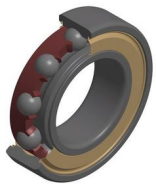
Technical data

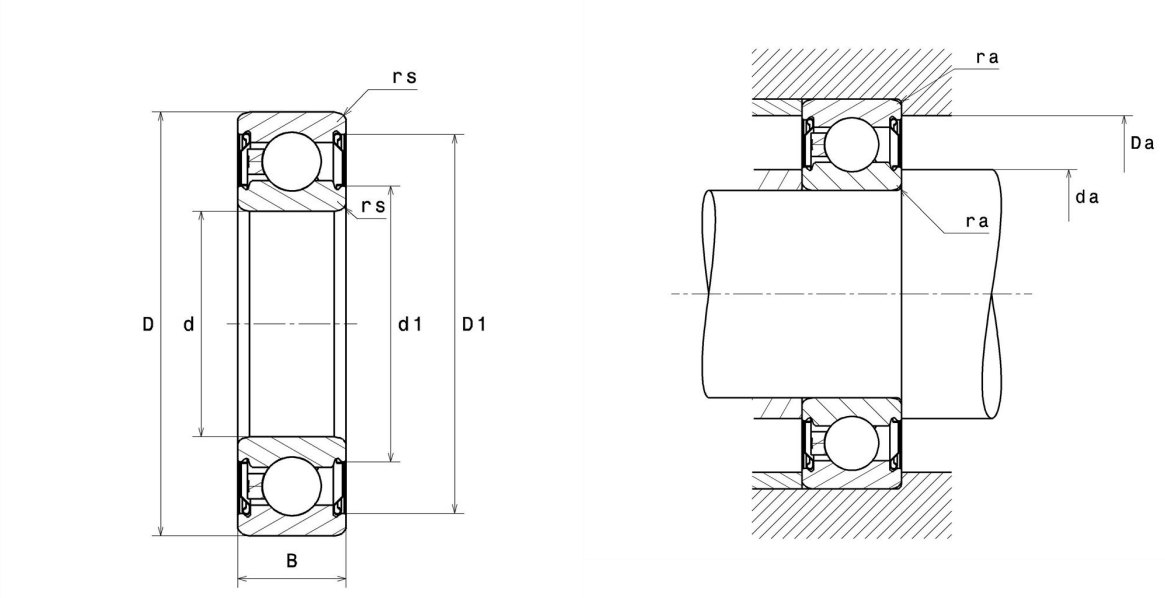
6209.HVZZ

Single row deep groove ball bearings



TOPLINE deep groove ball bearing, radial contact, pressed polyamide cage, shields on both sides, for high speed applications

Visual(s)



Product definition

d	45 mm
D	85 mm
B	19 mm
d1	54.5 mm
D1	75.6 mm
rs min	1.1 mm
Radial clearance class	C3
Mass	0.4 kg
Brand	SNR

Product performance

Dynamic load, C	32.2 kN
Static load, C0	20.4 kN
Fatigue limit load, Cu	0.93 kN
f0	14.1
Nref	8,700 Tr/min
Nlim	11,000 Tr/min
Min operating temperature, Tmin	-20 °C
Max operating temperature, Tmax	120 °C
Characteristic cage frequency, FTF	0.4 Hz
Characteristic rolling element frequency, BSF	4.92 Hz
Characteristic outer ring frequency, BPF0	3.62 Hz
Characteristic inner ring frequency, BPFI	5.38 Hz

Abutment dimensions

da min	51.5 mm
da max	54.5 mm
Ce min	0 mm
Da max	78.5 mm
ra max	1 mm

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