

PDF technical sheet 6222L1C3



Single row deep groove ball bearings

Deep groove ball bearing, radial contact, machined cage, open

Product definition

d	4.3307 "
D	7.8740 "
B	1.4961 "
rs min	0.0827 "
Radial clearance class	C3
Mass	15.38 oz
Brand	NTN



Product performance

Dynamic load, C	144 kN
Static load, C0	117 kN
Fatigue limit load, Cu	4.25 kN
f0	14.3
Nlim (oil)	3,800 RPM
Nlim (grease)	3,200 RPM
Min operating temperature, Tmin	-76 °C
Characteristic cage frequency, FTF	0.41 Hz
Characteristic rolling element frequency, BSF	5.24 Hz
Characteristic outer ring frequency, BPF0	4.08 Hz
Characteristic inner ring frequency, BPF1	5.92 Hz



Abutment dimensions

da min	4.7638 "
Da max	7.4409 "
ra max	0.0787 "

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 $P_0 = Fr$