



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

HK 1210 E

Drawn cup needle roller bearing with open ends

Drawn cup needle roller bearings are typically used in applications where the housing bore cannot be used as a raceway for a needle roller and cage assembly, but where a very compact and economical bearing arrangement is required. Owing to their large number of rollers, the bearings have a high load carrying capacity and stiffness.

- High radial load carrying capacity
- High stiffness
- Very low cross-sectional height

Overview

Dimensions

Bore diameter of needle roller complement	12 mm
Outside diameter	16 mm
Width	10 mm

Performance

Basic dynamic load rating	5.01 kN
Basic static load rating	6.8 kN
Reference speed	16 000 r/min
Limiting speed	18 000 r/min

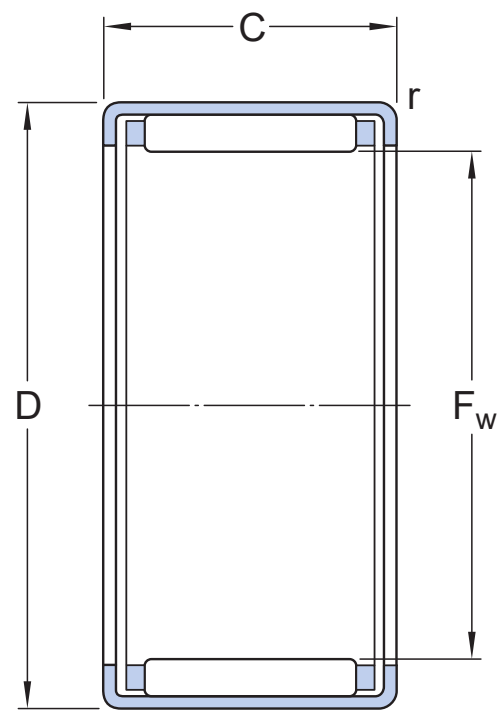
Properties

Bearing part	Bearing without inner ring
Number of rows	1
Outer ring type	Drawn cup with open ends
Aligning feature	Without
Cage	Sheet steel
Number of flanges, outer ring	2
Tolerance class	Normal
Material, bearing	Bearing steel
Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	Without
Indicative product carbon footprint to manufacture	0.0162 kg CO ₂ e

Logistics

Product net weight	0.0045 kg
eClass code	23-05-09-03
UNSPSC code	31171512

Technical specification



Dimensions

F _w	12 mm	Diameter under rollers
D	16 mm	Outside diameter
C	10 mm	Width
r	min. 0.4 mm	Chamfer dimension drawn cup (outer ring)

Calculation data

Basic dynamic load rating	C	5.01 kN
Basic static load rating	C ₀	6.8 kN
Fatigue load limit	P _u	0.75 kN
Reference speed		16 000 r/min
Limiting speed		18 000 r/min

Associated products

Inner ring IR series	IR 8x12x10.5
Inner ring LR series	LR 8x12x10.5

Radial shaft seal with a low cross-sectional height, single lip

G 12x16x3

Tolerances and clearances

GENERAL BEARING SPECIFICATIONS

- Tolerances: [table](#)

DESIGN CONSIDERATIONS




- [Shaft and housing tolerances: table](#)

Compatible products

Recommended product

Inner ring for needle roller bearings, IR series	IR 8X12X10.5
Inner ring for needle roller bearings, LR series	LR 8X12X10.5
Radial shaft seal with low cross-sectional height for needle roller bearings, G design	G 12X16X3

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>Mounting</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>Bearing Select</div> <div>Engineering Calculator</div> <div>LubeSelect for SKF greases</div> <div>Heater Selection Tool</div> <div>skf.com/mount</div>
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