

# HK 4020 Drawn cup needle roller bearing with open ends



## 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	40 mm
Outside diameter	47 mm
Width	20 mm

## Performance

Basic dynamic load rating	24.2 kN
Basic static load rating	53 kN
Reference speed	6 300 r/min
Limiting speed	7 000 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

## Technical Specification



### Dimensions

$F_w$	40 mm	Diameter under rollers
D	47 mm	Outside diameter
C	20 mm	Width
r	min. 0.8 mm	Chamfer dimension drawn cup (outer ring)

### Calculation data

Basic dynamic load rating	C	24.2 kN
Basic static load rating	$C_0$	53 kN
Fatigue load limit	$P_u$	6.4 kN
Reference speed		6 300 r/min
Limiting speed		7 000 r/min

### Mass

Mass bearing	0.054 kg
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### Associated products

Inner ring IR series	IR 35x40x20.5
Inner ring LR series	LR 35x40x20.5
Radial shaft seal with a low cross-sectional height, single lip	G 40x47x4
Radial shaft seal with a low cross-sectional height, double lip	SD 40x47x4

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