

PDF technical sheet 68/670L1



Single row deep groove ball bearings

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

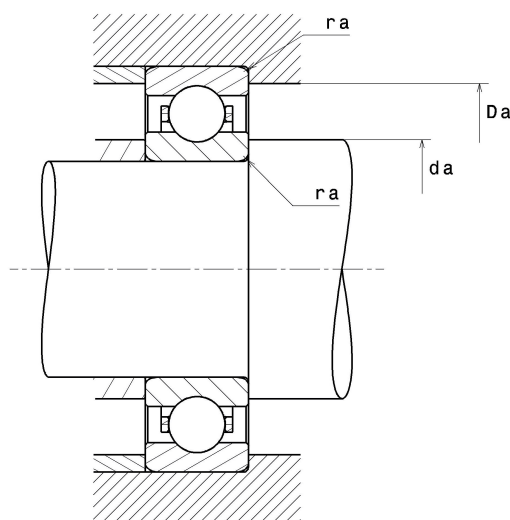
Product definition

d	26.3780 "
D	32.2835 "
B	2.7165 "
rs min	0.1575 "
Radial clearance class	CN
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	-4 °C
Max operating temperature, Tmax	248 °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, BPF1	14.31 Hz



Abutment dimensions

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

Calculation factors

Equivalent dynamic radial load

$$P = X.F_r + Y.F_a$$

$\frac{f_0 F_a}{C_0}$	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 $P_0 = F_r$