Technical data

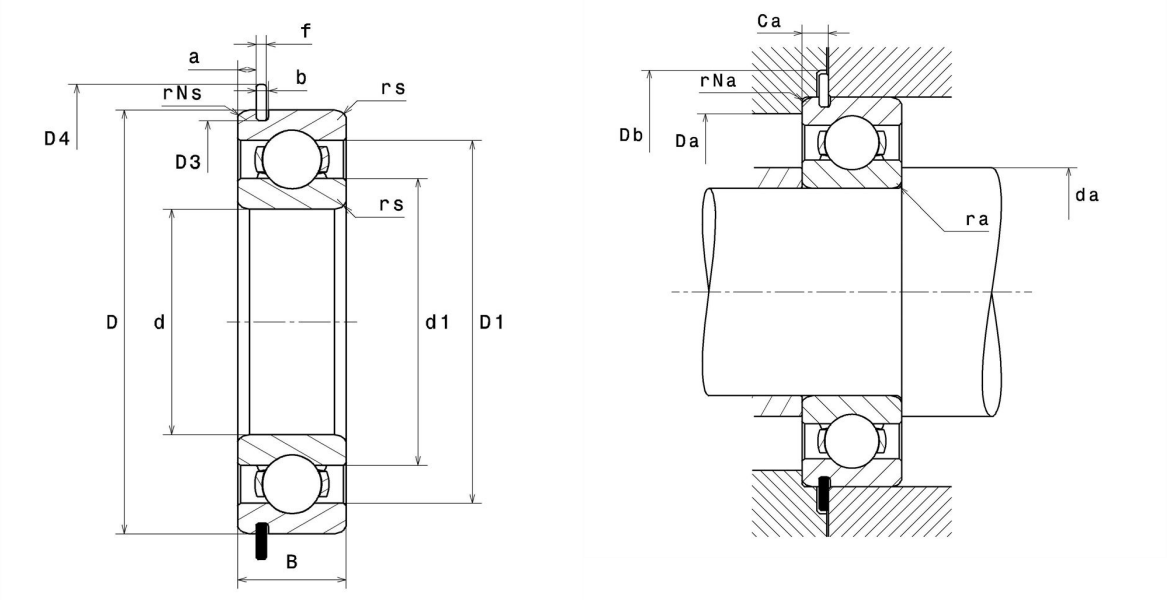
6203NRC3

Single row deep groove ball bearings



Deep groove ball bearing, radial contact, pressed steel cage, snap ring & groove on outer diameter, open

Visual(s)



Product definition

d	17 mm
D	40 mm
B	12 mm
a min	1.9 mm
a max	2.06 mm
Ca min	2.92 mm
Ca max	3.18 mm
rs min	0.6 mm
rNs min	0.5 mm
D3 max	38.1 mm
b min	1.35 mm
b max	1.65 mm
r0 max	0.4 mm
D4 max	44.6 mm
f	1.12 mm
Snap ring reference	R40
Radial clearance class	C3
Mass	0.07 kg
Brand	NTN

Product performance

Dynamic load, C	9.6 kN
Static load, C0	4.6 kN
Fatigue limit load, Cu	0.21 kN
f0	12.8
Nlim (oil)	21,000 Tr/min
Nlim (grease)	18,000 Tr/min
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	120 °C
Characteristic cage frequency, FTF	0.38 Hz
Characteristic rolling element frequency, BSF	3.78 Hz
Characteristic outer ring frequency, BPF0	2.63 Hz
Characteristic inner ring frequency, BPFI	4.37 Hz

Abutment dimensions

da min	21 mm
Da max	36 mm
ra max	0.6 mm
rNa max	0.5 mm
Db min	45.5 mm

Calculation factors

Equivalent dynamic radial load

P = X.Fr + Y.Fa

$\frac{f_0 F_a}{C_0}$	e	Fa / Fr ≤ e		Fa / Fr > e	
		X	Y	X	Y
0.172	0.19	1	0	0.56	2.3
0.345	0.22				1.99
0.689	0.26				1.71
1.03	0.28				1.55
1.38	0.3				1.45
2.07	0.34				1.31
3.45	0.38				1.15
5.17	0.42				1.04
6.89	0.44				1

Equivalent static radial load

Po = Xo.Fr + Yo.Fa

X_0	Y_0
0.6	0.5

For single or DT bearing arrangement :

If Po <Fr, then use Po = Fr