



Brand of NTN corporation

Technical data

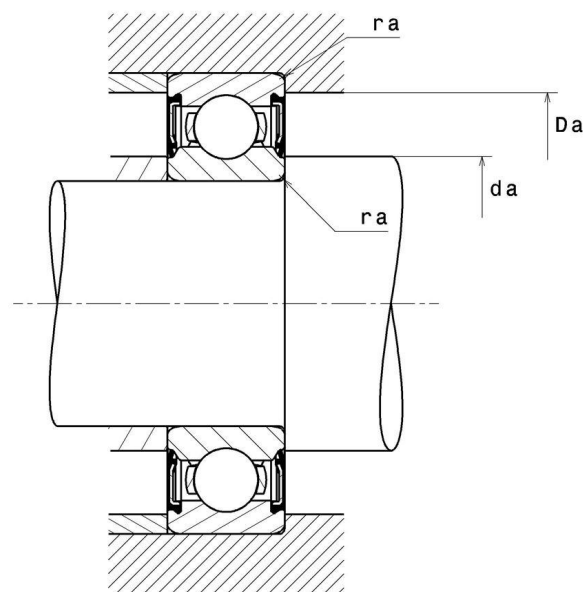
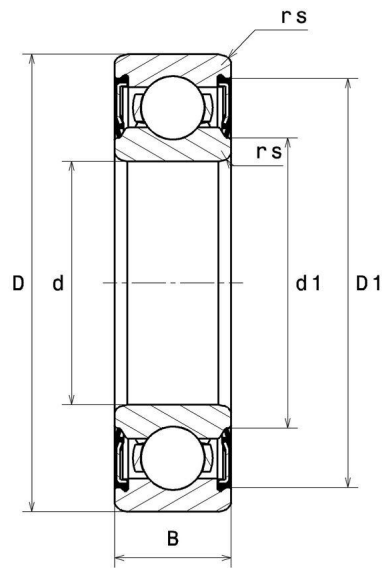
6216EE

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

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Single row deep groove ball bearings

PRODUCT DEFINITION

Brand	SNR
d - Internal diameter	80 mm
D - External diameter	140 mm
B - Bearing/Inner ring width	26 mm
d1 - External diameter inner ring	93,4 mm
D1 - Inner diameter outer ring	127,5 mm
rs - Min fillet radius	2 mm
Radial clearance class	CN
Mass	1,42 kg

PRODUCT PERFORMANCE

C - Dynamic load	76600000 mN
C0 - Static load	53000000 mN
Cu - Fatigue limit load	2300000 mN
f0 - Coefficient	14.6
N lim - Mechanical Limit Speed	18600 °/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)	4.134 Hz
BPFI - Over rolling frequency on inner (60 rpm)	5.866 Hz
BSF - Over rolling frequency on rolling element (60 rpm)	5.601 Hz
BRF - Rotational frequency - rolling element (60 rpm)	2.801 Hz
FTF - Rotational frequency - cage (60 rpm)	0.413 Hz



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ABUTMENT

da min - Min shoulder diameter IR	89 mm
da max - Max shoulder diameter IR	54,5 mm
Da max - Max shoulder diameter OR	131 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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