



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

NJ 1024 ML/C3

Single row cylindrical roller bearing, NJ design

Single row cylindrical roller bearings are designed to accommodate high radial loads in combination with high speeds. Having two integral flanges on the outer ring and one on the inner ring, NJ design bearings can accommodate axial displacement in one direction. An important feature is the separable design, which facilitates mounting and enables the bearing components to be interchanged.

- High radial load carrying capacity
- Low friction
- Long service life
- Locate the shaft axially in one direction
- Separable design

Overview

Dimensions

Bore diameter	120 mm
Outside diameter	180 mm
Width	28 mm

Performance

Basic dynamic load rating	153 kN
Basic static load rating	183 kN
Reference speed	4 000 r/min
Limiting speed	6 300 r/min
SKF performance class	SKF Explorer

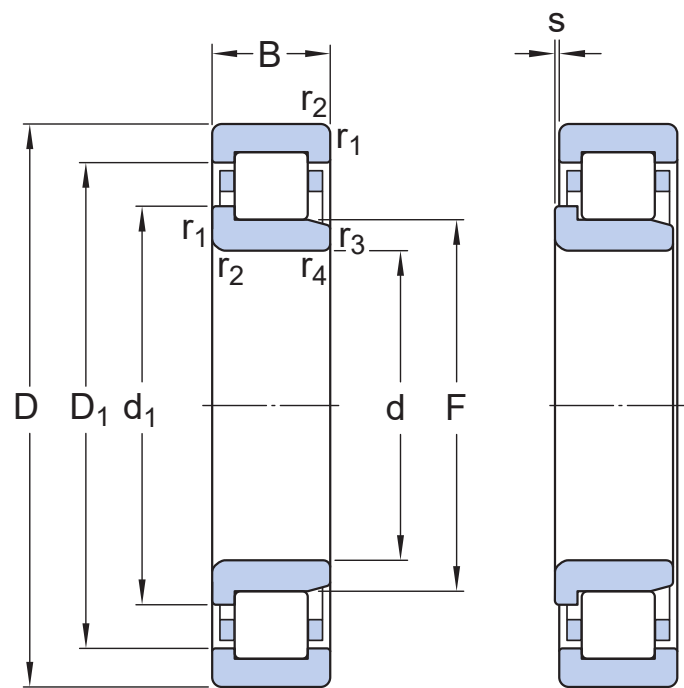
Properties

Bearing part	Complete bearing
Axial displacement capability	In one direction
Number of rows	1
Locating feature, bearing outer ring	None
Bore type	Cylindrical
Cage	Machined brass
Number of flanges, outer ring	2
Number of flanges, inner ring	1
Loose flange	None
Radial internal clearance	C3
Tolerance class	Normal
Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	Without
Indicative product carbon footprint to manufacture	9.03 kg CO ₂ e

