

PDF technical sheet 6324L1C3



Single row deep groove ball bearings

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

Product definition

d	4.7244 "
D	10.2362 "
B	2.1654 "
rs min	0.1181 "
Radial clearance class	C3
Mass	43.74 oz
Brand	NTN



Product performance

Dynamic load, C	207 kN
Static load, C0	185 kN
Fatigue limit load, Cu	6.10 kN
f0	13.5
Nlim (oil)	3,100 RPM
Nlim (grease)	2,600 RPM
Min operating temperature, Tmin	-76 °C
Characteristic cage frequency, FTF	0.39 Hz
Characteristic rolling element frequency, BSF	4.39 Hz
Characteristic outer ring frequency, BPF0	3.13 Hz
Characteristic inner ring frequency, BPF1	4.87 Hz



Abutment dimensions

da min	5.2362 "
Da max	9.7244 "
ra max	0.0984 "

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 $P_0 = F_r$