



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

## 1302 ETN9

### Self-aligning ball bearing

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

Overview

Dimensions

Bore diameter	15 mm
Outside diameter	42 mm
Width	13 mm

Performance

Basic dynamic load rating	10.8 kN
Basic static load rating	2.6 kN
Reference speed	34 000 r/min
Limiting speed	24 000 r/min

Properties

Retaining feature, inner ring	None
Locating feature, bearing outer ring	None
Number of rows	2
Bore type	Cylindrical
Cage	Non-metallic
Radial internal clearance	CN
Tolerance class	Normal
Material, bearing	Bearing steel
Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	Without

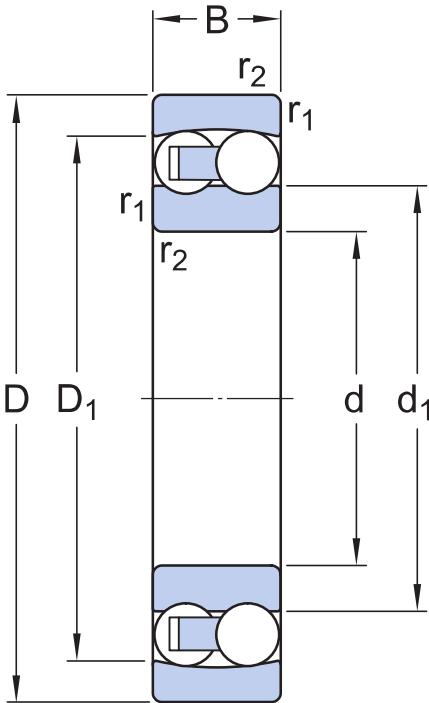
Logistics

Product net weight	0.087 kg
eClass code	23-05-08-06
UNSPSC code	31171532

Technical specification

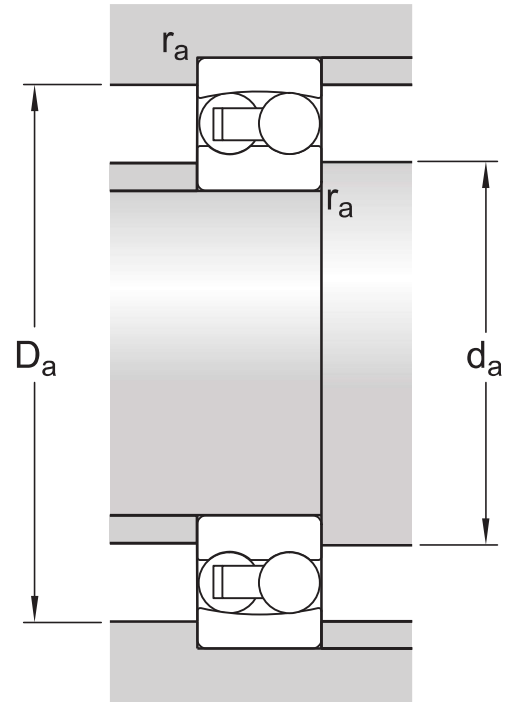
Bore type

Cylindrical



Dimensions

d	15 mm	Bore diameter
D	42 mm	Outside diameter
B	13 mm	Width
d <sub>1</sub>	≈ 23.9 mm	Shoulder diameter inner ring
D <sub>1</sub>	≈ 34.3 mm	Shoulder diameter outer ring
r <sub>1,2</sub>	min. 1 mm	Chamfer dimension



Abutment dimensions

d <sub>a</sub>	min. 20.6 mm	Abutment diameter shaft
D <sub>a</sub>	max. 36.4 mm	Abutment diameter housing
r <sub>a</sub>	max. 1 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	10.8 kN
Basic static load rating	C <sub>0</sub>	2.6 kN
Fatigue load limit	P <sub>u</sub>	0.134 kN
Reference speed		34 000 r/min
Limiting speed		24 000 r/min
Permissible angular misalignment	α	3 °
Calculation factor	k <sub>r</sub>	0.04
Limiting value	e	0.31
Calculation factor	Y <sub>0</sub>	2.2
Calculation factor	Y <sub>1</sub>	2
Calculation factor	Y <sub>2</sub>	3.1

## Tolerances and clearances

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### GENERAL BEARING SPECIFICATIONS

- [Tolerances: Normal, JS7](#)
- [Radial internal clearance: table](#)

## BEARING INTERFACES

- [Seat tolerances for standard conditions](#)
- [Tolerances and resultant fits](#)

More Information

<div> Product details</div> <div><div>Designs and variants</div><div>General bearing specifications</div><div>Loads</div><div>Temperature limits</div><div>Permissible speed</div><div>Design considerations</div><div>Mounting</div><div>Designation system</div></div>	<div> Engineering information</div> <div><div>Principles of rolling bearing selection</div><div>General bearing knowledge</div><div>Bearing selection process</div><div>Bearing interfaces</div><div>Seat tolerances for standard conditions</div><div>Selecting internal clearance</div><div>Lubrication</div><div>Sealing, mounting and dismounting</div><div>Bearing failure and how to prevent it</div></div>	<div> Tools</div> <div><div>SKF Product select - Select and evaluate bearing</div><div>SKF Product select - Combine housing with bearing</div><div>SimPro Quick</div><div>LubeSelect for SKF greases</div><div>Heater selection tool</div><div>Drive-up Method Program</div><div>Oil Injection Method Program</div><div>Tool and Accessory Selector for sleeves and shafts</div></div>
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