Logistics

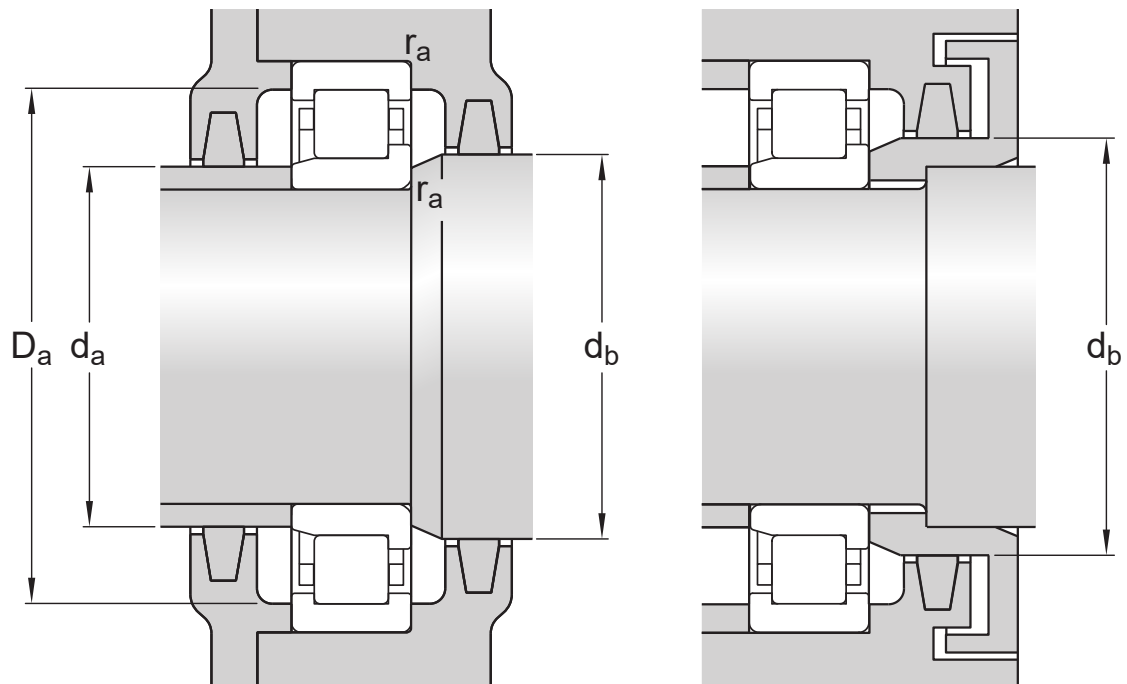
Product net weight	2.51 kg
eClass code	23-05-09-01
UNSPSC code	31171505

Technical specification



Dimensions

d	120 mm	Bore diameter
D	180 mm	Outside diameter
B	28 mm	Width
d_1	≈ 141 mm	Shoulder diameter of inner ring
D_1	≈ 159.7 mm	Shoulder diameter of outer ring
D_1	≈ 159 mm	Shoulder diameter of outer ring
F	135 mm	Raceway diameter of inner ring
$r_{1,2}$	min. 2 mm	Chamfer dimension
$r_{1,2}$	min. 2 mm	Chamfer dimension
$r_{3,4}$	min. 2 mm	Chamfer dimension
$r_{3,4}$	min. 1.1 mm	Chamfer dimension
s	max. 3.8 mm	Permissible axial displacement



Abutment dimensions

d_a	min. 129 mm	Diameter of spacer sleeve
d_a	max. 133 mm	Diameter of spacer sleeve
d_b	min. 143 mm	Diameter of shaft abutment
D_a	max. 171 mm	Diameter of housing abutment
r_a	max. 2 mm	Radius of fillet
r_a	max. 2 mm	Radius of fillet
r_b	max. 1 mm	Radius of fillet

Calculation data

SKF performance class		SKF Explorer
Basic dynamic load rating	C	153 kN
Basic static load rating	C_0	183 kN
Fatigue load limit	P_u	20.8 kN
Reference speed		4 000 r/min
Limiting speed		6 300 r/min
Minimum load factor	k_r	0.15
Limiting value	e	0.2
Calculation factor	Y	0.6

Tolerances and clearances




GENERAL BEARING SPECIFICATIONS

- Tolerances: Normal (metric), P6, Normal (inch)
- Radial internal clearance: cylindrical bore, tapered bore
- Axial internal clearance: NUP, NJ + HJ

BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fit

More Information

<div> Product details</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>Designation system</div>	<div> Engineering information</div> <div>Principles of rolling bearing selection</div> <div>General bearing knowledge</div> <div>Bearing selection process</div> <div>Bearing failure and how to prevent it</div>	<div> Tools</div> <div>SimPro Quick</div> <div>SKF Product select</div> <div>Bearing Frequency Calculator</div> <div>LubeSelect for SKF greases</div> <div>Heater selection tool</div> <div>Oil Injection Method Program</div>
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