

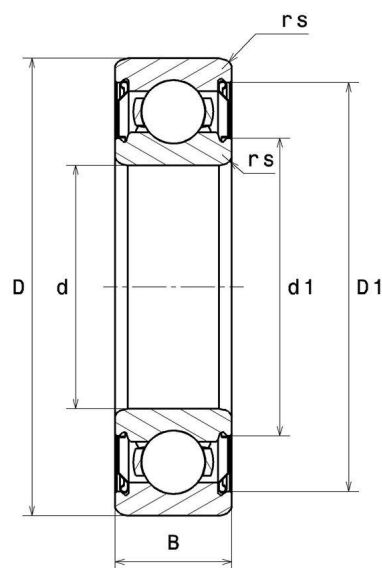
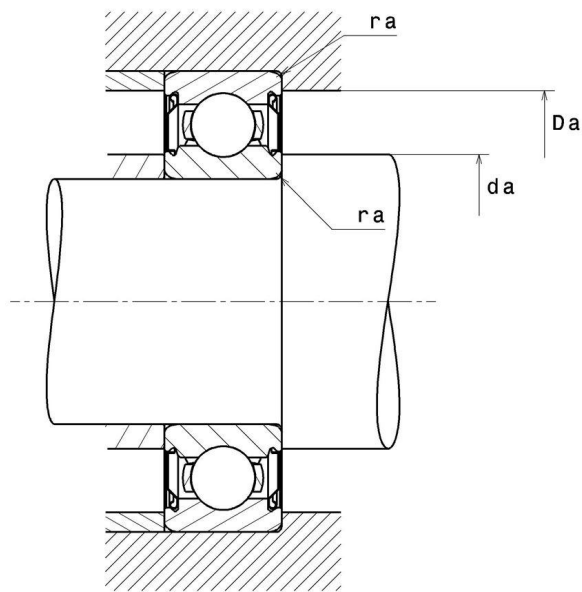
Technical data

6010.ZZ

Single row deep groove ball bearings

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

VISUAL (S)



6010.ZZ

Single row deep groove ball bearings

PRODUCT DIMENSIONS

Internal diameter d	50 mm
External diameter D	80 mm
Bearing/Inner ring width(B)	16 mm
External diameter inner ring d1	57,5 mm
Inner diameter outer ring D1	73,1 mm
Min fillet radius rs	1 mm
Radial clearance class	CN
Mass	0,25 kg
Brand	SNR

PRODUCT PERFORMANCE

Dynamic load, C	21,5 kN
Static load, C0	16,3 kN
Fatigue limit load, Cu	0,74 kN
Coefficient f0	15.4
Reference thermal speed (Nref)	8900 tr/min
Mechanical Limit Speed Nlim	11000 tr/min
Min operating temperature, Tmin	-30 °C
Max operating temperature, Tmax	120 °C
Characteristic cage frequency, FTF	0.431 Hz
Characteristic rolling element frequency, BSF	7.084 Hz
Characteristic outer ring frequency, BPF0	5.6 Hz
Characteristic inner ring frequency, BRF0	7.4 Hz

ABUTMENT

Min shoulder diameter IR da min	55 mm
Max shoulder diameter IR da max	57,5 mm
Max shoulder diameter OR Da max	75 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 $P_0 = F_r$