

PDF technical sheet 6030C4



Single row deep groove ball bearings

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

Product definition

d	150 mm
D	225 mm
B	35 mm
rs min	2.10 mm
Radial clearance class	C4
Mass	4.08 kg
Brand	NTN



Product performance

Dynamic load, C	126 kN
Static load, C0	126 kN
Fatigue limit load, Cu	4.20 kN
f0	15.9
Nlim (oil)	3,200 Tr/min
Nlim (grease)	2,800 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	8.32 Hz
Characteristic outer ring frequency, BPF0	7.05 Hz
Characteristic inner ring frequency, BPFI	8.95 Hz



Abutment dimensions

da min	161 mm
Da max	214 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 $P_0 = F_r$