

PDF technical sheet 68/670C3



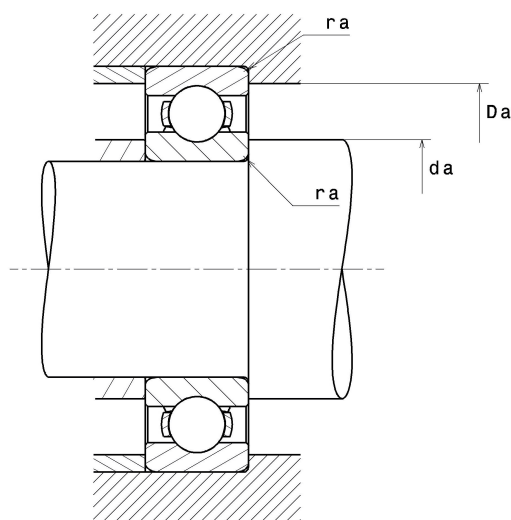
Single row deep groove ball bearings

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

Product definition	
d	26.3780 "
D	32.2835 "
B	2.7165 "
rs min	0.1575 "
Radial clearance class	C3
Mass	264.91 oz
Brand	NTN



Product performance	
Dynamic load, C	425 kN
Static load, C0	850 kN
Fatigue limit load, Cu	14.20 kN
Nlim (oil)	700 RPM
Nlim (grease)	500 RPM
Min operating temperature, Tmin	-76 °C
Characteristic cage frequency, FTF	0.47 Hz
Characteristic rolling element frequency, BSF	16.70 Hz
Characteristic outer ring frequency, BPF0	12.70 Hz
Characteristic inner ring frequency, BPFI	14.31 Hz



Abutment dimensions

da min	27.0079 "
Da max	31.6535 "
ra max	0.1181 "

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 $P_0 = Fr$