



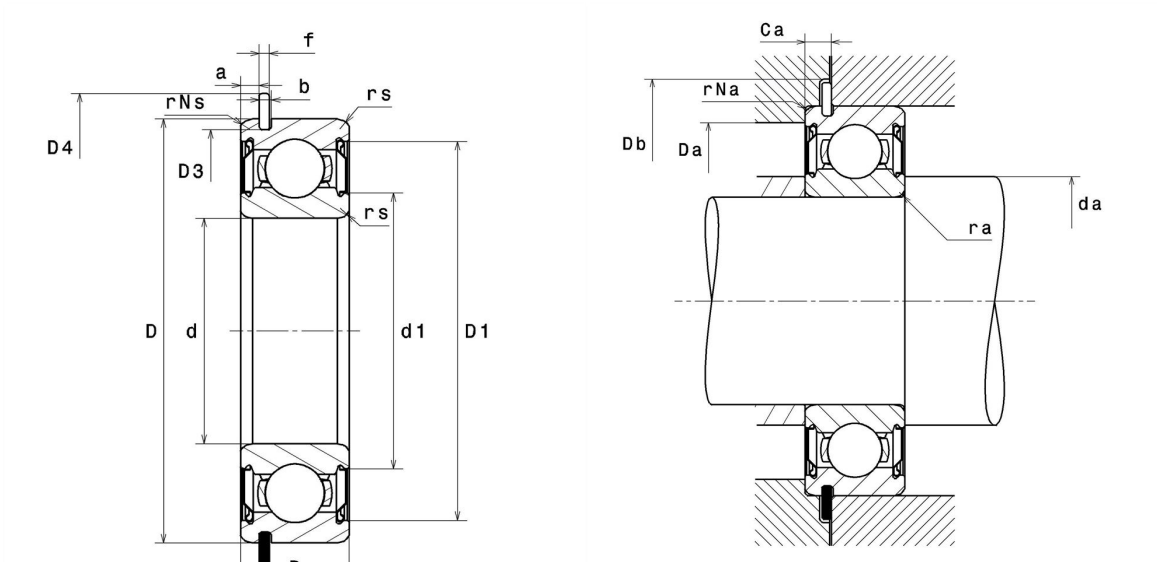
Technical datasheet

6211ZZNR/2AS

Single row deep groove ball bearings

Deep groove ball bearing, radial contact, pressed steel cage, snap ring & groove on outer diameter, shields on both sides

Visual(s)



Product definition

d	55 mm
D	100 mm
B	21 mm
a min	3.07 mm
a max	3.28 mm
Ca min	5.43 mm
Ca max	5.74 mm
rs min	1.5 mm
rNs min	0.5 mm
D3 max	96.8 mm
b min	2.7 mm
b max	3 mm
r0 max	0.6 mm
D4 max	106.5 mm
f	2.46 mm
Snap ring reference	R100
Radial clearance class	CN
Mass	0.6 kg
Brand	NTN

Product performance

Dynamic load, C	43.5 kN
Static load, C₀	29.2 kN
Fatigue limit load, C_u	1.33 kN
f₀	14.3
N_{lim} (grease)	6,400 rpm
Min operating temperature, T_{min}	-20 °C
Max operating temperature, T_{max}	120 °C
Characteristic cage frequency, FTF	0.41 Hz
Characteristic rolling element frequency, BSF	5.24 Hz
Characteristic outer ring frequency, BPF₀	4.08 Hz
Characteristic inner ring frequency, BPF_i	5.92 Hz

Abutment dimensions

da min	63 mm
Da max	92 mm
ra max	1.5 mm
rNa max	0.5 mm
Db min	108 mm

Calculation factors

Equivalent dynamic radial load

$$P = X.F_r + Y.F_a$$

$\frac{f_0 F_a}{C_0}$	e	F _a / F _r ≤ e		F _a / F _r > 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 P₀ < F_r, then use P₀ = F_r