



Brand of NTN corporation

Technical data

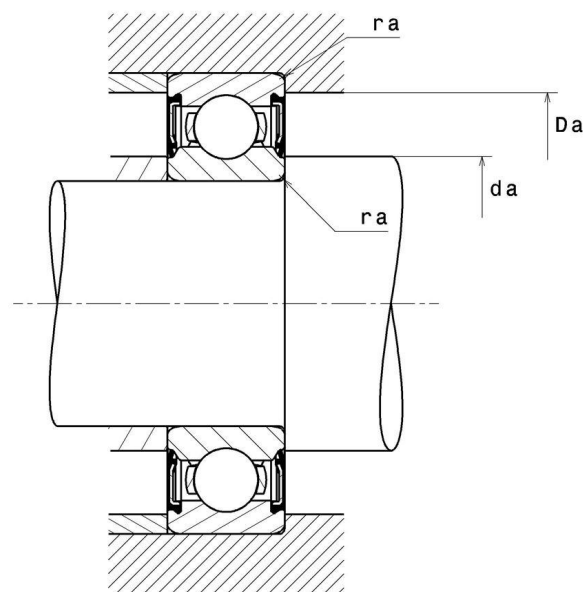
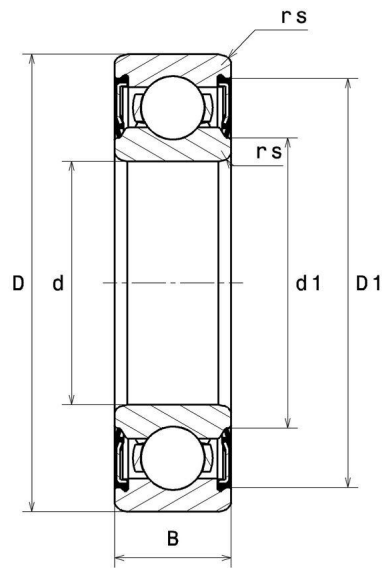
6218EEC3

Single row deep groove ball bearings



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

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Single row deep groove ball bearings

PRODUCT DEFINITION

Brand	SNR
d - Internal diameter	90 mm
D - External diameter	160 mm
B - Bearing/Inner ring width	30 mm
d1 - External diameter inner ring	106,4 mm
D1 - Inner diameter outer ring	144,6 mm
rs - Min fillet radius	2 mm
Radial clearance class	C3
Mass	2,25 kg

PRODUCT PERFORMANCE

C - Dynamic load	101000000 mN
C0 - Static load	71600000 mN
Cu - Fatigue limit load	2900000 mN
f0 - Coefficient	14.5
N lim - Mechanical Limit Speed	16200 °/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)	4.111 Hz
BPFI - Over rolling frequency on inner (60 rpm)	5.889 Hz
BSF - Over rolling frequency on rolling element (60 rpm)	5.447 Hz
BRF - Rotational frequency - rolling element (60 rpm)	2.724 Hz
FTF - Rotational frequency - cage (60 rpm)	0.411 Hz



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ABUTMENT

da min - Min shoulder diameter IR	99 mm
da max - Max shoulder diameter IR	106,4 mm
Da max - Max shoulder diameter OR	151 mm
ra max - Max shaft & housing fillet radius	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 $P_0 = F_r$



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