



SKF NKIB 5903

Combined needle roller / angular contact ball bearing for axial loads in both directions

These bearings consist of a radial needle roller bearing combined with an angular contact ball bearing. Together they can accommodate both heavy radial loads and light axial loads in both directions. In addition, they can operate at 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.

Technical specifications

Dimensions	
Bore diameter	17 mm
Outside diameter	30 mm
Width	20 mm
Width of outer ring	18 mm
Diameter of inner ring raceway	22 mm
Chamfer dimension	0.3 mm
Width, outer ring	18 mm

Abutment dimensions	
Diameter of shaft abutment	19 mm
Diameter of housing abutment	28 mm
Radius of fillet	0.3 mm

Calculation data	
Basic dynamic load rating, radial	11.4 kN
Basic static load rating, radial	16.3 kN
Basic dynamic load rating, axial	2.24 kN
Basic static load rating, axial	2.74 kN
Fatigue load limit, radial	1.96 kN
Fatigue load limit, axial	0.116 kN
Reference speed	18000 r/min
Limiting speed	20000 r/min

Performance	
Reference speed	18000 r/min
Limiting speed	20000 r/min

Properties	
Rolling bearing type	Needle roller / angular contact ball bearing
Bearing part	Complete bearing
Thrust part	With cage
Radial part	With cage
Rolling element (thrust part)	Balls
Axial load capability	Double-direction
Radial internal clearance	CN
Tolerance class	Not applicable
Material, bearing	Bearing steel
Coating	Without
Lubricant (thrust part)	None
Indicative carbon footprint for new product	0.2 kg CO ₂ e

Logistics	
Product net weight	0.0558 kg
eClass code	23-05-09-03
UNSPSC code	31171512

