

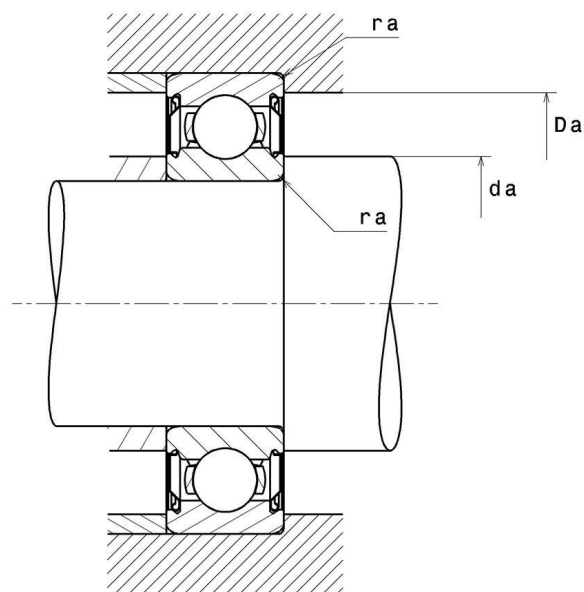
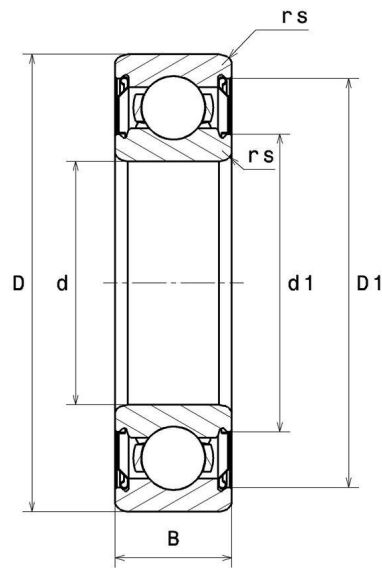
Technical data

6205ZZ

Single row deep groove ball bearings

Deep groove ball bearing, radial contact, pressed steel cage, shields on both sides

VISUAL (S)



6205ZZ

Single row deep groove ball bearings

PRODUCT DIMENSIONS

Internal diameter d	25 mm
External diameter D	52 mm
Bearing/Inner ring width(B)	15 mm
External diameter inner ring d1	31,8 mm
Inner diameter outer ring D1	46,4 mm
Min fillet radius rs	1 mm
Radial clearance class	CN
Mass	0,129 kg
Brand	SNR

PRODUCT PERFORMANCE

Dynamic load, C	13,8 kN
Static load, C0	7,9 kN
Fatigue limit load, Cu	0,36 kN
Coefficient f0	13.9
Reference thermal speed (Nref)	14000 tr/min
Mechanical Limit Speed Nlim	17000 tr/min
Min operating temperature, Tmin	-30 °C
Max operating temperature, Tmax	120 °C
Characteristic cage frequency, FTF	0.398 Hz
Characteristic rolling element frequency, BSF	4.71 Hz
Characteristic outer ring frequency, BPF0	3.584 Hz
Characteristic inner ring frequency, BRF0	5.416 Hz

ABUTMENT

Min shoulder diameter IR da min	30 mm
Max shoulder diameter IR da max	31,8 mm
Max shoulder diameter OR Da max	47 mm
Max shaft & housing fillet radius ra max	1 mm

INDUSTRY CALCUL FACTORS

Equivalent dynamic radial load

$$P = X.F_r + Y.F_a$$

$\frac{f_0 F_a}{C_0}$	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

$$P_0 = X_0.F_r + Y_0.F_a$$

X_0	Y_0
0.6	0.5

For single or DT bearing arrangement:

If $P_0 < F_r$, then use $P_0 = F_r$