



# 7224 BM

Popular item

## Angular contact ball bearings, single row

### Bearing data

[Tolerances](#),

Normal (metric), P6, P5, Normal (inch),

[Internal clearance](#),

CA+CB+CC, G,

[Preload](#),

GA+GB+GC

### Bearing interfaces

[Seat tolerances for standard conditions](#),

[Tolerances and resultant fit](#)

## Technical specification



### DIMENSIONS

d	120 mm
D	215 mm
B	40 mm
d <sub>1</sub>	≈ 157 mm
d <sub>2</sub>	≈ 138.6 mm
D <sub>1</sub>	≈ 179.4 mm
a	90 mm
r <sub>1,2</sub>	min. 2.1 mm
r <sub>3,4</sub>	min. 1.1 mm

### ABUTMENT DIMENSIONS

d <sub>a</sub>	min. 132 mm
D <sub>a</sub>	max. 203 mm
D <sub>b</sub>	max. 208 mm
r <sub>a</sub>	max. 2 mm
r <sub>b</sub>	max. 1 mm



## CALCULATION DATA

Basic dynamic load rating	C	165 kN
Basic static load rating	$C_0$	163 kN
Fatigue load limit	$P_u$	5.3 kN
Reference speed		3600 r/min
Limiting speed		4000 r/min
Calculation factor	A	0.45
Calculation factor	$k_r$	0.08
Calculation factor	e	1.14

## SINGLE BEARING OR BEARING PAIR ARRANGED IN TANDEM

Calculation factor	X	0.35
Calculation factor	$Y_0$	0.26
Calculation factor	$Y_2$	0.57

## BEARING PAIR ARRANGED BACK-TO-BACK OR FACE-TO-FACE

Calculation factor	X	0.57
Calculation factor	$Y_0$	0.52
Calculation factor	$Y_1$	0.55
Calculation factor	$Y_2$	0.93

## MASS

Mass bearing	5.89 kg
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## More information

Product details	Engineering information	Tools
<a href="#">Designs and variants</a>	<a href="#">Principles of rolling bearing selection</a>	<a href="#">Bearing Select</a>
<a href="#">Bearing data</a>	<a href="#">General bearing knowledge</a>	<a href="#">SimPro Quick</a>
<a href="#">Loads</a>	<a href="#">Bearing selection process</a>	<a href="#">Engineering Calculator</a>
<a href="#">Temperature limits</a>	<a href="#">Bearing interfaces</a>	<a href="#">LubeSelect for SKF greases</a>
<a href="#">Permissible speed</a>	<a href="#">Seat tolerances for standard conditions</a>	<a href="#">Heater selection tool</a>
<a href="#">Design considerations</a>	<a href="#">Selecting internal clearance or preload</a>	<a href="#">Rolling bearings mounting and dismounting instructions</a>
<a href="#">Designation system</a>	<a href="#">Lubrication</a>	
	<a href="#">Sealing, mounting and dismounting</a>	
	<a href="#">Bearing failure and how to prevent it</a>	

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