



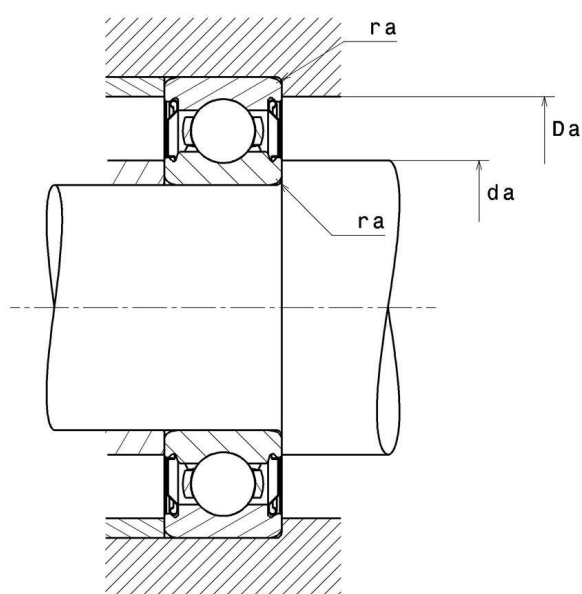
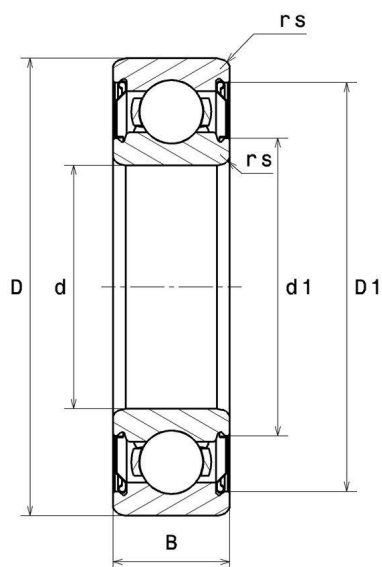
Technical data

625ZZC3

Single row deep groove ball bearings

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

VISUAL (S)



625ZZC3

Single row deep groove ball bearings

PRODUCT DEFINITION

Brand	SNR
d - Internal diameter	5 mm
D - External diameter	16 mm
B - Bearing/Inner ring width	5 mm
d1 - External diameter inner ring	7,7 mm
D1 - Inner diameter outer ring	13,8 mm
rs - Min fillet radius	0,3 mm
Radial clearance class	C3
Mass	0,005 kg

PRODUCT PERFORMANCE

C - Dynamic load	1,83 kN
C0 - Static load	0,67 kN
Cu - Fatigue limit load	0,03 kN
f0 - Coefficient	12.4
Nref - Reference thermal speed	36000 tr/min
Nlim - Mechanical Limit Speed	54000 tr/min
Tmin - Min operating temperature	-30 °C
Tmax - Max operating temperature	120 °C

BEARING FREQUENCIES

BPFO - Characteristic outer ring frequency (60 rpm)	2.574 Hz
BPFI - Characteristic inner ring frequency (60 rpm)	4.426 Hz
FTF - Characteristic cage frequency (60 rpm)	0.368 Hz
BSF - Characteristic rolling element frequency (60 rpm)	3.515 Hz

625ZZC3

Single row deep groove ball bearings

ABUTMENT

da min - Min shoulder diameter IR	7 mm
da max - Max shoulder diameter IR	7,7 mm
Da max - Max shoulder diameter OR	14 mm
ra max - Max shaft & housing fillet radius	0,3 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 $P_0 = F_r$