

PDF technical sheet 16048L1C3



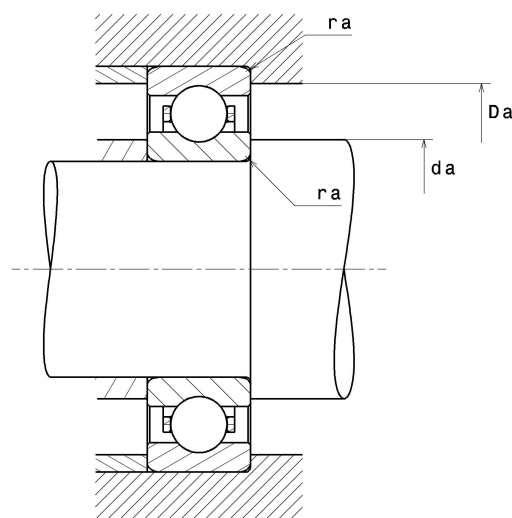
Single row deep groove ball bearings

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

Product definition	
d	9.4488 "
D	14.1732 "
B	1.4567 "
rs min	0.0827 "
Radial clearance class	C3
Mass	42.68 oz
Brand	NTN



Product performance	
Dynamic load, C	178 kN
Static load, C0	217 kN
Fatigue limit load, Cu	5.70 kN
f0	16.5
Nlim (oil)	2,000 RPM
Nlim (grease)	1,700 RPM
Min operating temperature, Tmin	-76 °C
Characteristic cage frequency, FTF	0.46 Hz
Characteristic rolling element frequency, BSF	11.03 Hz
Characteristic outer ring frequency, BPF0	8.19 Hz
Characteristic inner ring frequency, BPF1	9.81 Hz



Abutment dimensions

da min	9.8819 "
Da max	13.7402 "
ra max	0.0787 "

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 $P_0 = F_r$