

PDF technical sheet

6888



Single row deep groove ball bearings

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

Product definition

d	17.3228 "
D	21.2598 "
B	1.8110 "
rs min	0.0827 "
Radial clearance class	CN
Mass	79.37 oz
Brand	NTN



Product performance

Dynamic load, C	264 kN
Static load, C0	420 kN
Fatigue limit load, Cu	8.60 kN
f0	16
Nlim (oil)	1,100 RPM
Nlim (grease)	950 RPM
Min operating temperature, Tmin	-4 °C
Max operating temperature, Tmax	248 °C
Characteristic cage frequency, FTF	0.47 Hz
Characteristic rolling element frequency, BSF	15.37 Hz
Characteristic outer ring frequency, BPF0	12.16 Hz
Characteristic inner ring frequency, BPF1	13.84 Hz



Abutment dimensions

da min	17.7559 "
Da max	20.8268 "
ra max	0.0787 "

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 $P_0 = F_r$