



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

## QJ 218 N2MA

### Four-point contact ball bearing with locating slots

Four-point contact ball bearings with locating slots can accommodate high axial loads in both directions and small radial loads. They can operate at very high speeds and are more suitable than deep groove ball bearings for supporting large axial forces. The outer ring,

with ball and cage assembly, can be mounted separately from the two inner ring halves. The locating slots can be used to prevent the outer ring from rotating.

- High-speed capability
- Accommodate high axial loads in both directions and small radial loads
- Require considerably less axial space than double row angular contact ball bearings
- The locating slots can be used to prevent the outer ring from rotating

Overview

Dimensions

Bore diameter	90 mm
Outside diameter	160 mm
Width	30 mm
Contact angle	35 °

Performance

Basic dynamic load rating	186 kN
Basic static load rating	200 kN
Limiting speed	7 000 r/min
SKF performance class	SKF Explorer

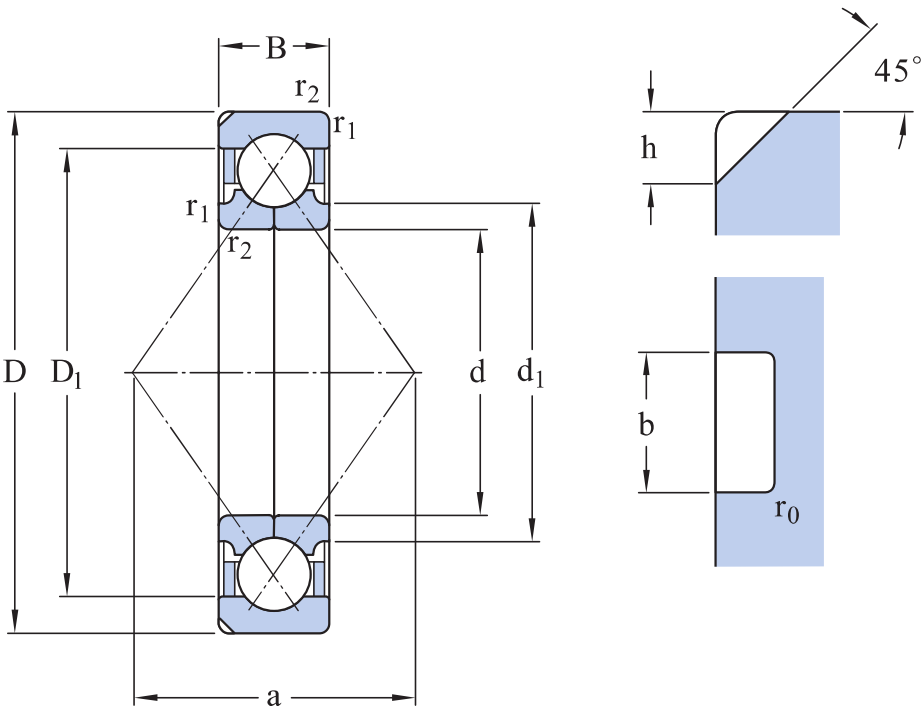
Properties

Contact type	Four-point contact
Number of rows	1
Locating feature, bearing outer ring	Locating slot
Ring type	Two-piece inner ring and one-piece outer ring
Cage	Machined metal
Matched arrangement	No
Universal matching bearing	No
Axial internal clearance	CN
Material, bearing	Bearing steel
Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	Without

Logistics

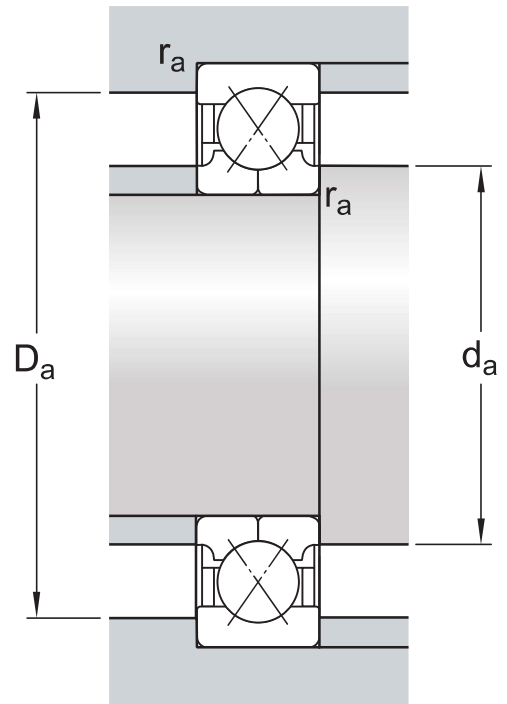
Product net weight	2.74 kg
eClass code	23-05-08-05
UNSPSC code	31171538

Technical specification



Dimensions

d	90 mm	Bore diameter
D	160 mm	Outside diameter
B	30 mm	Width
d <sub>1</sub>	≈ 114 mm	Shoulder diameter inner ring
D <sub>1</sub>	≈ 136 mm	Shoulder diameter outer ring/ inner diameter housing washer
a	88 mm	Distance pressure point(s)
h	8.1 mm	Locating slot depth outer ring
b	6.5 mm	Locating slot width outer ring
r <sub>0</sub>	1 mm	Corner radius locating slot
r <sub>1,2</sub>	min. 2 mm	Chamfer dimension inner ring



Abutment dimensions

$d_a$	min. 101 mm	Abutment diameter shaft
$D_a$	max. 149 mm	Abutment diameter housing
$r_a$	max. 2 mm	Fillet radius

Calculation data

SKF performance class		SKF Explorer
Basic dynamic load rating	C	186 kN
Basic static load rating	$C_0$	200 kN
Fatigue load limit	$P_u$	7.65 kN
Limiting speed		7 000 r/min
Calculation factor	A	0.106
Limiting value	e	0.95
Calculation factor	X	0.6
Calculation factor	$Y_0$	0.58
Calculation factor	$Y_1$	0.66
Calculation factor	$Y_2$	1.07

## Tolerances and clearances

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### GENERAL BEARING SPECIFICATIONS

- Tolerances: [Normal, P6](#)
- Internal clearance: [table](#)

## BEARING INTERFACES

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

More Information

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