

PDF technical sheet 6004F600



Single row deep groove ball bearings

TOPLINE deep groove ball bearing, radial contact, pressed steel cage, open, applications upto 350 °C.

Product definition	
d	20 mm
D	42 mm
B	12 mm
d1	27.50 mm
D1	37.60 mm
rs min	0.60 mm
Radial clearance class	> C5
Mass	0.07 kg
Brand	SNR



Product performance	
Dynamic load, C	0.01 kN
Static load, C0	0.01 kN
Fatigue limit load, Cu	0.00 kN
f0	13.8
Nlim	50 Tr/min
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	350 °C
Characteristic cage frequency, FTF	0.40 Hz
Characteristic rolling element frequency, BSF	4.68 Hz
Characteristic outer ring frequency, BPF0	3.58 Hz
Characteristic inner ring frequency, BPF1	5.42 Hz



Abutment dimensions

da min	24 mm
Da max	38 mm
ra max	0.60 mm

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 $P_0 = Fr$