

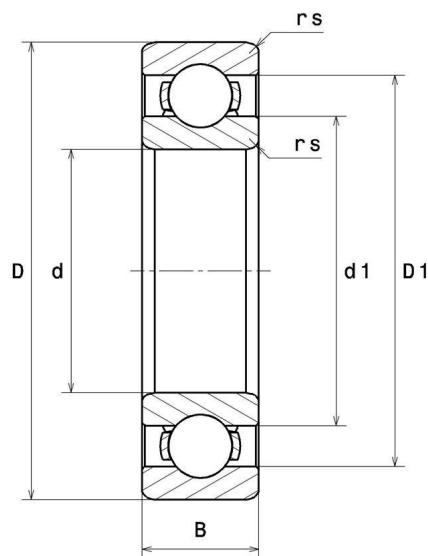
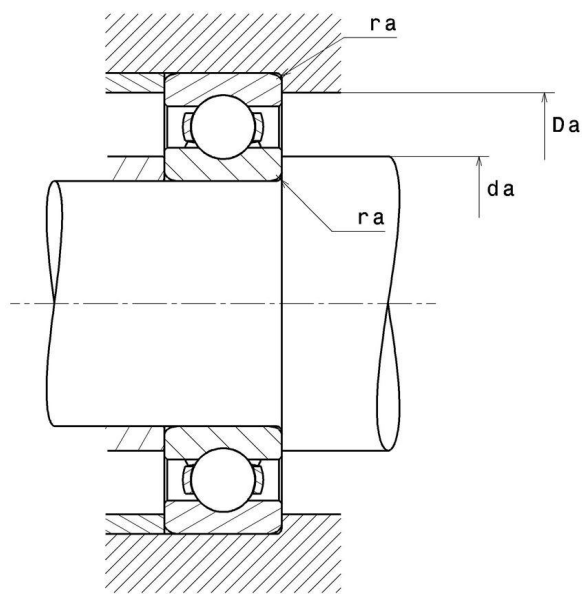
Technical data

6412C3

Single row deep groove ball bearings

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

VISUAL (S)



6412C3

Single row deep groove ball bearings

PRODUCT DIMENSIONS

Internal diameter d	60 mm
External diameter D	150 mm
Bearing/Inner ring width(B)	35 mm
Min fillet radius rs	2,1 mm
Radial clearance class	C3
Mass	2,77 kg
Brand	NTN

PRODUCT PERFORMANCE

Dynamic load, C	113 kN
Static load, C0	64,5 kN
Fatigue limit load, Cu	4,9 kN
Coefficient f0	12.6
Nlim (oil)	5700 tr/min
Nlim (grease)	4800 tr/min
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	120 °C
Characteristic cage frequency, FTF	0.371 Hz
Characteristic rolling element frequency, BSF	3.634 Hz
Characteristic outer ring frequency, BPF0	2.6 Hz
Characteristic inner ring frequency, BRF0	4.4 Hz

ABUTMENT

Min shoulder diameter IR da min	71 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 $P_0 = F_r$