

PDF technical sheet 6330C3



Single row deep groove ball bearings

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

Product definition

d	150 mm
D	320 mm
B	65 mm
rs min	4 mm
Radial clearance class	C3
Mass	22 kg
Brand	NTN



Product performance

Dynamic load, C	274 kN
Static load, C0	284 kN
Fatigue limit load, Cu	8.40 kN
f0	13.9
Nlim (oil)	2,400 Tr/min
Nlim (grease)	2,100 Tr/min
Min operating temperature, Tmin	-60 °C
Characteristic cage frequency, FTF	0.40 Hz
Characteristic rolling element frequency, BSF	4.73 Hz
Characteristic outer ring frequency, BPF0	3.59 Hz
Characteristic inner ring frequency, BPF1	5.41 Hz



Abutment dimensions

da min	166 mm
Da max	304 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 $P_0 = F_r$