Technical data

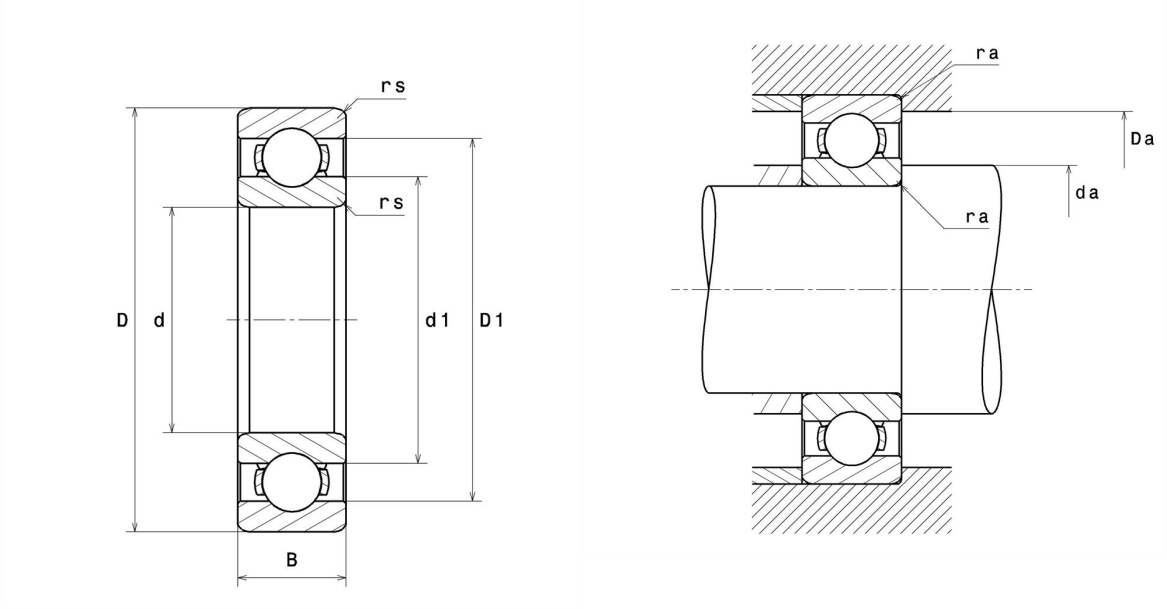
6814C3

Single row deep groove ball bearings



Deep groove ball bearing, radial contact, pressed steel cage, open

Visual(s)



Product definition

d	70 mm
D	90 mm
B	10 mm
rs min	0.6 mm
Radial clearance class	C3
Mass	0.14 kg
Brand	NTN

Product performance

Dynamic load, C	12.1 kN
Static load, C0	11.9 kN
Fatigue limit load, Cu	0.54 kN
f0	16.1
Nlim (oil)	8,100 Tr/min
Nlim (grease)	6,900 Tr/min
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	120 °C
Characteristic cage frequency, FTF	0.46 Hz
Characteristic rolling element frequency, BSF	14.33 Hz
Characteristic outer ring frequency, BPF0	11.17 Hz
Characteristic inner ring frequency, BPFI	12.83 Hz

Abutment dimensions

da min	74 mm
Da max	86 mm
ra max	0.6 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