



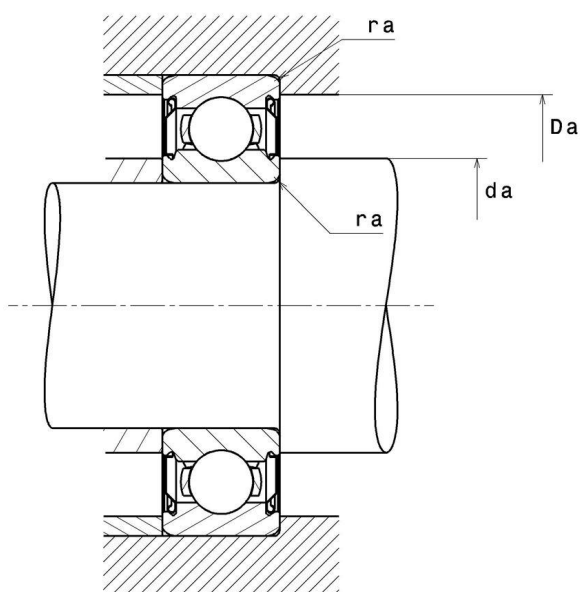
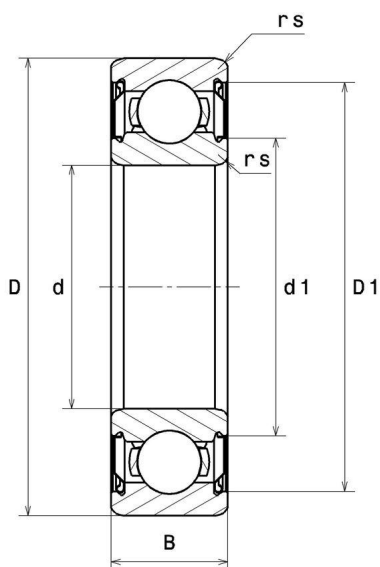
Technical data

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 DEFINITION

Brand	SNR
d - Internal diameter	50 mm
D - External diameter	90 mm
B - Bearing/Inner ring width	20 mm
d1 - External diameter inner ring	60 mm
D1 - Inner diameter outer ring	80,1 mm
rs - Min fillet radius	1,1 mm
Radial clearance class	CN
Mass	0,46 kg

PRODUCT PERFORMANCE

C - Dynamic load	37 kN
C0 - Static load	23,2 kN
Cu - Fatigue limit load	1,06 kN
f0 - Coefficient	14.4
Nref - Reference thermal speed	8200 tr/min
Nlim - Mechanical Limit Speed	9500 tr/min
Tmin - Min operating temperature	-30 °C
Tmax - Max operating temperature	120 °C

BEARING FREQUENCIES

BPFO - Characteristic outer ring frequency (60 rpm)	4.093 Hz
BPFI - Characteristic inner ring frequency (60 rpm)	5.907 Hz
FTF - Characteristic cage frequency (60 rpm)	0.409 Hz
BSF - Characteristic rolling element frequency (60 rpm)	5.33 Hz

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ABUTMENT

da min - Min shoulder diameter IR	56,5 mm
da max - Max shoulder diameter IR	60 mm
Da max - Max shoulder diameter OR	83,5 mm
ra max - Max shaft & housing fillet radius	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 $P_0 = F_r$