection tool |
| Designation system | Seat tolerances for standard conditions | SKF mounting and dismounting |
| Designation system | Selecting internal clearance or preload | instructions |
| | Lubrication | |
| | Sealing, mounting and dismounting | |
| | Bearing failure and how to prevent it | |



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