



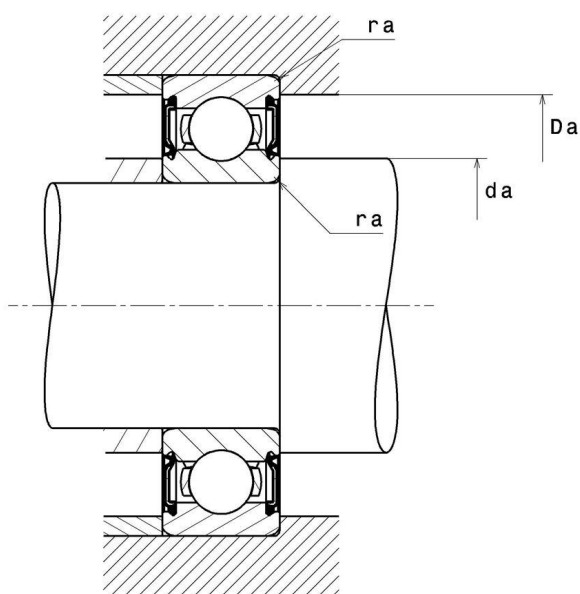
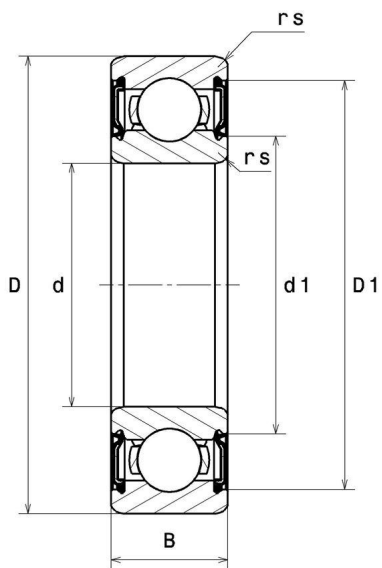
Technical data

6309.EEC3

Single row deep groove ball bearings

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

VISUAL (S)



6309.EEC3

Single row deep groove ball bearings

PRODUCT DIMENSIONS

Internal diameter d	45 mm
External diameter D	100 mm
Bearing/Inner ring width(B)	25 mm
External diameter inner ring d1	61,2 mm
Inner diameter outer ring D1	86,5 mm
Min fillet radius rs	1,5 mm
Radial clearance class	C3
Mass	0,837 kg
Brand	SNR

PRODUCT PERFORMANCE

Dynamic load, C	52,4 kN
Static load, C0	31,9 kN
Fatigue limit load, Cu	1,45 kN
Coefficient f0	13.1
Mechanical Limit Speed Nlim	4700 tr/min
Min operating temperature, Tmin	-30 °C
Max operating temperature, Tmax	120 °C
Characteristic cage frequency, FTF	0.381 Hz
Characteristic rolling element frequency, BSF	3.971 Hz
Characteristic outer ring frequency, BPF0	3.05 Hz
Characteristic inner ring frequency, BRF0	4.95 Hz

ABUTMENT

Min shoulder diameter IR da min	53 mm
Max shoulder diameter IR da max	61,2 mm
Max shoulder diameter OR Da max	92 mm
Max shaft & housing fillet radius ra max	1,5 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 $P_0 = F_r$