



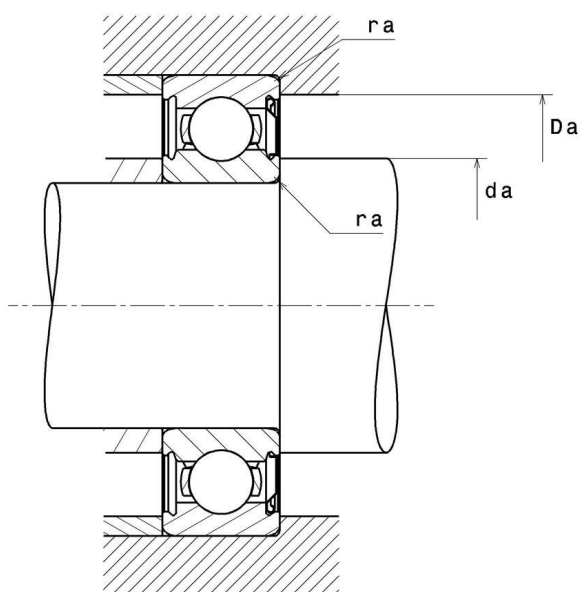
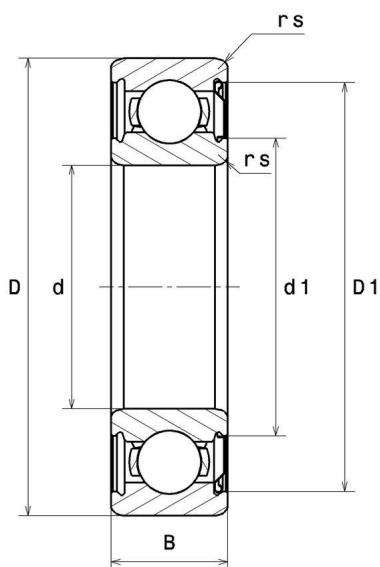
Technical data

6305ZC3

Single row deep groove ball bearings

Deep groove ball bearing, radial contact, pressed steel cage, shield on one side

VISUAL (S)



6305ZC3

Single row deep groove ball bearings

PRODUCT DIMENSIONS

Internal diameter d	25 mm
External diameter D	62 mm
Bearing/Inner ring width(B)	17 mm
Min fillet radius rs	1,1 mm
Radial clearance class	C3
Mass	0,232 kg
Brand	NTN

PRODUCT PERFORMANCE

Dynamic load, C	23,5 kN
Static load, C0	10,9 kN
Fatigue limit load, Cu	0,855 kN
Coefficient f0	12.6
Nlim (oil)	14000 tr/min
Nlim (grease)	12000 tr/min
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	120 °C
Characteristic cage frequency, FTF	0.372 Hz
Characteristic rolling element frequency, BSF	3.659 Hz
Characteristic outer ring frequency, BPF0	2.606 Hz
Characteristic inner ring frequency, BPFI	4.394 Hz

ABUTMENT

Min shoulder diameter IR da min	31,5 mm
Max shoulder diameter OR Da max	55,5 mm
Max shaft & housing fillet radius ra max	1 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 $P_0 = F_r$