



Brand of NTN corporation

Technical data

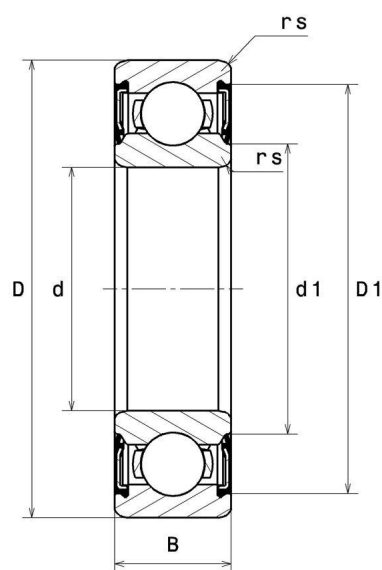
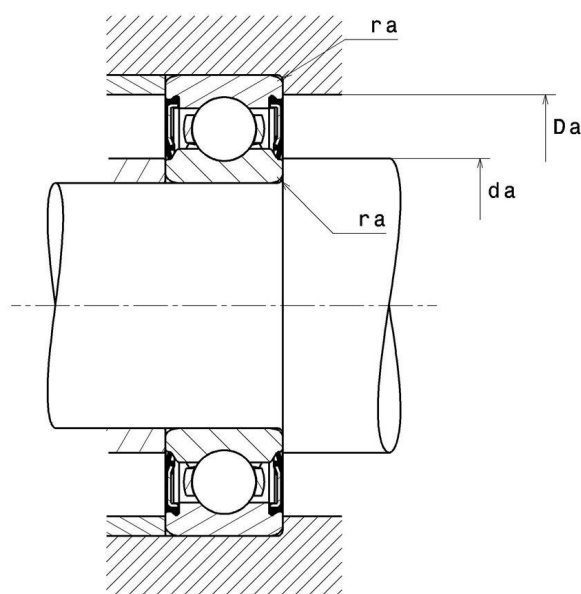
62304EE

Single row deep groove ball bearings



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

VISUAL (S)



NTN Europe

1 rue des Usines · BP 2017 · 74010 Annecy Cedex · France · Tel. +33 (0)4 50 65 30 00
S.A. au capital de 322 639 919 € · RCS ANNECY B 325 821 072 · Id. Fiscale : FR 48 325 821 072
SIRET 325 821 072 00015 · Code APE 2815 Z · Code NACE 28.15

PRODUCT DEFINITION

Brand	SNR
d - Internal diameter	20 mm
D - External diameter	52 mm
B - Bearing/Inner ring width	21 mm
d1 - External diameter inner ring	30 mm
D1 - Inner diameter outer ring	45,5 mm
rs - Min fillet radius	1,1 mm
Radial clearance class	CN
Mass	0,197 kg

PRODUCT PERFORMANCE

C - Dynamic load	16800000 mN
C0 - Static load	7900000 mN
Cu - Fatigue limit load	360000 mN
f0 - Coefficient	12.4
N lim - Mechanical Limit Speed	57000 °/s
Tmin - Min operating temperature	243,15 °K
Tmax - Max operating temperature	393,15 °K

BEARING FREQUENCIES

BPFO - Over rolling frequency on outer ring (60 rpm)	2.574 Hz
BPFI - Over rolling frequency on inner (60 rpm)	4.426 Hz
BSF - Over rolling frequency on rolling element (60 rpm)	3.515 Hz
BRF - Rotational frequency - rolling element (60 rpm)	1.758 Hz
FTF - Rotational frequency - cage (60 rpm)	0.368 Hz



ABUTMENT

da min - Min shoulder diameter IR	26,5 mm
da max - Max shoulder diameter IR	30 mm
Da max - Max shoulder diameter OR	45,5 mm
ra max - Max shaft & housing fillet radius	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 $P_0 = F_r$

