Technical data

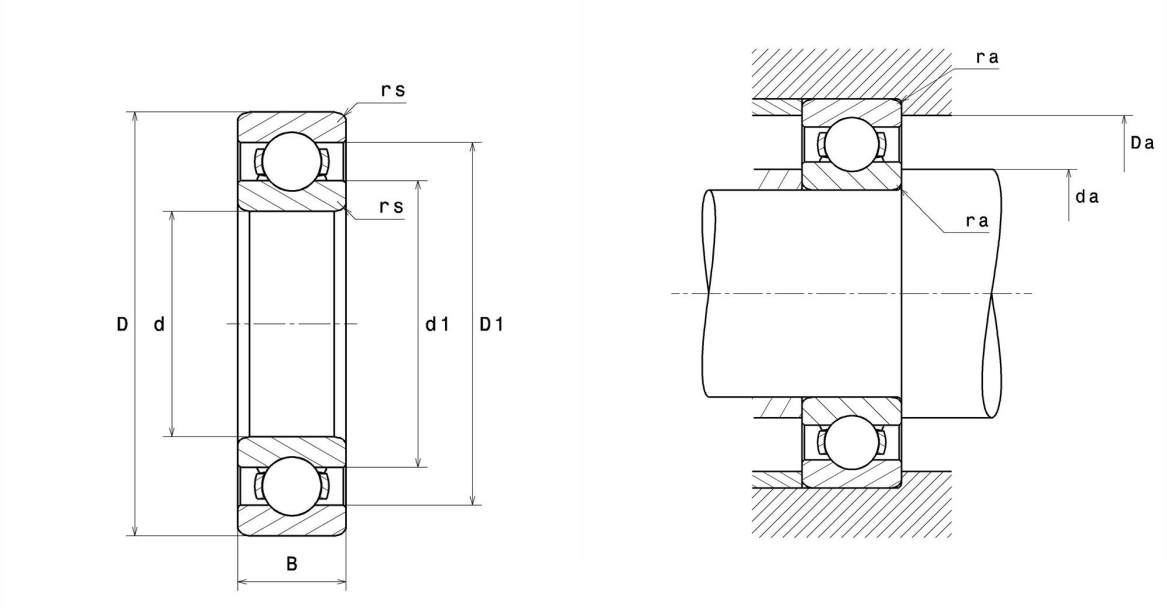
6314C3

Single row deep groove ball bearings



Deep groove ball bearing, radial contact, pressed steel cage, open

Visual(s)



Product definition

d	70 mm
D	150 mm
B	35 mm
d1	91.3 mm
D1	129.3 mm
rs min	2.1 mm
Radial clearance class	C3
Mass	2.41 kg
Brand	SNR

Product performance

Dynamic load, C	103 kN
Static load, C0	68.2 kN
Fatigue limit load, Cu	2.95 kN
f0	13.2
Nref	6,100 Tr/min
Nlim	7,500 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	4.1 Hz
Characteristic outer ring frequency, BPF0	3.08 Hz
Characteristic inner ring frequency, BPFI	4.92 Hz

Abutment dimensions

da min	81 mm
da max	91.3 mm
Ce min	0 mm
Da max	139 mm
ra max	2 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