



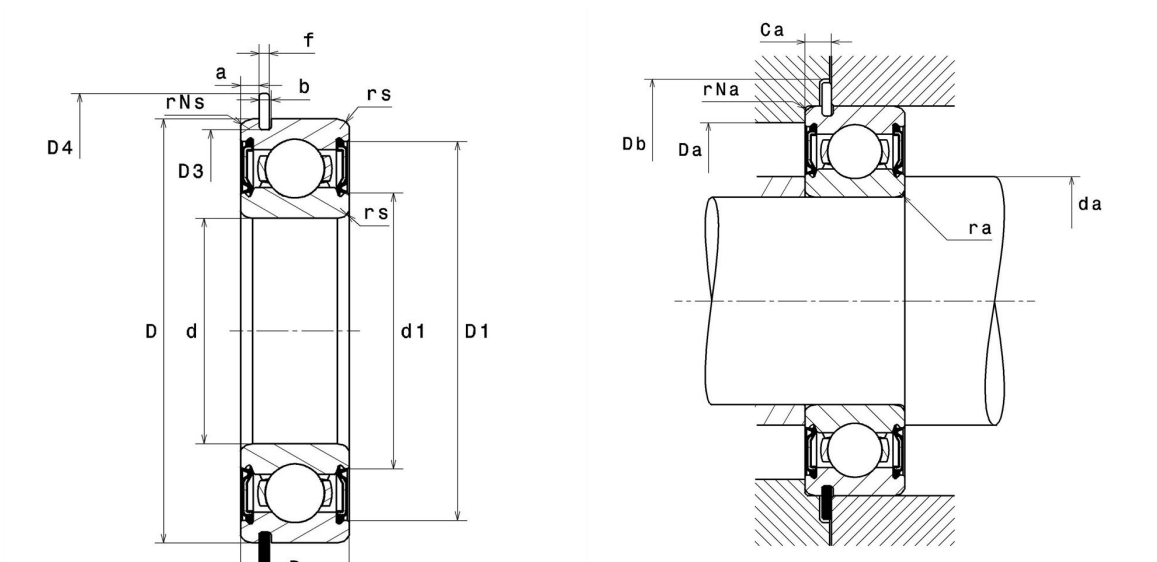
Technical datasheet

6209LLUNR/2AS

Single row deep groove ball bearings

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

Visual(s)



Product definition

d	45 mm
D	85 mm
B	19 mm
a min	3.07 mm
a max	3.28 mm
Ca min	4.67 mm
Ca max	4.98 mm
rs min	1.1 mm
rNs min	0.5 mm
D3 max	81.81 mm
b min	1.9 mm
b max	2.2 mm
r0 max	0.6 mm
D4 max	91.6 mm
f	1.7 mm
Snap ring reference	R85
Radial clearance class	CN
Mass	0.4 kg
Brand	NTN

Product performance

Dynamic load, C	32.5 kN
Static load, C0	20.4 kN
Fatigue limit load, Cu	0.93 kN
f0	14.1
Nlim (grease)	5,200 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	4.92 Hz
Characteristic outer ring frequency, BPF0	3.62 Hz
Characteristic inner ring frequency, BPFI	5.38 Hz

Abutment dimensions

da min	51.5 mm
da max	55.5 mm
Da max	78.5 mm
ra max	1 mm
rNa max	0.5 mm
Db min	93 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 $P_0 = F_r$