

PDF technical sheet 6034C3



Single row deep groove ball bearings

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

Product definition

d	170 mm
D	260 mm
B	42 mm
rs min	2.10 mm
Radial clearance class	C3
Mass	6.76 kg
Brand	NTN



Product performance

Dynamic load, C	168 kN
Static load, C0	172 kN
Fatigue limit load, Cu	5.30 kN
f0	15.8
Nlim (oil)	2,800 Tr/min
Nlim (grease)	2,400 Tr/min
Min operating temperature, Tmin	-60 °C
Max operating temperature, Tmax	120 °C
Characteristic cage frequency, FTF	0.44 Hz
Characteristic rolling element frequency, BSF	7.84 Hz
Characteristic outer ring frequency, BPF0	6.56 Hz
Characteristic inner ring frequency, BPFI	8.44 Hz



Abutment dimensions

da min	181 mm
Da max	249 mm
ra max	2 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 $P_0 = F_r$