



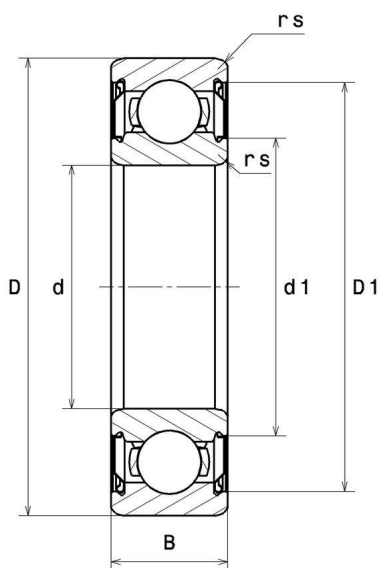
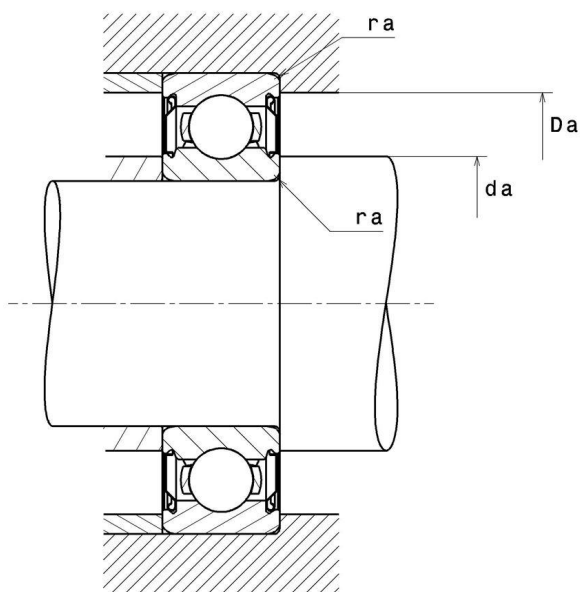
Technical data

6314ZZC3

Single row deep groove ball bearings

Deep groove ball bearing, radial contact, pressed steel cage, shields on both sides

VISUAL (S)



6314ZZC3

Single row deep groove ball bearings

PRODUCT DIMENSIONS

Internal diameter d	70 mm
External diameter D	150 mm
Bearing/Inner ring width(B)	35 mm
External diameter inner ring d1	91,3 mm
Inner diameter outer ring D1	129,3 mm
Min fillet radius rs	2,1 mm
Radial clearance class	C3
Mass	2,47 kg
Brand	SNR

PRODUCT PERFORMANCE

Dynamic load, C	103 kN
Static load, C0	68,2 kN
Fatigue limit load, Cu	2,95 kN
Coefficient f0	13.2
Reference thermal speed (Nref)	6100 tr/min
Mechanical Limit Speed Nlim	6000 tr/min
Min operating temperature, Tmin	-30 °C
Max operating temperature, Tmax	120 °C
Characteristic cage frequency, FTF	0.385 Hz
Characteristic rolling element frequency, BSF	4.1 Hz
Characteristic outer ring frequency, BPF0	3.076 Hz
Characteristic inner ring frequency, BRF0	4.924 Hz

ABUTMENT

Min shoulder diameter IR da min	81 mm
Max shoulder diameter IR da max	91,3 mm
Max shoulder diameter OR Da max	139 mm
Max shaft & housing fillet radius ra max	2 mm

INDUSTRY CALCUL 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 $P_0 = F_r$