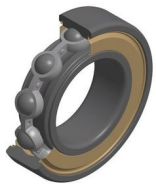
Technical data

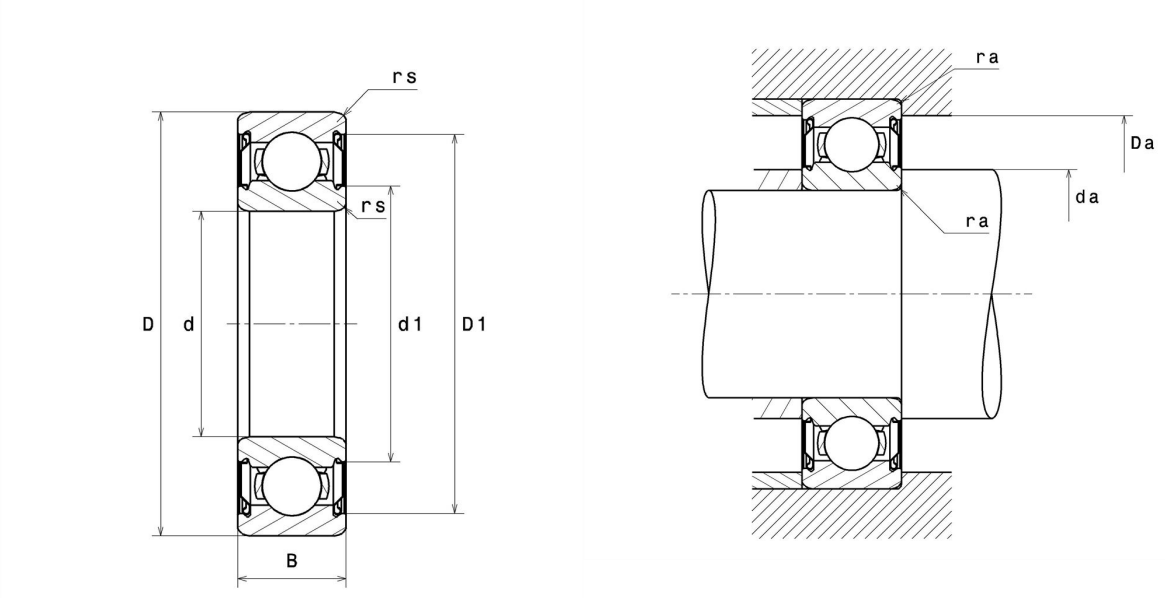
6309.HT200ZZ

Single row deep groove ball bearings



TOPLINE deep groove ball bearing, radial contact, pressed steel cage, shields on both sides, applications up to 200°C.

Visual(s)



Product definition

d	45 mm
D	100 mm
B	25 mm
d1	59.3 mm
D1	87.1 mm
rs min	1.5 mm
Radial clearance class	C4
Mass	0.82 kg
Brand	SNR

Product performance

Dynamic load, C	52.3 kN
Static load, C0	31.7 kN
Fatigue limit load, Cu	1.44 kN
f0	13
Nref	8,300 Tr/min
Nlim	3,200 Tr/min
Min operating temperature, Tmin	-20 °C
Max operating temperature, Tmax	200 °C
Characteristic cage frequency, FTF	0.38 Hz
Characteristic rolling element frequency, BSF	3.91 Hz
Characteristic outer ring frequency, BPF0	3.04 Hz
Characteristic inner ring frequency, BPFI	4.96 Hz

Abutment dimensions

da min	53 mm
da max	59.3 mm
Ce min	0 mm
Da max	92 mm
ra max	1.5 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