

PDF technical sheet 6224C3



Single row deep groove ball bearings

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

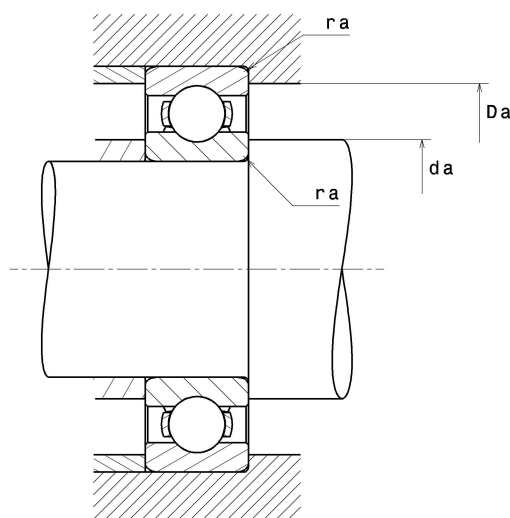
Product definition

d	120 mm
D	215 mm
B	40 mm
rs min	2.10 mm
Radial clearance class	C3
Mass	5.15 kg
Brand	NTN



Product performance

Dynamic load, C	155 kN
Static load, C0	131 kN
Fatigue limit load, Cu	4.60 kN
f0	14.4
Nlim (oil)	3,400 Tr/min
Nlim (grease)	2,900 Tr/min
Min operating temperature, Tmin	-60 °C
Max operating temperature, Tmax	120 °C
Characteristic cage frequency, FTF	0.41 Hz
Characteristic rolling element frequency, BSF	5.37 Hz
Characteristic outer ring frequency, BPF0	4.10 Hz
Characteristic inner ring frequency, BPF1	5.90 Hz



Abutment dimensions

da min	131 mm
Da max	204 mm
ra max	2 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 $P_0 = Fr$