

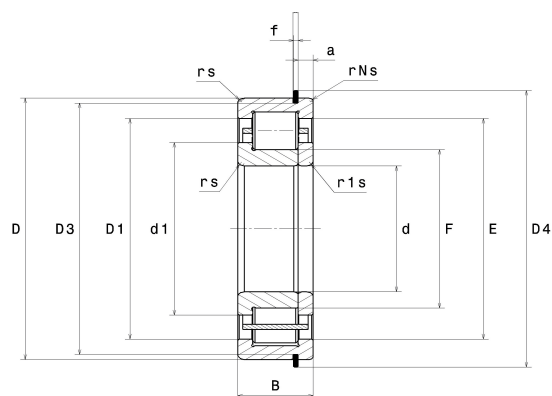
PDF technical sheet NUP309NRU



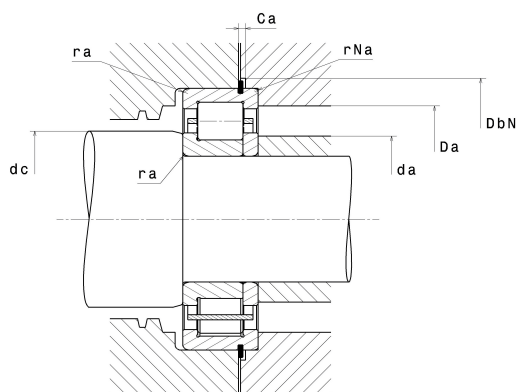
Single row cylindrical roller bearings

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

Product definition	
d	1.7717 "
D	3.9370 "
B	0.9843 "
E	3.4055 "
F	2.3031 "
d1	2.5197 "
a min	0.1209 "
a max	0.1291 "
Ca min	0.2138 "
Ca max	0.2260 "
rNs min	0.0197 "
D3 max	3.8110 "
b min	0.1063 "
b max	0.1181 "
r0 max	0.0236 "
D4 max	4.1929 "
f	0.0969 "
Snap ring reference	R100
rs min	0.0591 "
r1s min	0.0591 "
Radial clearance class	CN
Mass (without HJ ring)	3.25 oz
Brand	NTN



Product performance	
Dynamic load, C	74 kN
Static load, C0	71 kN
Fatigue limit load, Cu	8.70 kN
Nlim (oil)	8,400 RPM
Nlim (grease)	7,200 RPM
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	248 °C
Characteristic cage frequency, FTF	0.40 Hz
Characteristic rolling element frequency, BSF	4.99 Hz
Characteristic outer ring frequency, BPF0	4.44 Hz
Characteristic inner ring frequency, BPF1	6.56 Hz



Abutment dimensions

da min	2.0866 "
dc min	2.5984 "
Da max	3.6220 "
DbN min	4.2480 "
ra max	0.0591 "
rNa max	0.0197 "

Calculation factors

Equivalent dynamic radial load

$$P = Fr$$

Equivalent static radial load

$$P_0 = Fr$$