



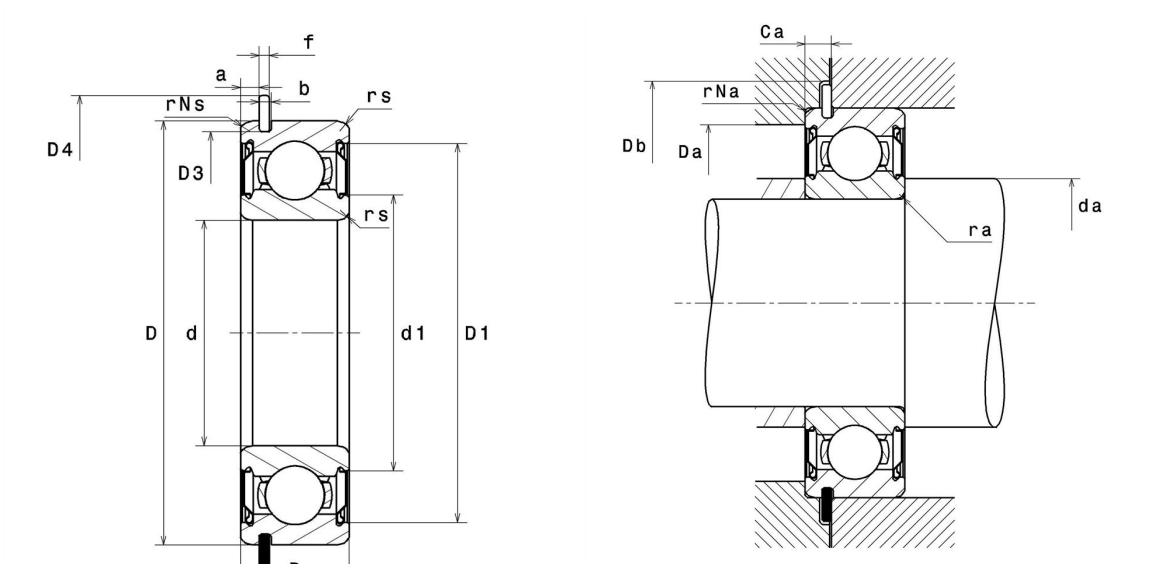
Technical datasheet

6200ZZNR/5K

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	10 mm
D	30 mm
B	9 mm
a min	1.9 mm
a max	2.06 mm
Ca min	2.92 mm
Ca max	3.18 mm
rs min	0.6 mm
rNs min	0.5 mm
D3 max	28.17 mm
b min	1.35 mm
b max	1.65 mm
r0 max	0.4 mm
D4 max	34.7 mm
f	1.12 mm
Snap ring reference	R30
Radial clearance class	CN
Mass	0.03 kg
Brand	NTN

Product performance

Dynamic load, C	5.1 kN
Static load, C₀	2.39 kN
Fatigue limit load, C_u	0.11 kN
f₀	13.2
N_{lim} (grease)	25,000 rpm
Min operating temperature, T_{min}	-20 °C
Max operating temperature, T_{max}	120 °C
Characteristic cage frequency, FTF	0.38 Hz
Characteristic rolling element frequency, BSF	4.07 Hz
Characteristic outer ring frequency, BPF₀	3.07 Hz
Characteristic inner ring frequency, BPF_i	4.93 Hz

Abutment dimensions

da min	14 mm
Da max	26 mm
ra max	0.6 mm
rNa max	0.5 mm
Db min	35.5 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