



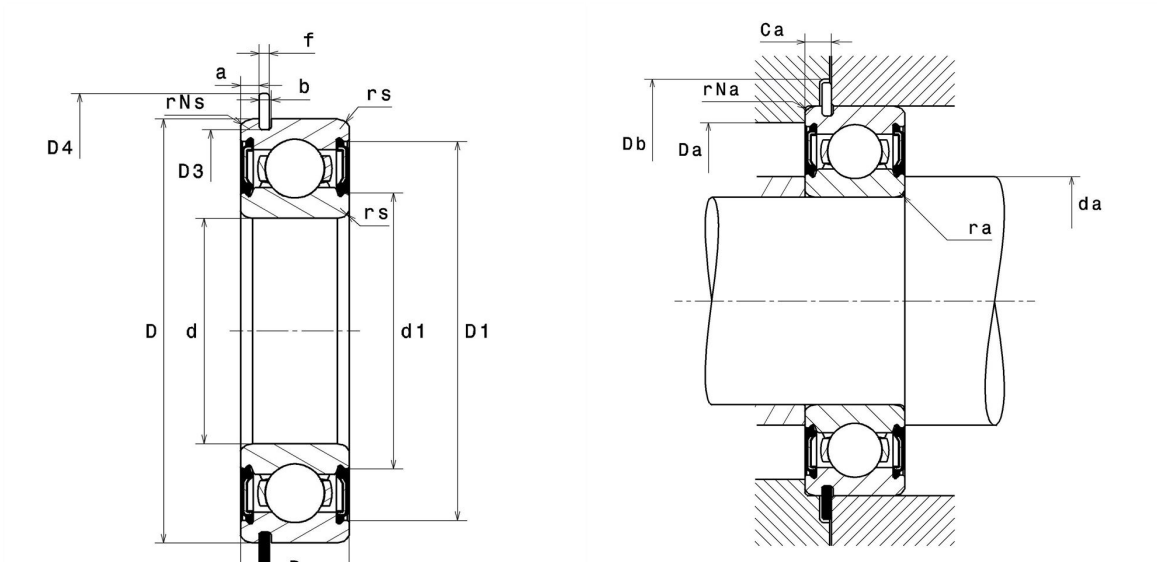
Technical datasheet

6205LLBNR/2AS

Single row deep groove ball bearings

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

Visual(s)



Product definition

d	25 mm
D	52 mm
B	15 mm
a min	2.31 mm
a max	2.46 mm
Ca min	3.33 mm
Ca max	3.58 mm
rs min	1 mm
rNs min	0.5 mm
D3 max	49.73 mm
b min	1.35 mm
b max	1.65 mm
r0 max	0.4 mm
D4 max	57.9 mm
f	1.12 mm
Snap ring reference	R52
Radial clearance class	CN
Mass	0.13 kg
Brand	NTN

Product performance

Dynamic load, C	14 kN
Static load, C0	7.85 kN
Fatigue limit load, Cu	0.36 kN
f0	13.9
Nlim (grease)	13,000 rpm
Min operating temperature, Tmin	-25 °C
Max operating temperature, Tmax	110 °C
Characteristic cage frequency, FTF	0.4 Hz
Characteristic rolling element frequency, BSF	4.71 Hz
Characteristic outer ring frequency, BPF0	3.58 Hz
Characteristic inner ring frequency, BPFI	5.42 Hz

Abutment dimensions

da min	30 mm
da max	32 mm
Da max	47 mm
ra max	1 mm
rNa max	0.5 mm
Db min	58.5 mm

Calculation 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 $P_0 = F_r$