



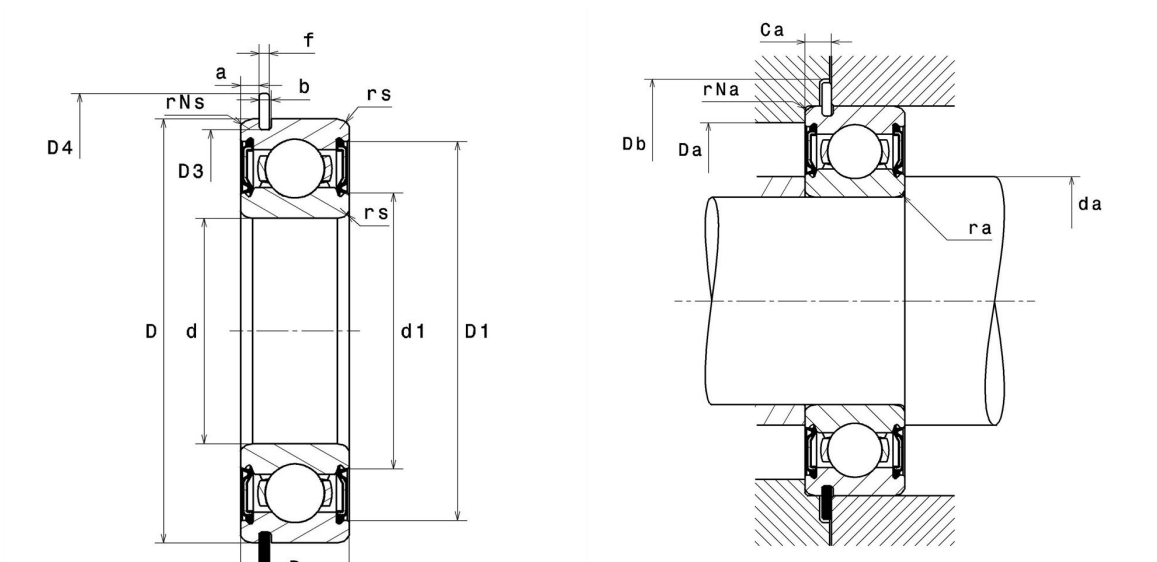
Technical datasheet

6303LLUNR/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	17 mm
D	47 mm
B	14 mm
a min	2.31 mm
a max	2.46 mm
Ca min	3.43 mm
Ca max	3.58 mm
rs min	1 mm
rNs min	0.5 mm
D3 max	44.6 mm
b min	1.35 mm
b max	1.65 mm
r0 max	0.4 mm
D4 max	52.7 mm
f	1.12 mm
Snap ring reference	R47
Radial clearance class	CN
Mass	0.12 kg
Brand	NTN

Product performance

Dynamic load, C	13.5 kN
Static load, C0	6.55 kN
Fatigue limit load, Cu	0.3 kN
f0	12.2
Nlim (grease)	11,000 rpm
Min operating temperature, Tmin	-25 °C
Max operating temperature, Tmax	110 °C
Characteristic cage frequency, FTF	0.36 Hz
Characteristic rolling element frequency, BSF	3.39 Hz
Characteristic outer ring frequency, BPF0	2.54 Hz
Characteristic inner ring frequency, BPFI	4.46 Hz

Abutment dimensions

da min	22 mm
da max	25 mm
Da max	42 mm
ra max	1 mm
rNa max	0.5 mm
Db min	53.5 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 $P_0 = F_r$