

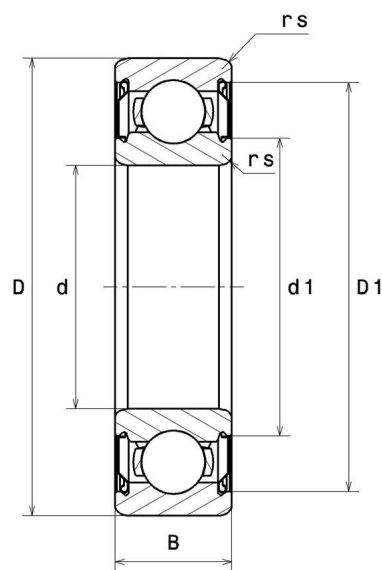
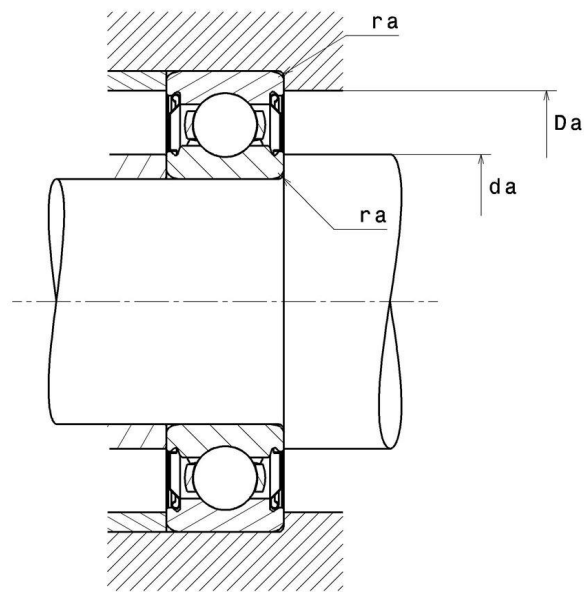
**Technical data**

**6201ZZ**

Single row deep groove ball bearings

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

**VISUAL (S)**



# 6201ZZ

Single row deep groove ball bearings

## PRODUCT DEFINITION

<b>Brand</b>	SNR
<b>d - Internal diameter</b>	12 mm
<b>D - External diameter</b>	32 mm
<b>B - Bearing/Inner ring width</b>	10 mm
<b>d1 - External diameter inner ring</b>	17,6 mm
<b>D1 - Inner diameter outer ring</b>	28,1 mm
<b>rs - Min fillet radius</b>	0,6 mm
<b>Radial clearance class</b>	CN
<b>Mass</b>	0,038 kg

## PRODUCT PERFORMANCE

<b>C - Dynamic load</b>	7,2 kN
<b>C0 - Static load</b>	3,05 kN
<b>Cu - Fatigue limit load</b>	0,14 kN
<b>f0 - Coefficient</b>	12.3
<b>Nref - Reference thermal speed</b>	22000 tr/min
<b>Nlim - Mechanical Limit Speed</b>	30000 tr/min
<b>Tmin - Min operating temperature</b>	-30 °C
<b>Tmax - Max operating temperature</b>	120 °C

## BEARING FREQUENCIES

<b>BPFO - Characteristic outer ring frequency (60 rpm)</b>	2.561 Hz
<b>BPFI - Characteristic inner ring frequency (60 rpm)</b>	4.439 Hz
<b>FTF - Characteristic cage frequency (60 rpm)</b>	0.366 Hz
<b>BSF - Characteristic rolling element frequency (60 rpm)</b>	3.461 Hz

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## ABUTMENT

<b>da min - Min shoulder diameter IR</b>	16 mm
<b>da max - Max shoulder diameter IR</b>	17,6 mm
<b>Da max - Max shoulder diameter OR</b>	28 mm
<b>ra max - Max shaft &amp; housing fillet radius</b>	0,6 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  $P_0 = F_r$