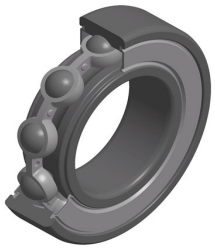
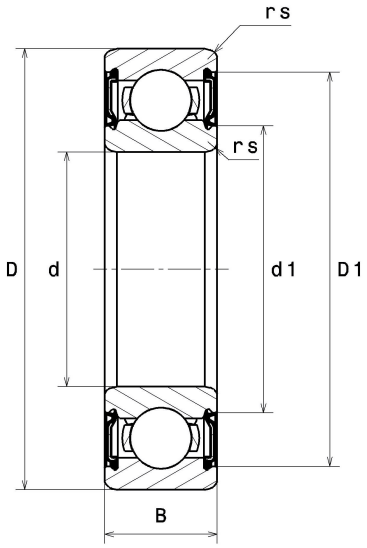
PDF technical sheet
6209EE

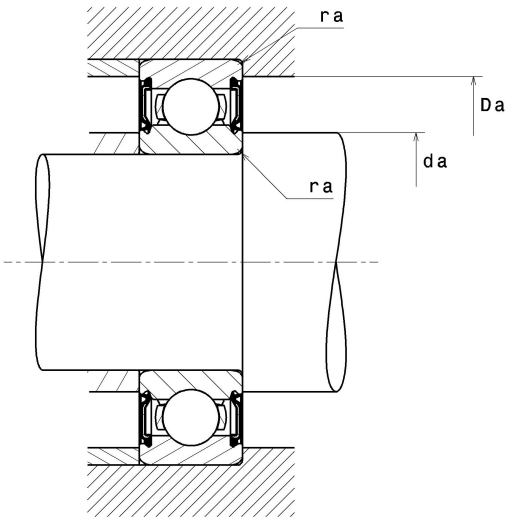


Single row deep groove ball bearings
Deep groove ball bearing, radial contact, pressed steel cage, contact seals on both sides

Product definition	
d	1.7717 "
D	3.3465 "
B	0.7480 "
d1	2.2441 "
D1	2.9803 "
rs min	0.0433 "
Radial clearance class	CN
Mass	1.47 oz
Brand	SNR



Product performance	
Dynamic load, C	31.20 kN
Static load, C0	20.70 kN
Fatigue limit load, Cu	0.94 kN
f0	14.4
Nlim	5,000 RPM
Min operating temperature, Tmin	−4 °C
Max operating temperature, Tmax	248 °C
Characteristic cage frequency, FTF	0.41 Hz
Characteristic rolling element frequency, BSF	5.32 Hz
Characteristic outer ring frequency, BPF0	4.09 Hz
Characteristic inner ring frequency, BPFI	5.91 Hz



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S.A. au capital de 123 599 542 € - RCS ANNECY B 325 821 072 – Id. Fiscale : FR 48 325 821 072 – SIRET 325 821 072 00015 –
Code APE 2815 Z – Code NACE 28.15

Abutment dimensions	
da min	2.0276 "
da max	2.2441 "
Da max	3.0906 "
ra max	0.0394 "

Calculation factors

Equivalent dynamic radial load

P = X.Fr + Y.Fa

$\frac{f_0 F_a}{C_0}$	e	Fa / Fr ≤ e		Fa / 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

Po = Xo.Fr + Yo.Fa

X_0	Y_0
0.6	0.5

For single or DT bearing arrangement :

If Po <Fr, then use Po = Fr