

PDF technical sheet 6248C3



Single row deep groove ball bearings

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

Product definition

d	9.4488 "
D	17.3228 "
B	2.8346 "
rs min	0.1575 "
Radial clearance class	C3
Mass	182.37 oz
Brand	NTN



Product performance

Dynamic load, C	360 kN
Static load, C0	470 kN
Fatigue limit load, Cu	11.50 kN
Nlim (oil)	1,800 RPM
Nlim (grease)	1,400 RPM
Min operating temperature, Tmin	-76 °C
Characteristic cage frequency, FTF	0.43 Hz
Characteristic rolling element frequency, BSF	6.64 Hz
Characteristic outer ring frequency, BPF0	5.12 Hz
Characteristic inner ring frequency, BPFI	6.88 Hz



Abutment dimensions

da min	10.0787 "
Da max	16.6929 "
ra max	0.1181 "

Calculation factors

Equivalent dynamic radial load

$$P = X \cdot Fr + Y \cdot Fa$$

$\frac{f_0 F_a}{C_0}$	e	$F_a / Fr \leq e$		$F_a / Fr > e$	
		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

$$P_0 = X_0 \cdot Fr + Y_0 \cdot Fa$$

X_0	Y_0
0.6	0.5

For single or DT bearing arrangement :

If $P_0 < Fr$, then use $P_0 = Fr$