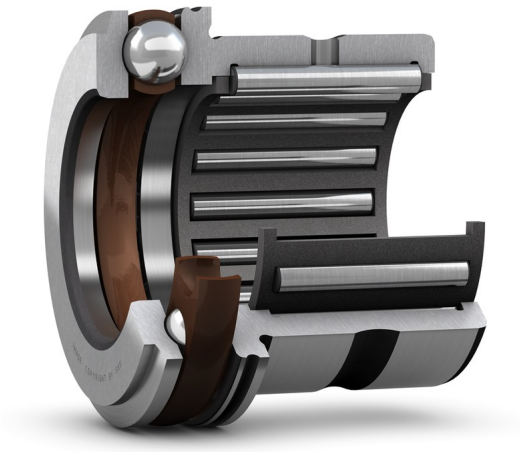


NKX 45Combined needle roller / thrust ball bearing

Combined needle roller / thrust ball bearing

These bearings consist of a radial needle roller bearing combined with a thrust ball bearing. Together they can accommodate both radial loads and axial loads in one direction. In addition, they can operate at relatively high speeds. Their low cross-sectional height makes the bearings particularly suitable for applications where other types of locating bearing arrangements occupy too much space.

- Accommodate radial and axial loads in one direction
- High load carrying capacity
- Relatively high-speed capability
- Low cross section
- Separable design

Overview

Dimensions

Bore diameter	45 mm
Outside diameter	58 mm
Width	32 mm

Performance

Reference speed	4 500 r/min
Limiting speed	6 300 r/min

Properties

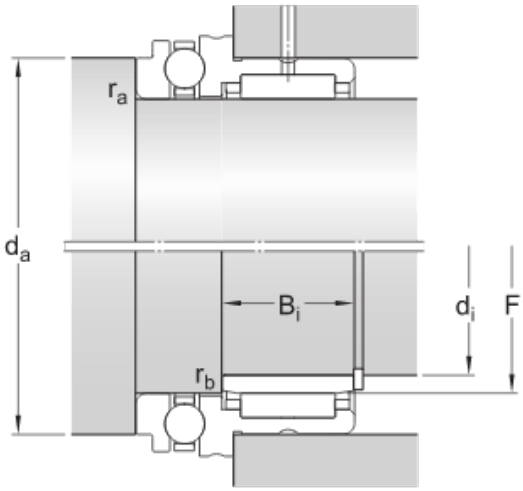
Rolling bearing type	Needle roller / thrust ball bearing
Bearing part	Radial part without inner ring
Thrust part	With cage
Radial part	With cage
Rolling element (thrust part)	Balls
Axial load capability	Single-direction
Tolerance class	Other
Material, bearing	Bearing steel
Coating	Without
Lubricant (thrust part)	None

Technical Specification

NOT FOUND

Dimensions

F_w	45 mm	Diameter under rollers
D	58 mm	Outside diameter
C	32 mm	Width
C_1	14 mm	Width of thrust part
C_1	9 mm	Distance side face to lubrication hole
d	45 mm	Bore diameter of thrust part
D_1	65.2 mm	Diameter of flange
$r_{1,2}$	min. 0.6 mm	Chamfer dimension



Abutment dimensions

d_a	min. 60.5 mm	Diameter of shaft abutment
r_a	max. 0.6 mm	Radius of fillet
r_b	max. 0.3 mm	Radius of fillet
d_i	40 mm	Bore diameter of associated inner ring
F	45 mm	Diameter of inner ring raceway
B_i	20 mm	Width of associated inner ring

Calculation data

Basic dynamic load rating, radial	C	27.5 kN
Basic static load rating, radial	C_0	57 kN
Basic dynamic load rating, axial	C	28.1 kN
Basic static load rating, axial	C_0	75 kN
Fatigue load limit, radial	P_u	7.1 kN
Fatigue load limit, axial	P_u	2.8 kN
Minimum axial load factor	A	0.029

Reference speed	4 500 r/min
Limiting speed	6 300 r/min

Mass

Mass	0.25 kg

Associated products

Inner ring	IR 40x45x20

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