

PDF technical sheet

6860



Single row deep groove ball bearings

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

Product definition

d	11.8110 "
D	14.9606 "
B	1.4961 "
rs min	0.0827 "
Radial clearance class	CN
Mass	37.04 oz
Brand	NTN



Product performance

Dynamic load, C	162 kN
Static load, C0	210 kN
Fatigue limit load, Cu	5.20 kN
f0	16.1
Nlim (oil)	1,700 RPM
Nlim (grease)	1,500 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	14.21 Hz
Characteristic outer ring frequency, BPF0	10.70 Hz
Characteristic inner ring frequency, BPFI	12.31 Hz



Abutment dimensions

da min	12.2441 "
Da max	14.5276 "
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 $P_0 = F_r$