

NKX 25

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	0.984 in
Outside diameter	1.457 in
Width	1.181 in

Performance

Limiting speed	9 000 r/min
Reference speed	6 300 r/min

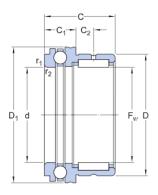
Properties

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



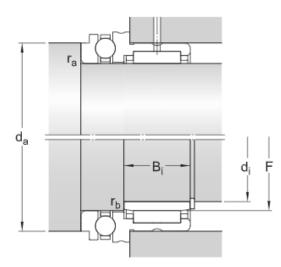


Technical Specification



Dimensions

F_{w}	0.984 in	Diameter under rollers
D	1.457 in	Outside diameter
С	1.181 in	Width
C_1	0.433 in	Width of thrust part
C ₁	0.374 in	Distance side face to lubrication hole
d	0.984 in	Bore diameter of thrust part
D_1	1.657 in	Diameter of flange
r _{1,2}	min. 0.024 in	Chamfer dimension



Abutment dimensions

d _a	min. 1.484 in	Diameter of shaft abutment
r _a	max. 0.024 in	Radius of fillet
r _b	max. 0.012 in	Radius of fillet
di	0.787 in	Bore diameter of associated inner ring
F	0.984 in	Diameter of inner ring raceway
Bi	0.787 in	Width of associated inner ring

Calculation data

Basic dynamic load rating, radial	С	4 271 lbf
Basic static load rating, radial	C _O	7 306 lbf
Basic dynamic load rating, axial	С	4 384 lbf
Basic static load rating, axial	C ₀	9105 lbf
Fatigue load limit, radial	P _u	899 lbf
Fatigue load limit, axial	P _u	337 lbf
Minimum axial load factor	А	0.0085



Reference speed	6 300 r/min
Limiting speed	9 000 r/min
Mass	
Mass	0.276 lb
Associated products	

Inner ring

IR 20x25x20



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