



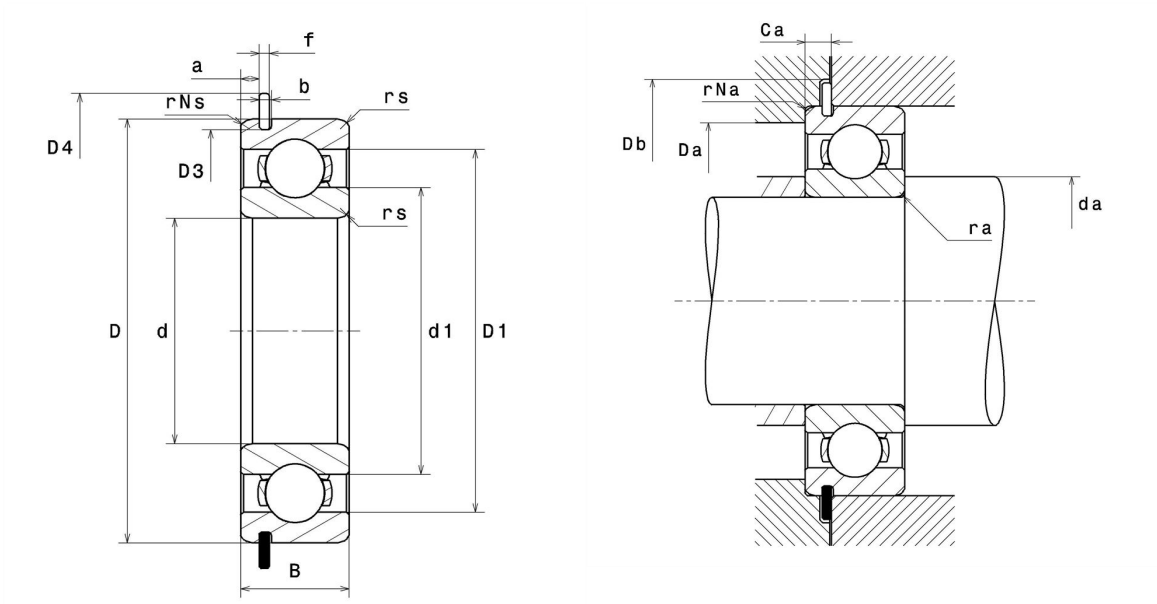
Technical datasheet

63/32NRC3

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	32 mm
D	75 mm
B	20 mm
a min	3.07 mm
a max	3.28 mm
Ca min	4.77 mm
Ca max	4.98 mm
rs min	1.1 mm
rNs min	0.5 mm
D3 max	71.83 mm
b min	1.9 mm
b max	2.2 mm
r0 max	0.6 mm
D4 max	81.6 mm
f	1.7 mm
Snap ring reference	R75
Radial clearance class	C3
Mass	0.38 kg
Brand	NTN

Product performance

Dynamic load, C	29.8 kN
Static load, C₀	16.9 kN
Fatigue limit load, C_u	0.77 kN
f₀	13.1
N_{lim} (oil)	11,000 rpm
N_{lim} (grease)	9,500 rpm
Min operating temperature, T_{min}	-60 °C
Characteristic cage frequency, FTF	0.38 Hz
Characteristic rolling element frequency, BSF	4.02 Hz
Characteristic outer ring frequency, BPF₀	3.06 Hz
Characteristic inner ring frequency, BPF_i	4.94 Hz

Abutment dimensions

da min	38.5 mm
Da max	68.5 mm
ra max	1 mm
rNa max	0.5 mm
Db min	83 mm

Calculation factors

Equivalent dynamic radial load

$$P = X.F_r + Y.F_a$$

$\frac{f_0 F_a}{C_0}$	e	F _a / F _r ≤ e		F _a / F _r > 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

$$P_0 = X_0.F_r + Y_0.F_a$$

X ₀	Y ₀
0.6	0.5

For single or DT bearing arrangement:

If P₀ < F_r, then use P₀ = F_r