

2307 E-2RS1KTN9

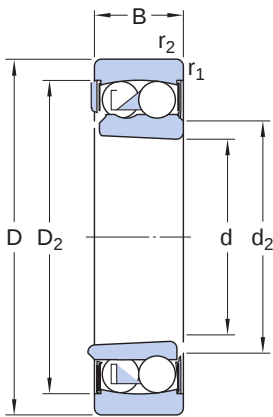


Self-aligning ball bearings, with a tapered bore and seals on both sides, have two rows of balls, a common sphered raceway in the outer ring and two deep uninterrupted raceway grooves in the inner ring. They are insensitive to angular misalignment of the shaft relative to the housing. The tapered bore facilitates ease of mounting via adapter/withdrawal sleeves. The integral sealing can prolong bearing service life by keeping lubricant in the bearings and contaminants out.

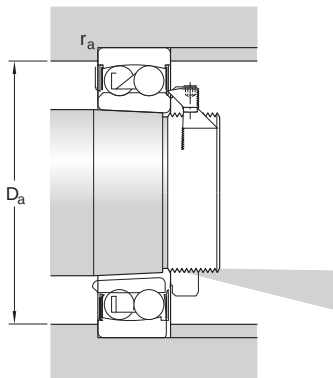
- Ease of mounting via adapter/withdrawal sleeves
- Accommodate static and dynamic misalignment
- Excellent high-speed and light load performance
- Low friction
- Integral sealing results in reduced maintenance requirements and prolonged bearing service life

Bore type

Tapered 1:12



Dimensions		
d	35 mm	Bore diameter
D	80 mm	Outside diameter
B	31 mm	Width
d ₂	≈ 43.7 mm	Recess diameter inner ring
D ₂	≈ 69.2 mm	Recess diameter outer ring
r _{1,2}	min. 1.5 mm	Chamfer dimension



Abutment dimensions		
Da	max. 71 mm	Abutment diameter housing
ra	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	26.5 kN
Basic static load rating	C ₀	8.5 kN
Fatigue load limit	P _u	0.43 kN
Reference speed		15 000 r/min
Limiting speed		5 600 r/min
Permissible angular misalignment	α	1.5 °
Calculation factor	k _r	0.05
Limiting value	e	0.25
Calculation factor	Y ₀	2.5
Calculation factor	Y ₁	2.5
Calculation factor	Y ₂	3.9

Tolerances and clearances

GENERAL BEARING SPECIFICATIONS

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

BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fits