Technical datasheet

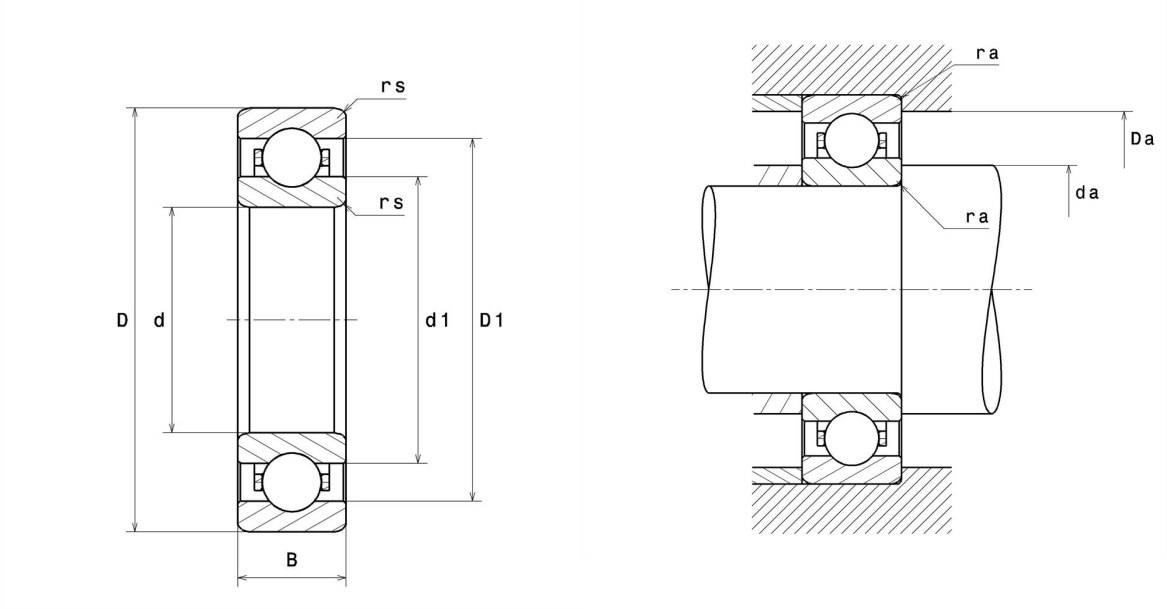
6844C3

Single row deep groove ball bearings



Deep groove ball bearing, radial contact, machined cage, open

Visual(s)



Product definition

d	220 mm
D	270 mm
B	24 mm
rs min	1.5 mm
Radial clearance class	C3
Mass	3 kg
Brand	NTN

Product performance

Dynamic load, C	76.5 kN
Static load, C0	98 kN
Fatigue limit load, Cu	2.85 kN
f0	16
Nlim (oil)	2,400 rpm
Nlim (grease)	2,100 rpm
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	120 °C
Characteristic cage frequency, FTF	0.47 Hz
Characteristic rolling element frequency, BSF	16.18 Hz
Characteristic outer ring frequency, BPF0	12.67 Hz
Characteristic inner ring frequency, BPFI	14.33 Hz

Abutment dimensions

da min	228 mm
Da max	262 mm
ra max	1.5 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