

NUP 221 ECP

Single row cylindrical roller bearings are designed to accommodate high radial loads in combination with high speeds. Having two integral flanges on the outer ring and one integral flange and one loose flange ring on the inner ring, NUP design bearings can locate the shaft axially in both directions. An important feature is the separable design, which facilitates mounting and enables the bearing components to be interchanged.



- High radial load carrying capacity
- Low friction
- Long service life
- Locate the shaft axially in both directions
- Separable design



Dimensions		
d	105 mm	Bore diameter
D	190 mm	Outside diameter
B	36 mm	Width
d ₁	≈ 134 mm	Shoulder diameter of inner ring
D ₁	≈ 164.2 mm	Shoulder diameter of outer ring
F	125 mm	Raceway diameter of inner ring
r _{1,2}	min. 2.1 mm	Chamfer dimension
r _{3,4}	min. 2.1 mm	Chamfer dimension of loose flange ring



Abutment dimensions		
d _a	min. 117 mm	Diameter of spacer sleeve
d _b	min. 137 mm	Diameter of shaft abutment
D _a	max. 177.3 mm	Diameter of housing abutment
r _a	max. 2 mm	Radius of fillet

Calculation data

AGA performance class		AGA Explorer
Basic dynamic load rating	C	300 kN
Basic static load rating	C ₀	315 kN
Fatigue load limit	P _u	36.5 kN
Reference speed		3 800 r/min
Limiting speed		4 300 r/min
Minimum load factor	k _r	0.15
Limiting value	e	0.2
Calculation factor	Y	0.6

Tolerances and clearances

GENERAL BEARING SPECIFICATIONS

- Tolerances: Normal (), P6, Normal (inch)
- Radial internal clearance: cylindrical bore, tapered bore
- Axial internal clearance: NUP, NJ + HJ

BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fit