



SKF NN 3014 KTN/SPW33

Super-precision double row cylindrical roller bearing with tapered bore and lubrication

Super-precision double row cylindrical roller bearings in the NN 30 series provide a unique balance between load carrying capacity, rigidity and speed. Having three flanges on the inner ring and no flanges on the outer ring, the bearings can accommodate axial displacement in both directions. The separable design simplifies mounting and dismounting, particularly when load conditions require both rings to have an interference fit. The tapered bore enables accurate adjustment of clearance or preload during mounting.

Technical specifications

General	
Bore type	Tapered 1:12
Dimensions	
Bore diameter	70 mm
Outside diameter	110 mm
Width	30 mm
Shoulder diameter inner ring (NN design)	85.6 mm
Raceway diameter outer ring (NN design)	100 mm
Width annular lubrication groove at outer ring	5.5 mm
Diameter lubrication hole (outer ring)	3 mm
Chamfer dimension outer ring	1.1 mm
Chamfer dimension inner ring (bearing with tapered bore)	0.6 mm
Permissible axial displacement from the normal position of one bearing ring relative to the other (all)	2 mm
Abutment dimensions	
Abutment diameter shaft	76.5 mm
Abutment diameter housing	101 mm
Abutment diameter housing	103.5 mm
Fillet radius	1 mm
Oil nozzle position (not for variants with TNHA cage)	98.4 mm
Calculation data	
Basic dynamic load rating	96.8 kN
Basic static load rating	150 kN
Fatigue load limit	17.3 kN
Attainable speed for grease lubrication	8000 r/min
Attainable speed for oil-air lubrication	9000 r/min
Reference grease quantity	5.9 cm ³
Static radial stiffness (guideline value)	1610 N/μm
Performance	
Basic dynamic load rating	96.8 kN
Basic static load rating	150 kN
Attainable speed for grease lubrication	8000 r/min
Attainable speed for oil-air lubrication	9000 r/min
Properties	
Bearing part	Complete bearing
Number of rows	2
Bore type	Tapered 1:12
Cage	Non-metallic
Design	NN
Number of flanges, outer ring	0
Number of flanges, inner ring	3
Loose flange	None
Radial internal clearance	C1

Tolerance class	Class SP (SP)
Material, bearing	Bearing steel
Coating	Without
Sealing	Without
Lubricant	None
Relubrication feature	Annular groove and lubrication holes
Indicative carbon footprint for new product	3.5 kg CO ₂ e

Logistics	
Product net weight	0.983 kg
eClass code	23-05-09-01
UNSPSC code	31171505

SKF drawings