

3305 A/C3S1



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

Dimensions

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

Abutment dimensions

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

Calculation data

Basic dynamic load rating	C	30.7 kN
Basic static load rating	C ₀	19.3 kN
Fatigue load limit	P _u	0 kN
Reference speed		11 000 r/min
Limiting speed		11 000 r/min
Calculation factor	k _r	0.07
Limiting value	e	0.8
Calculation factor	X	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