



SKF NNU 4924 BK/SPW33

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

Super-precision double row cylindrical roller bearings in the NNU 49 series are designed to accommodate heavy radial loads and high speeds, while providing a high degree of stiffness. Having three flanges on the outer ring and no flanges on the inner 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	120 mm
Outside diameter	165 mm
Width	45 mm
Shoulder diameter outer ring (NNU design)	150.5 mm
Raceway diameter inner ring (NNU design)	134.5 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)	1.1 mm

Abutment dimensions	
Abutment diameter shaft	126 mm
Abutment diameter shaft (NNU design)	133 mm
Abutment diameter housing	158.5 mm
Fillet radius	1 mm
Oil nozzle position (not for variants with TNHA cage)	135.8 mm

Calculation data	
Basic dynamic load rating	176 kN
Basic static load rating	340 kN
Fatigue load limit	37.5 kN
Attainable speed for grease lubrication	4800 r/min
Attainable speed for oil-air lubrication	5300 r/min
Reference grease quantity	27 cm ³
Static radial stiffness (guideline value)	3140 N/μm

Performance	
Basic dynamic load rating	176 kN
Basic static load rating	340 kN
Attainable speed for grease lubrication	4800 r/min
Attainable speed for oil-air lubrication	5300 r/min

Properties	
Bearing part	Complete bearing
Number of rows	2
Bore type	Tapered 1:12
Cage	Machined metal
Design	NNU
Number of flanges, outer ring	3
Number of flanges, inner ring	0
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	10 kg CO ₂ e

Logistics	
Product net weight	2.78 kg
eClass code	23-05-09-01
UNSPSC code	31171505

SKF drawings