

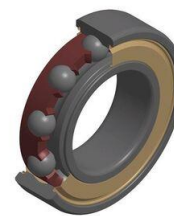


Brand of NTN corporation

Technical data

6001HVZZ

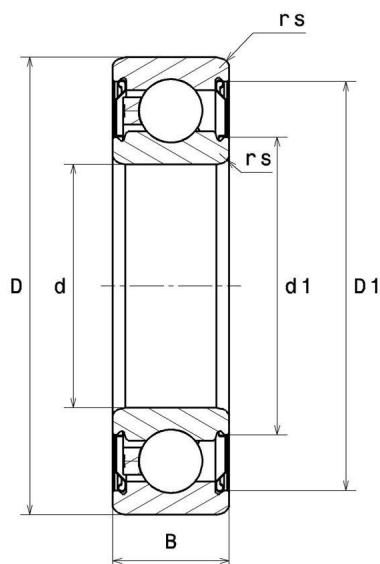
Single row deep groove ball bearings



TOPLINE deep groove ball bearing, radial contact, pressed polyamide cage, shields on both sides, for high speed applications

TOPLINE

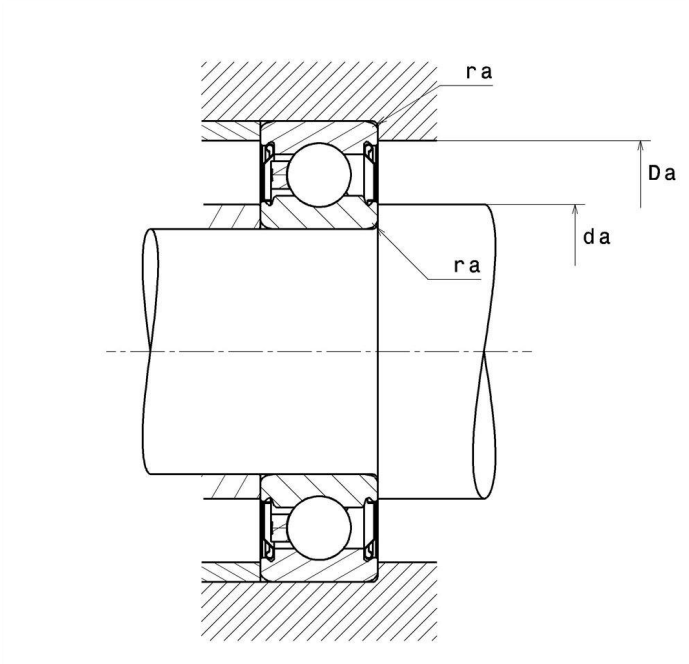
VISUAL (S)



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

6001HVZZ
Single row deep groove ball bearings



PRODUCT DEFINITION

Brand	SNR
d - Internal diameter	12 mm
D - External diameter	28 mm
B - Bearing/Inner ring width	8 mm
d1 - External diameter inner ring	17,2 mm
D1 - Inner diameter outer ring	25,5 mm
rs - Min fillet radius	0,3 mm
Radial clearance class	C3
Mass	0,021 kg

PRODUCT PERFORMANCE

C - Dynamic load	5400000 mN
C0 - Static load	2370000 mN
Cu - Fatigue limit load	110000 mN



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PRODUCT PERFORMANCE

f0 - Coefficient	13.1
N lim - Mechanical Limit Speed	240000 °/s
Tmin - Min operating temperature	223,15 °K
Tmax - Max operating temperature	393,15 °K

BEARING FREQUENCIES

BPFO - Over rolling frequency on outer ring (60 rpm)	3.047 Hz
BPFI - Over rolling frequency on inner (60 rpm)	4.953 Hz
BSF - Over rolling frequency on rolling element (60 rpm)	3.961 Hz
BRF - Rotational frequency - rolling element (60 rpm)	1.981 Hz
FTF - Rotational frequency - cage (60 rpm)	0.381 Hz

ABUTMENT

da min - Min shoulder diameter IR	14 mm
da max - Max shoulder diameter IR	17,2 mm
Da max - Max shoulder diameter OR	26 mm
ra max - Max shaft & housing fillet radius	0,3 mm



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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

$P_0 = X_0.Fr + Y_0.Fa$

X ₀	Y ₀
0.6	0.5

For single or DT bearing arrangement :

If P₀ <Fr, then use P₀ = Fr