

PDF technical sheet 6038C3



Single row deep groove ball bearings

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

Product definition

d	190 mm
D	290 mm
B	46 mm
rs min	2.10 mm
Radial clearance class	C3
Mass	9.18 kg
Brand	NTN



Product performance

Dynamic load, C	197 kN
Static load, C0	215 kN
Fatigue limit load, Cu	6.30 kN
f0	15.8
Nlim (oil)	2,500 Tr/min
Nlim (grease)	2,100 Tr/min
Min operating temperature, Tmin	-60 °C
Characteristic cage frequency, FTF	0.44 Hz
Characteristic rolling element frequency, BSF	7.83 Hz
Characteristic outer ring frequency, BPF0	6.56 Hz
Characteristic inner ring frequency, BPF1	8.44 Hz



Abutment dimensions

da min	201 mm
Da max	279 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 $P_0 = F_r$