



## 2309 ETN9

- Popular item

### Self-aligning ball bearings

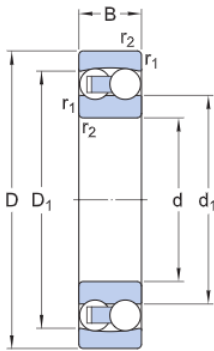
#### Bearing data

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

#### Bearing interfaceS

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

### Technical specification

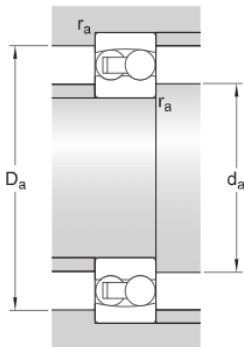


#### DIMENSIONS

d	45 mm	Bore diameter
D	100 mm	Outside diameter
B	36 mm	Width
d1	≈60.16 mm	Shoulder diameter inner ring
D1	≈86 mm	Shoulder diameter outer ring
r1,2	min.1.5 mm	Chamfer dimension

#### ABUTMENT DIMENSIONS

da	min.54 mm	Abutment diameter shaft
Da	max.91 mm	Abutment diameter housing
ra	max.1.5 mm	Fillet radius



## CALCULATION DATA

Basic dynamic load rating	C	63.7 kN
Basic static load rating	C <sub>0</sub>	19.3 kN
Fatigue load limit	P <sub>u</sub>	1 kN
Reference speed		13 000 r/min
Limiting speed		9 000 r/min
Permissible angular misalignment	α	3 °
Calculation factor	k <sub>r</sub>	0.05
Calculation factor	e	0.33
Calculation factor	Y <sub>0</sub>	2
Calculation factor	Y <sub>1</sub>	1.9
Calculation factor	Y <sub>2</sub>	3

## MASS

Mass bearing		1.25 kg
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## More information

<p>Product details</p> <hr/> <p><a href="#">Designs and variants</a></p> <hr/> <p><a href="#">Bearing data</a></p> <hr/> <p><a href="#">Loads</a></p> <hr/> <p><a href="#">Temperature limits</a></p> <hr/> <p><a href="#">Permissible speed</a></p> <hr/> <p><a href="#">Design considerations</a></p> <hr/> <p><a href="#">Mounting</a></p> <hr/> <p><a href="#">Designation system</a></p> <hr/>	<p>Engineering information</p> <hr/> <p><a href="#">Principles of rolling bearing selection</a></p> <hr/> <p><a href="#">General bearing knowledge</a></p> <hr/> <p><a href="#">Bearing selection process</a></p> <hr/> <p><a href="#">Bearing interfaces</a></p> <hr/> <p><a href="#">Seat tolerances for standard conditions</a></p> <hr/> <p><a href="#">Selecting internal clearance</a></p> <hr/> <p><a href="#">Lubrication</a></p> <hr/> <p><a href="#">Sealing, mounting and dismantling</a></p> <hr/> <p><a href="#">Bearing failure and how to prevent it</a></p> <hr/>	<p>Tools</p> <hr/> <p><a href="#">Bearing Select</a></p> <hr/> <p><a href="#">SimPro Quick</a></p> <hr/> <p><a href="#">Engineering Calculator</a></p> <hr/> <p><a href="#">LubeSelect for SKF greases</a></p> <hr/> <p><a href="#">Heater selection tool</a></p> <hr/> <p><a href="#">Drive-up Method Program</a></p> <hr/> <p><a href="#">Oil Injection Method Program</a></p> <hr/> <p><a href="#">Tool and Accessory Selector for sleeves and shafts</a></p> <hr/> <p><a href="#">Housing Select</a></p> <hr/> <p><a href="#">Rolling bearings mounting and dismantling instructions</a></p> <hr/>
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