



SKF NKIA 5904

Combined needle roller / angular contact ball bearing for axial loads in one direction

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 one direction. 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	20 mm
Outside diameter	37 mm
Width	23 mm
Diameter of inner ring raceway	25 mm
Chamfer dimension	0.3 mm
Width, outer ring	23 mm

Abutment dimensions	
Diameter of shaft abutment	22 mm
Diameter of housing abutment	35 mm
Radius of fillet	0.3 mm

Calculation data	
Basic dynamic load rating, radial	21.6 kN
Basic static load rating, radial	28 kN
Basic dynamic load rating, axial	3.79 kN
Basic static load rating, axial	4.21 kN
Fatigue load limit, radial	3.35 kN
Fatigue load limit, axial	0.176 kN
Reference speed	15000 r/min
Limiting speed	17000 r/min

Performance	
Reference speed	15000 r/min
Limiting speed	17000 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	Single-direction
Radial internal clearance	CN
Tolerance class	Normal
Material, bearing	Bearing steel
Coating	Without
Lubricant (thrust part)	None
Indicative carbon footprint for new product	0.37 kg CO ₂

Logistics	
Product net weight	0.103 kg
eClass code	23-05-09-03
UNSPSC code	31171512

SKF drawings

