

PDF technical sheet 6321C3

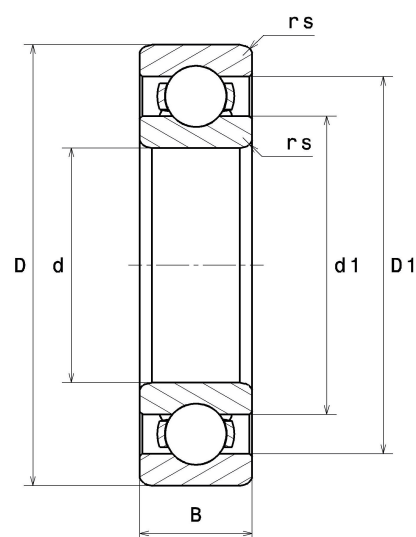


Single row deep groove ball bearings

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

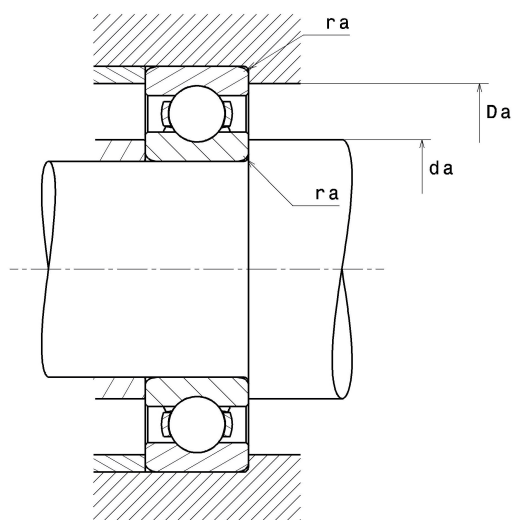
Product definition

d	105 mm
D	225 mm
B	49 mm
rs min	3 mm
Radial clearance class	C3
Mass	8.05 kg
Brand	NTN



Product performance

Dynamic load, C	184 kN
Static load, C0	153 kN
Fatigue limit load, Cu	5.40 kN
f0	13.2
Nlim (oil)	3,600 Tr/min
Nlim (grease)	3,000 Tr/min
Min operating temperature, Tmin	-20 °C
Max operating temperature, Tmax	120 °C
Characteristic cage frequency, FTF	0.39 Hz
Characteristic rolling element frequency, BSF	4.10 Hz
Characteristic outer ring frequency, BPF0	3.08 Hz
Characteristic inner ring frequency, BPFI	4.92 Hz



Abutment dimensions

da min	118 mm
Da max	212 mm
ra max	2.50 mm

Calculation factors

Equivalent dynamic radial load

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

$\frac{f_0 F_a}{C_0}$	e	$F_a / F_r \leq e$		$F_a / F_r > e$	
		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 $P_0 < F_r$, then use $P_0 = F_r$