

PDF technical sheet 6956



Single row deep groove ball bearings

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

Product definition

d	11.0236 "
D	14.9606 "
B	1.8110 "
rs min	0.0827 "
Radial clearance class	CN
Mass	52.21 oz
Brand	NTN



Product performance

Dynamic load, C	227 kN
Static load, C0	299 kN
Fatigue limit load, Cu	7.50 kN
f0	16.5
Nlim (oil)	1,800 RPM
Nlim (grease)	1,500 RPM
Min operating temperature, Tmin	-4 °C
Max operating temperature, Tmax	248 °C
Characteristic cage frequency, FTF	0.45 Hz
Characteristic rolling element frequency, BSF	10.30 Hz
Characteristic outer ring frequency, BPF0	8.13 Hz
Characteristic inner ring frequency, BPFI	9.87 Hz



Abutment dimensions

da min	11.4567 "
Da max	14.5276 "
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 $P_0 = F_r$