

HK 2820

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	28 mm
Outside diameter	35 mm
Width	20 mm

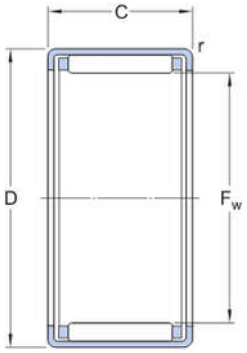
Performance

Basic dynamic load rating	20.1 kN
Basic static load rating	36.5 kN
Limiting speed	9 500 r/min
Reference speed	9 000 r/min

Properties

Aligning feature	Without
Bearing part	Bearing without inner ring
Cage	Sheet steel
Coating	Without
Lubricant	None
Material, bearing	Bearing steel
Number of flanges, outer ring	2
Number of rows	1
Outer ring type	Drawn cup with open ends
Relubrication feature	Without
Sealing	Without
Tolerance class	Normal

Technical Specification



Dimensions

F_w	28	mm	Diameter under rollers
D	35	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	20.1 kN
Basic static load rating	C_0	36.5 kN
Fatigue load limit	P_u	4.4 kN
Reference speed		9 000 r/min
Limiting speed		9 500 r/min

Mass

Mass bearing	0.036 kg

Associated products

Inner ring IR series	IR 22x28x20.5
Inner ring LR series	LR 22x28x20.5
Radial shaft seal with a low cross-sectional height, single lip	G 28x35x4
Radial shaft seal with a low cross-sectional height, double lip	SD 28x35x4

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