



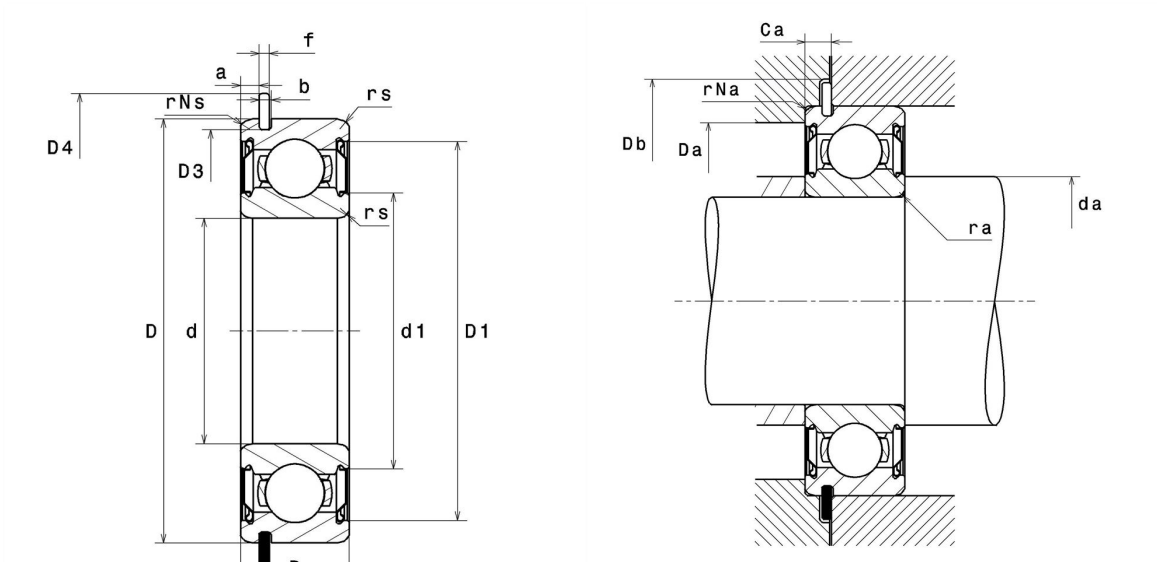
Technical data

6906ZZNR/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	30 mm
D	47 mm
B	9 mm
a min	1.55 mm
a max	1.7 mm
Ca min	2.4 mm
Ca max	2.55 mm
rs min	0.3 mm
rNs min	0.3 mm
D3 max	45.7 mm
b min	0.95 mm
b max	1.2 mm
r0 max	0.25 mm
D4 max	49.8 mm
f	0.85 mm
Snap ring reference	R47
Radial clearance class	CN
Mass	0.05 kg
Brand	NTN

Product performance

Dynamic load, C	7.25 kN
Static load, C₀	5 kN
Fatigue limit load, C_u	0.23 kN
f₀	15.8
N_{lim} (grease)	14,000 Tr/min
Min operating temperature, T_{min}	-20 °C
Max operating temperature, T_{max}	120 °C
Characteristic cage frequency, FTF	0.44 Hz
Characteristic rolling element frequency, BSF	7.96 Hz
Characteristic outer ring frequency, BPF₀	6.13 Hz
Characteristic inner ring frequency, BPF_i	7.87 Hz

Abutment dimensions

da min	32 mm
Da max	45 mm
ra max	0.3 mm
rNa max	0.3 mm
Db min	50.5 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