

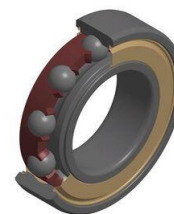


Brand of NTN corporation

Technical data

6000HVZZ

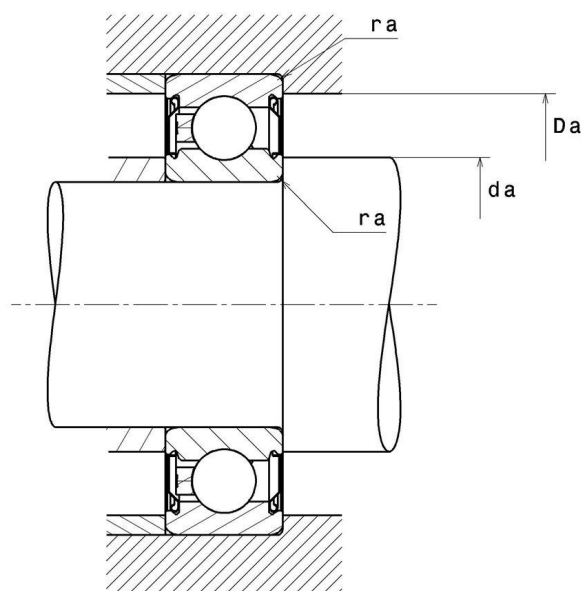
Single row deep groove ball bearings



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

TOPLINE

VISUAL (S)

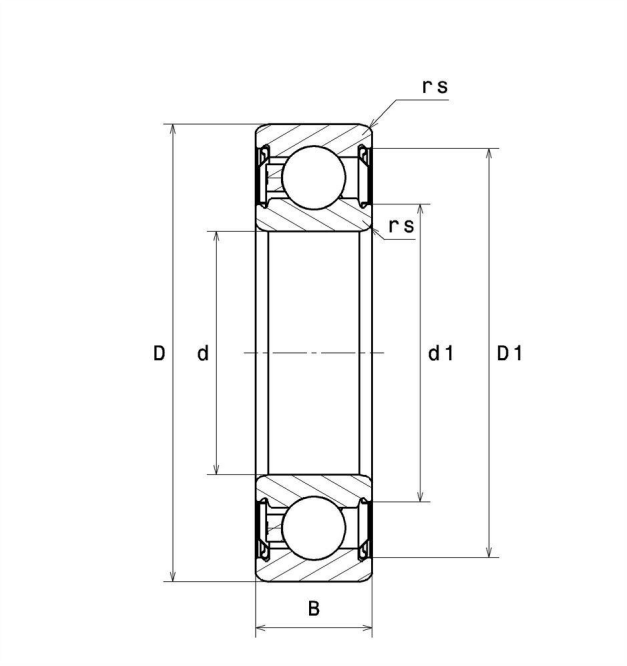


NTN Europe

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
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6000HVZZ

Single row deep groove ball bearings



PRODUCT DEFINITION

Brand	SNR
d - Internal diameter	10 mm
D - External diameter	26 mm
B - Bearing/Inner ring width	8 mm
d1 - External diameter inner ring	14,7 mm
D1 - Inner diameter outer ring	22,7 mm
rs - Min fillet radius	0,3 mm
Radial clearance class	C3
Mass	0,02 kg

PRODUCT PERFORMANCE

C - Dynamic load	4800000 mN
C0 - Static load	1970000 mN
Cu - Fatigue limit load	90000 mN



PRODUCT PERFORMANCE

f0 - Coefficient	12.4
N lim - Mechanical Limit Speed	269999,999 °/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)	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	12 mm
da max - Max shoulder diameter IR	14,7 mm
Da max - Max shoulder diameter OR	24 mm
ra max - Max shaft & housing fillet radius	0,3 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 $P_0 = F_r$

