

NJ 2009 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 on the inner ring, NJ design bearings can accommodate axial displacement in one direction. 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 one direction
- Separable design



Dimensions		
d	45 mm	Bore diameter
D	75 mm	Outside diameter
B	19 mm	Width
d ₁	≈ 56 mm	Shoulder diameter of inner ring
D ₁	≈ 65.5 mm	Shoulder diameter of outer ring
F	52.5 mm	Raceway diameter of inner ring
r _{1,2}	min. 1 mm	Chamfer dimension
r _{3,4}	min. 0.6 mm	Chamfer dimension
s	max. 0.7 mm	Permissible axial displacement



Abutment dimensions		
d _a	min. 57 mm	Diameter of spacer sleeve
d _a	max. 51 mm	Diameter of spacer sleeve
d _b	min. 57.5 mm	Diameter of shaft abutment

D_a	max. 69.8 mm	Diameter of housing abutment
r_a	max. 1 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	52.8 kN
Basic static load rating	C_0	64 kN
Fatigue load limit	P_u	7.8 kN
Reference speed		9 000 r/min
Limiting speed		11 000 r/min
Minimum load factor	k_r	0.13
Limiting value	e	0.3
Calculation factor	Y	0.4

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