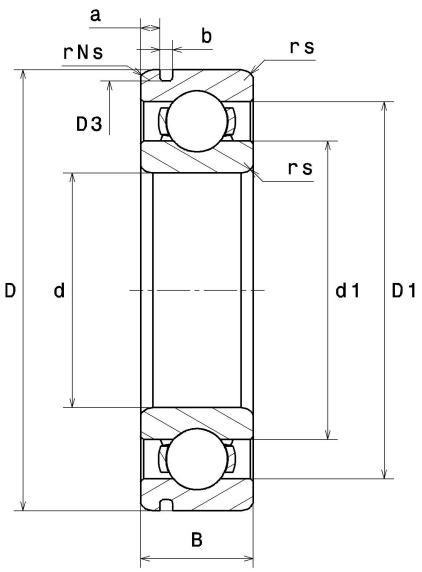
PDF technical sheet
6307N

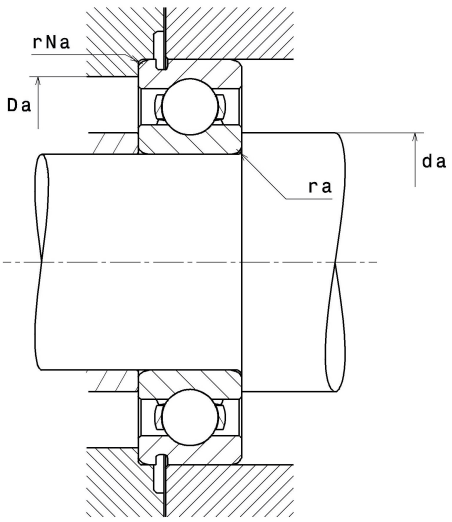
Single row deep groove ball bearings

Deep groove ball bearing, radial contact, pressed steel cage, snap ring groove on outer diameter, open

Product definition	
d	35 mm
D	80 mm
B	21 mm
d1	46.20 mm
D1	70.10 mm
a min	3.07 mm
a max	3.28 mm
rs min	1.50 mm
rNs min	0.50 mm
D3 max	76.81 mm
b min	1.90 mm
b max	2.20 mm
r0 max	0.60 mm
Radial clearance class	CN
Mass	0.45 kg
Brand	SNR



Product performance	
Dynamic load, C	33 kN
Static load, C0	19.20 kN
Fatigue limit load, Cu	1.13 kN
f0	13.2
Nref	9,900 Tr/min
Nlim	14,000 Tr/min
Min operating temperature, Tmin	−40 °C
Max operating temperature, Tmax	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, BPFI	4.93 Hz



NTN-SNR ROULEMENTS – www.ntn-snr.com
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Abutment dimensions	
da min	43 mm
da max	46.20 mm
Da max	72 mm
ra max	1.50 mm
rNa max	0.50 mm
Db min	88 mm

Calculation factors

Equivalent dynamic radial load

P = X.Fr + Y.Fa

$\frac{f_0 F_a}{C_0}$	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

Po = Xo.Fr + Yo.Fa

X_0	Y_0
0.6	0.5

For single or DT bearing arrangement :

If Po <Fr, then use Po = Fr