



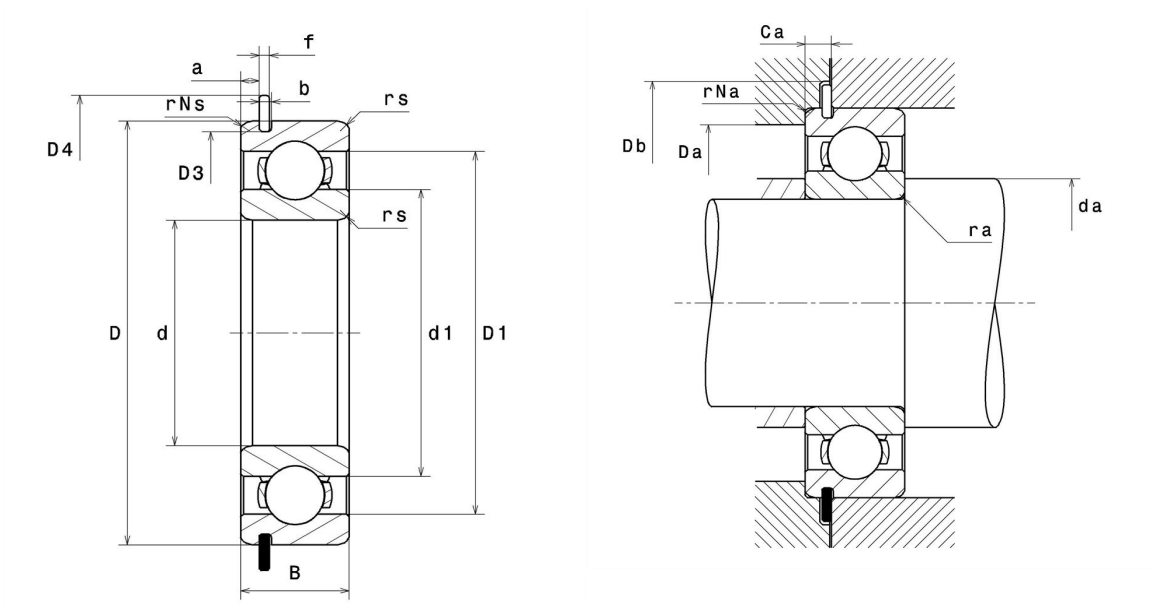
Technical datasheet

63/32NR

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	CN
Mass	0.38 kg
Brand	NTN

Product performance

Dynamic load, C	29.8 kN
Static load, C0	16.9 kN
Fatigue limit load, Cu	0.77 kN
f0	13.1
Nlim (oil)	11,000 rpm
Nlim (grease)	9,500 rpm
Min operating temperature, Tmin	-20 °C
Max operating temperature, Tmax	120 °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, BPFI	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	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

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

X_0	Y_0
0.6	0.5

For single or DT bearing arrangement:

If $P_0 < F_r$, then use $P_0 = F_r$