

PDF technical sheet 16040



Single row deep groove ball bearings

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

Product definition	
d	7.8740 "
D	12.2047 "
B	1.3386 "
d1	9.6260 "
D1	10.8819 "
rs min	0.0787 "
Radial clearance class	CN
Mass	32.13 oz
Brand	SNR



Product performance	
Dynamic load, C	171 kN
Static load, C0	202 kN
Fatigue limit load, Cu	5.70 kN
f0	16.4
Nref	2,600 RPM
Nlim	3,300 RPM
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	248 °C
Characteristic cage frequency, FTF	0.45 Hz
Characteristic rolling element frequency, BSF	9.83 Hz
Characteristic outer ring frequency, BPF0	8.09 Hz
Characteristic inner ring frequency, BPF1	9.91 Hz



Abutment dimensions

da min	8.2283 "
Da max	11.8504 "
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 $P_0 = F_r$