

1319



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	95 mm Bore diameter
	D	200 mm Outside diameter
	B	45 mm Width
	d ₁	≈ 127.6 mm Shoulder diameter inner ring
	D ₁	≈ 170.5 mm Shoulder diameter outer ring
	C ₁	1.486 mm Protrusion of the balls from bearing side faces
	r _{1,2}	min. 3 mm Chamfer dimension
Abutment dimensions		
d _a	min. 109 mm	Abutment diameter shaft
D _a	max. 186 mm	Abutment diameter housing
r _a	max. 3 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	133 kN
Basic static load rating	C ₀	51 kN
Fatigue load limit	P _u	2.16 kN
Reference speed		6 300 r/min
Limiting speed		4 300 r/min
Permissible angular misalignment	α	3 °
Calculation factor	k _r	0.045
Limiting value	e	0.23
Calculation factor	Y ₀	2.8
Calculation factor	Y ₁	2.7
Calculation factor	Y ₂	4.2

Tolerances and clearances

GENERAL BEARING SPECIFICATIONS

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

BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fits