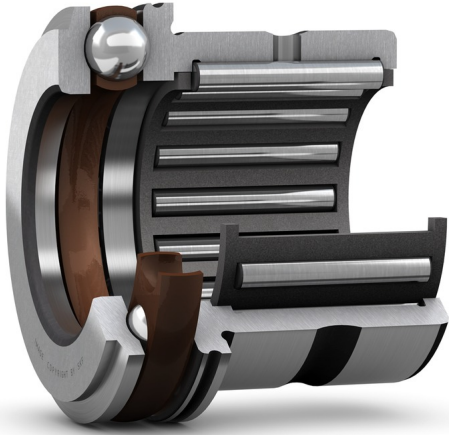


# NKX 35 Combined needle roller / thrust ball bearing



## 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	35 mm
Outside diameter	47 mm
Width	30 mm

### Performance

Reference speed	5 600 r/min
Limiting speed	7 500 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

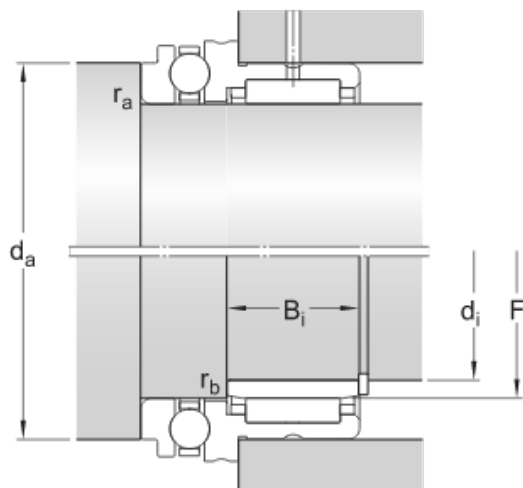


## Dimensions

$F_w$	35 mm	Diameter under rollers
$D$	47 mm	Outside diameter
$C$	30 mm	Width
$C_1$	12 mm	Width of thrust part
$C_1$	9 mm	Distance side face to lubrication hole
$d$	35 mm	Bore diameter of thrust part
$D_1$	52.1 mm	Diameter of flange
$r_{1,2}$	min. 0.6 mm	Chamfer dimension

## Abutment dimensions

$d_a$	min. 47.7 mm	Diameter of shaft abutment
$r_a$	max. 0.6 mm	Radius of fillet
$r_b$	max. 0.3 mm	Radius of fillet
$d_i$	30 mm	Bore diameter of associated inner ring
$F$	35 mm	Diameter of inner ring raceway
$B_i$	20 mm	Width of associated inner ring



## Calculation data

Basic dynamic load rating, radial	$C$	24.6 kN
Basic static load rating, radial	$C_0$	45 kN
Basic dynamic load rating, axial	$C$	21.2 kN
Basic static load rating, axial	$C_0$	51 kN
Fatigue load limit, radial	$P_u$	5.6 kN
Fatigue load limit, axial	$P_u$	1.9 kN
Minimum axial load factor	$A$	0.013

Reference speed	5 600 r/min
Limiting speed	7 500 r/min

## Mass

Mass	0.16 kg
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## Associated products

Inner ring	IR 30x35x20
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