



# 2311 M

## Self-aligning ball bearings

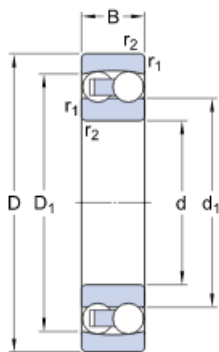
### Bearing data

Tolerances,  
Normal, JS7,  
Radial internal clearance,  
table

### Bearing interfaceS

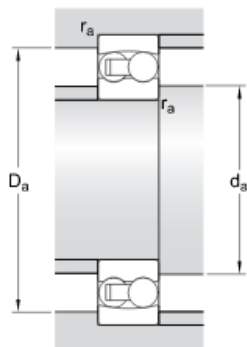
Seat tolerances for standard  
conditions,  
Tolerances and resultant fits  
table

## Technical specification



### DIMENSIONS

d	55 mm
D	120 mm
B	43 mm
d <sub>1</sub>	≈ 72 mm
D <sub>1</sub>	≈ 101 mm
r <sub>1,2</sub>	min. 2 mm



### ABUTMENT DIMENSIONS

d <sub>a</sub>	min. 66 mm
D <sub>a</sub>	max. 109 mm
r <sub>a</sub>	max. 2 mm

## CALCULATION DATA

Basic dynamic load rating	C	76.1 kN
Basic static load rating	C <sub>0</sub>	24 kN
Fatigue load limit	P <sub>u</sub>	1.25 kN
Reference speed		11000 r/min
Limiting speed		7500 r/min
Permissible angular misalignment	α	3 °
Calculation factor	k <sub>r</sub>	0.05
Calculation factor	e	0.4
Calculation factor	Y <sub>0</sub>	1.6
Calculation factor	Y <sub>1</sub>	1.6
Calculation factor	Y <sub>2</sub>	2.4

## MASS

Mass bearing	2.34 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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