

PDF technical sheet 6324L1C3



Single row deep groove ball bearings

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

Product definition

d	120 mm
D	260 mm
B	55 mm
rs min	3 mm
Radial clearance class	C3
Mass	12.40 kg
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 Tr/min
Nlim (grease)	2,600 Tr/min
Min operating temperature, Tmin	-60 °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, BPFI	4.87 Hz



Abutment dimensions

da min	133 mm
Da max	247 mm
ra max	2.50 mm

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 $P_0 = Fr$