

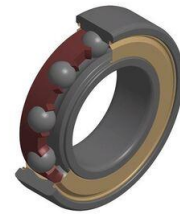


Brand of NTN corporation

Technical data

6002HVZZ

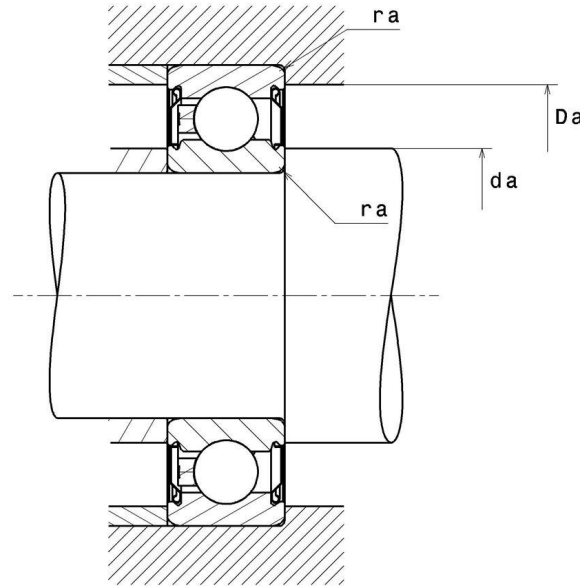
Single row deep groove ball bearings



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

TOPLINE

VISUAL (S)

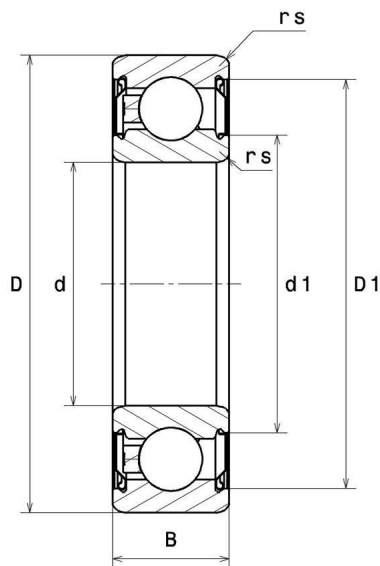


NTN Europe

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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

6002HVZZ

Single row deep groove ball bearings



PRODUCT DEFINITION

Brand	SNR
d - Internal diameter	15 mm
D - External diameter	32 mm
B - Bearing/Inner ring width	9 mm
d1 - External diameter inner ring	20,5 mm
D1 - Inner diameter outer ring	28,8 mm
rs - Min fillet radius	0,3 mm
Radial clearance class	C3
Mass	0,03 kg

PRODUCT PERFORMANCE

C - Dynamic load	5900000 mN
C0 - Static load	2850000 mN
Cu - Fatigue limit load	130000 mN



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PRODUCT PERFORMANCE

f0 - Coefficient	13.9
N lim - Mechanical Limit Speed	204000 %/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)	3.588 Hz
BPFI - Over rolling frequency on inner (60 rpm)	5.412 Hz
BSF - Over rolling frequency on rolling element (60 rpm)	4.731 Hz
BRF - Rotational frequency - rolling element (60 rpm)	2.366 Hz
FTF - Rotational frequency - cage (60 rpm)	0.399 Hz

ABUTMENT

da min - Min shoulder diameter IR	17 mm
da max - Max shoulder diameter IR	20,5 mm
Da max - Max shoulder diameter OR	30 mm
ra max - Max shaft & housing fillet radius	0,3 mm



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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 $P_0 = F_r$

