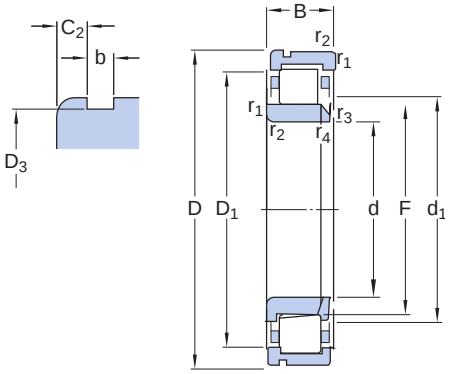
NUP 314 ECNP

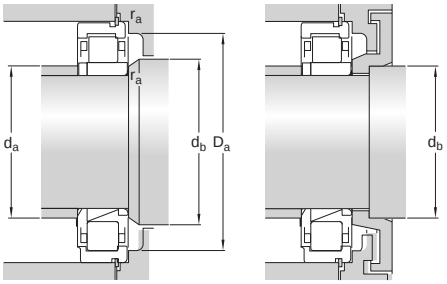
Single row cylindrical roller bearings are designed to accommodate high radial loads in combination with high speeds. Having two integral flanges on the outer ring and one integral flange and one loose flange ring on the inner ring, NUP design bearings can locate the shaft axially in both directions. An annular groove in the outer ring enables the bearings to retain a snap ring. 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	70 mm	Bore diameter
D	150 mm	Outside diameter
B	35 mm	Width
d_1	≈ 97.3 mm	Shoulder diameter of inner ring
D_1	≈ 125.75 mm	Shoulder diameter of outer ring
D_3	145.24 mm	Diameter of snap ring groove
F	89 mm	Raceway diameter of inner ring
C_2	4.9 mm	Distance from outer ring side face to snap ring groove
b	3.1 mm	Width of snap ring groove
$r_{1,2}$	min. 2.1 mm	Chamfer dimension
$r_{3,4}$	min. 2.1 mm	Chamfer dimension of loose flange ring



Abutment dimensions

d_a	min. 82 mm	Diameter of spacer sleeve
d_b	min. 100 mm	Diameter of shaft abutment
D_a	max. 137.5 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	236 kN
Basic static load rating	C_0	228 kN
Fatigue load limit	P_u	29 kN
Reference speed		4 800 r/min
Limiting speed		5 600 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