



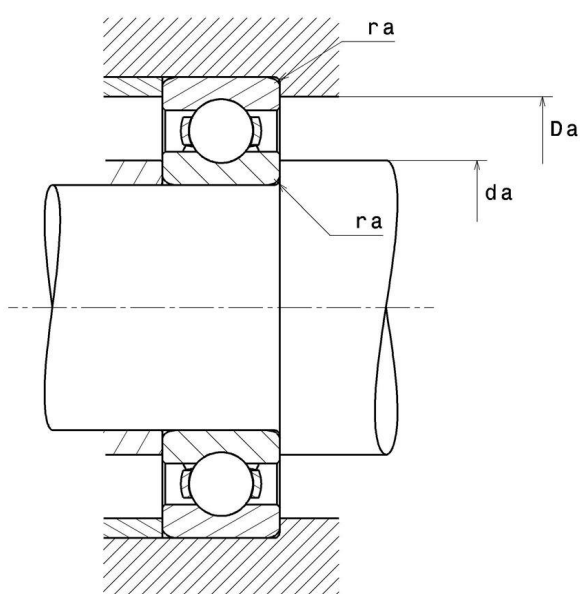
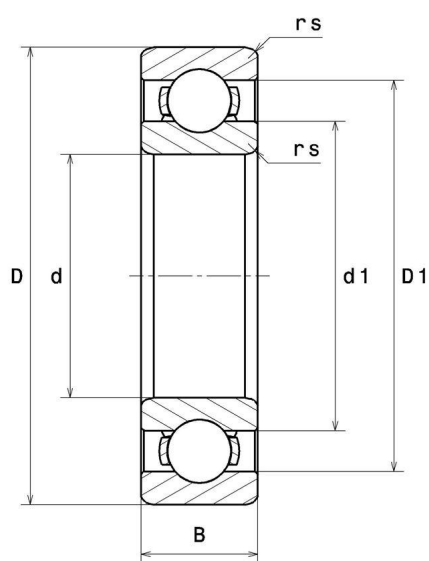
**Technical data**

**6303.C3**

Single row deep groove ball bearings

Deep groove ball bearing, radial contact, pressed steel cage, open

**VISUAL (S)**



# 6303.C3

Single row deep groove ball bearings

## PRODUCT DIMENSIONS

Internal diameter d	17 mm
External diameter D	47 mm
Bearing/Inner ring width(B)	14 mm
External diameter inner ring d1	27,5 mm
Inner diameter outer ring D1	41 mm
Min fillet radius rs	1 mm
Radial clearance class	C3
Mass	0,11 kg
Brand	SNR

## PRODUCT PERFORMANCE

Dynamic load, C	13,5 kN
Static load, C0	6,6 kN
Fatigue limit load, Cu	0,3 kN
Coefficient f0	12.4
Reference thermal speed (Nref)	16000 tr/min
Mechanical Limit Speed Nlim	26000 tr/min
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	120 °C
Characteristic cage frequency, FTF	0.368 Hz
Characteristic rolling element frequency, BSF	3.515 Hz
Characteristic outer ring frequency, BPF0	2.574 Hz
Characteristic inner ring frequency, BRF0	4.426 Hz

## ABUTMENT

Min shoulder diameter IR da min	22 mm
Max shoulder diameter IR da max	0 mm
Max shoulder diameter OR Da max	42 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  $P_0 = F_r$