

NCF 2944 CV

Single row full complement cylindrical roller bearings are designed to accommodate very high radial loads in combination with moderate speeds. The bearings incorporate a maximum number of rollers as they are not equipped with a cage. Having two integral flanges on the inner ring and one flange on the outer ring, NCF design bearings can accommodate axial displacement in one direction. A retaining ring on the outer ring holds the bearing together. The retaining ring should not be loaded axially during operation.



- Very high radial load carrying capacity
- High radial stiffness
- Long service life
- Locate the shaft axially in one direction



Dimensions		
d	220 mm	Bore diameter
D	300 mm	Outside diameter
B	48 mm	Width
d ₁	≈ 247 mm	Shoulder diameter inner ring
D ₁	≈ 274 mm	Shoulder diameter outer ring
E	283 mm	Raceway diameter outer ring
s	max. 3 mm	Permissible axial displacement from the normal position of one bearing ring relative to the other
r _{1,2}	min. 2.1 mm	Chamfer dimension
r _{3,4}	min. 1.5 mm	Chamfer dimension



Abutment dimensions

d_a	min. 231 mm	Abutment diameter shaft
d_{as}	243 mm	Abutment diameter shaft
D_a	max. 289 mm	Abutment diameter housing
D_b	max. 291 mm	Abutment diameter housing
r_a	max. 2 mm	Fillet radius
r_b	max. 1.5 mm	Fillet radius

Calculation data

Basic dynamic load rating	C	550 kN
Basic static load rating	C_0	1 060 kN
Fatigue load limit	P_u	106 kN
Reference speed		900 r/min
Limiting speed		1 200 r/min
Calculation factor	k_r	0.2
Limiting value	e	0.3
Calculation factor	Y	0.4

Tolerances and clearances

GENERAL BEARING SPECIFICATIONS

- Tolerances: Normal
- Radial internal clearance: table

BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fit