

1224 M

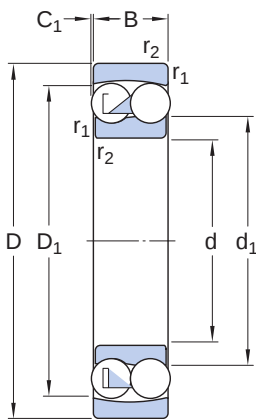


Self-aligning ball bearings have two rows of balls, a common sphered raceway in the outer ring and two deep uninterrupted raceway grooves in the inner ring. They are insensitive to angular misalignment of the shaft relative to the housing, which can be caused, for example, by shaft deflection.

- Accommodate static and dynamic misalignment
- Excellent high-speed performance
- Excellent light load performance
- Low friction

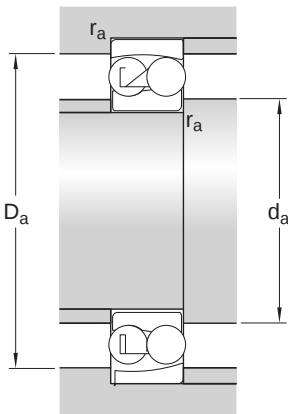
Bore type

Cylindrical



Dimensions

d	120 mm	Bore diameter
D	215 mm	Outside diameter
B	42 mm	Width
d ₁	≈ 149 mm	Shoulder diameter inner ring
D ₁	≈ 187.2 mm	Shoulder diameter outer ring
C ₁	1.271 mm	Protrusion of the balls from bearing side faces
r _{1,2}	min. 2.1 mm	Chamfer dimension



Abutment dimensions

d _a	min. 132 mm	Abutment diameter shaft
D _a	max. 203 mm	Abutment diameter housing
r _a	max. 2 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	119 kN
Basic static load rating	C ₀	53 kN
Fatigue load limit	P _u	2.12 kN
Reference speed		6 300 r/min
Limiting speed		4 000 r/min
Permissible angular misalignment	α	2.5 °
Calculation factor	k _r	0.04
Limiting value	e	0.19
Calculation factor	Y ₀	3.6
Calculation factor	Y ₁	3.3
Calculation factor	Y ₂	5.1

Tolerances and clearances

GENERAL BEARING SPECIFICATIONS

- Tolerances: Normal, JS7
- Radial internal clearance: table

BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fits