

NU 2944 ECMA

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 no flanges on the inner ring, NU design bearings can accommodate axial displacement 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
- Accommodate axial displacement in both directions
- Separable design



Dimensions		
d	220 mm	Bore diameter
D	300 mm	Outside diameter
B	48 mm	Width
D ₁	≈ 275.6 mm	Shoulder diameter of outer ring
F	239 mm	Raceway diameter of inner ring
r _{1,2}	min. 2.1 mm	Chamfer dimension
r _{3,4}	min. 1.5 mm	Chamfer dimension
s	max. 2.6 mm	Permissible axial displacement



Abutment dimensions		
d _a	min. 231 mm	Diameter of spacer sleeve
d _a	max. 236 mm	Diameter of spacer sleeve
d _b	min. 242 mm	Diameter of shaft abutment
D _a	max. 289 mm	Diameter of housing abutment

r_a	max. 2 mm	Radius of fillet
r_b	max. 1.5 mm	Radius of fillet

Calculation data

Basic dynamic load rating	C	457 kN
Basic static load rating	C_0	830 kN
Fatigue load limit	P_u	83 kN
Reference speed		2 400 r/min
Limiting speed		3 000 r/min
Minimum load factor	k_r	0.11
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