



Brand of NTN corporation

Technical data

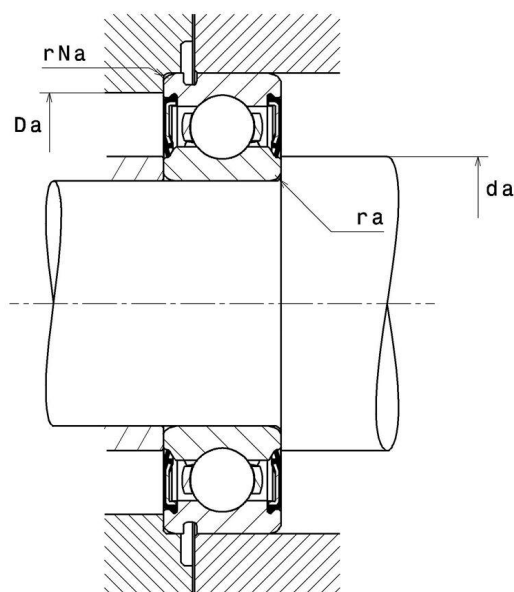
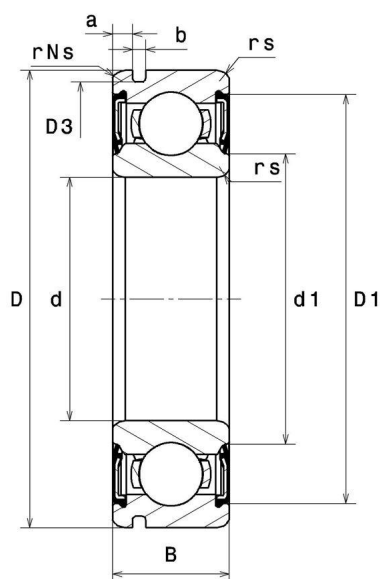
6304NEEC3

Single row deep groove ball bearings



Deep groove ball bearing, radial contact, pressed steel cage, snap ring groove on outer diameter, contact seals on both sides

VISUAL (S)



NTN Europe

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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	15 mm
d1 - External diameter inner ring	30 mm
D1 - Inner diameter outer ring	45 mm
a min - Min position Groove	2,31 mm
a max - Max position groove	2,46 mm
rs - Min fillet radius	1,1 mm
rNs - Min fillet radius	0,5 mm
D3 - Max bottom groove diameter	49,73 mm
b min - Min groove width	1,35 mm
b max - Max groove width	1,65 mm
r0 max - Max bottom groove radius	0,4 mm
Radial clearance class	C3
Mass	0,135 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



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PRODUCT PERFORMANCE

Tmax - Max operating temperature	393,15 °K
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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
rNa max - Max fillet radius on segment side	0,5 mm
Db min - Min stop ring position diameter	0 mm



INDUSTRY CALCUL 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

$$Po = X_0.Fr + Y_0.Fa$$

X ₀	Y ₀
0.6	0.5

For single or DT bearing arrangement :

If Po ≤Fr, then use Po = Fr