



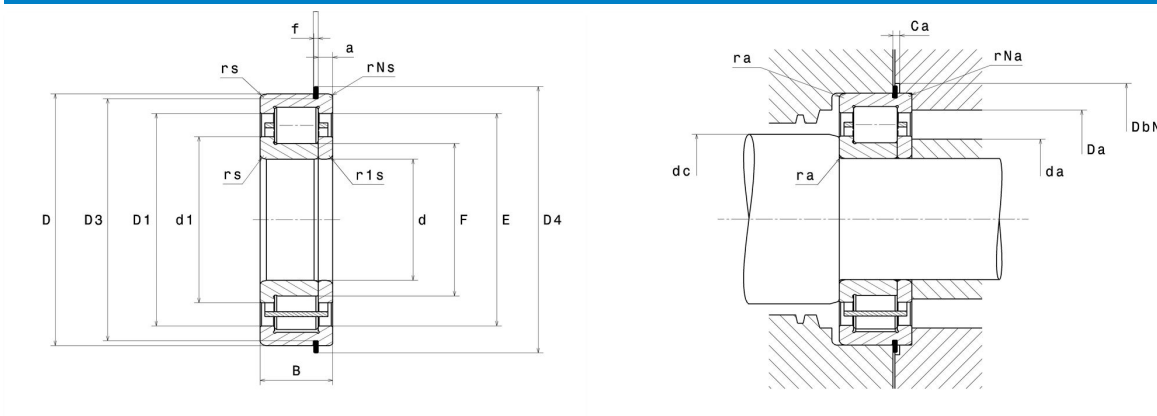
Technical datasheet

NUP309NRU

Single row cylindrical roller bearings

Single row cylindrical roller bearing with snap ring, separable, locating, pressed steel cage

Visual(s)



Product definition

d	45 mm
D	100 mm
B	25 mm
E	86.5 mm
F	58.5 mm
d1	64 mm
a min	3.07 mm
a max	3.28 mm
Ca min	5.43 mm
Ca max	5.74 mm
rNs min	0.5 mm
D3 max	96.8 mm
b min	2.7 mm
b max	3 mm
r0 max	0.6 mm
D4 max	106.5 mm
f	2.46 mm
Snap ring reference	R100
rs min	1.5 mm
r1s min	1.5 mm
Radial clearance class	CN
Mass (without HJ ring)	0.92 kg
Brand	NTN

Product performance

Dynamic load, C	74 kN
Static load, C0	71 kN
Fatigue limit load, Cu	8.7 kN
Nlim (oil)	8,400 rpm
Nlim (grease)	7,200 rpm
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	120 °C
Characteristic cage frequency, FTF	0.4 Hz
Characteristic rolling element frequency, BSF	4.98 Hz
Characteristic outer ring frequency, BPF0	4.44 Hz
Characteristic inner ring frequency, BPFI	6.56 Hz

Abutment dimensions

da min	53 mm
dc min	66 mm
Da max	92 mm
DbN min	107.9 mm
ra max	1.5 mm
rNa max	0.5 mm

Calculation factors

Equivalent dynamic radial load

$$P = Fr$$

Equivalent static radial load

$$Po = Fr$$