

PDF technical sheet 6240L1C3

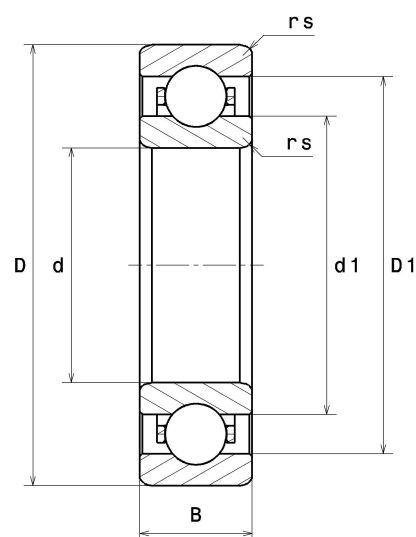


Single row deep groove ball bearings

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

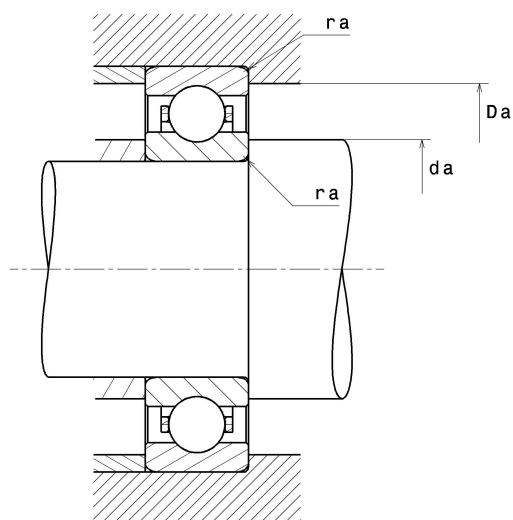
Product definition

d	200 mm
D	360 mm
B	58 mm
rs min	4 mm
Radial clearance class	C3
Mass	21.60 kg
Brand	NTN



Product performance

Dynamic load, C	269 kN
Static load, C0	310 kN
Fatigue limit load, Cu	8.40 kN
f0	15.2
Nlim (oil)	2,000 Tr/min
Nlim (grease)	1,700 Tr/min
Min operating temperature, Tmin	-60 °C
Characteristic cage frequency, FTF	0.43 Hz
Characteristic rolling element frequency, BSF	6.64 Hz
Characteristic outer ring frequency, BPF0	5.12 Hz
Characteristic inner ring frequency, BPF1	6.88 Hz



Abutment dimensions

da min	216 mm
Da max	344 mm
ra max	3 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 $P_0 = F_r$