

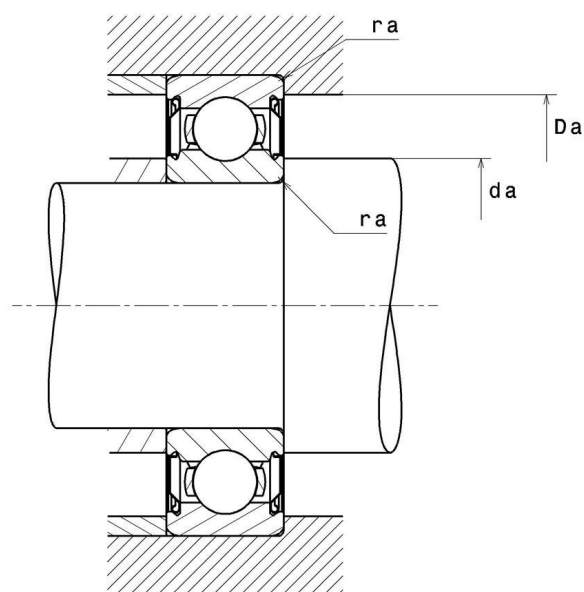
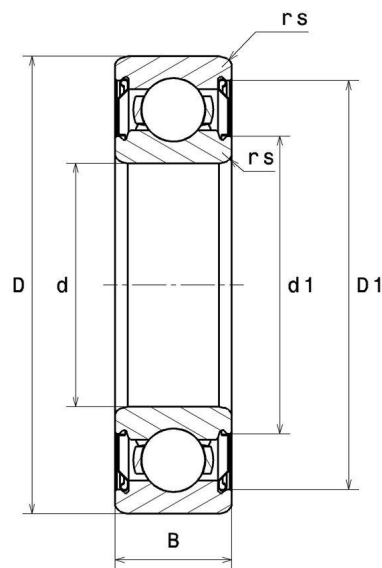
Technical data

6210ZZ

Single row deep groove ball bearings

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

VISUAL (S)



6210ZZ

Single row deep groove ball bearings

PRODUCT DIMENSIONS

Internal diameter d	50 mm
External diameter D	90 mm
Bearing/Inner ring width(B)	20 mm
External diameter inner ring d1	60,6 mm
Inner diameter outer ring D1	80,1 mm
Min fillet radius rs	1,1 mm
Radial clearance class	CN
Mass	0,462 kg
Brand	SNR

PRODUCT PERFORMANCE

Dynamic load, C	34,4 kN
Static load, C0	23,2 kN
Fatigue limit load, Cu	1,05 kN
Coefficient f0	14.4
Reference thermal speed (Nref)	8200 tr/min
Mechanical Limit Speed Nlim	9500 tr/min
Min operating temperature, Tmin	-30 °C
Max operating temperature, Tmax	120 °C
Characteristic cage frequency, FTF	0.409 Hz
Characteristic rolling element frequency, BSF	5.33 Hz
Characteristic outer ring frequency, BPF0	4.093 Hz
Characteristic inner ring frequency, BRF0	5.907 Hz

ABUTMENT

Min shoulder diameter IR da min	56,5 mm
Max shoulder diameter IR da max	60,6 mm
Max shoulder diameter OR Da max	83,5 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 $P_0 = F_r$