

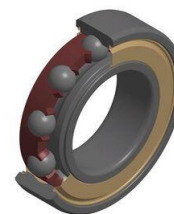


Brand of NTN corporation

Technical data

6201HVZZ

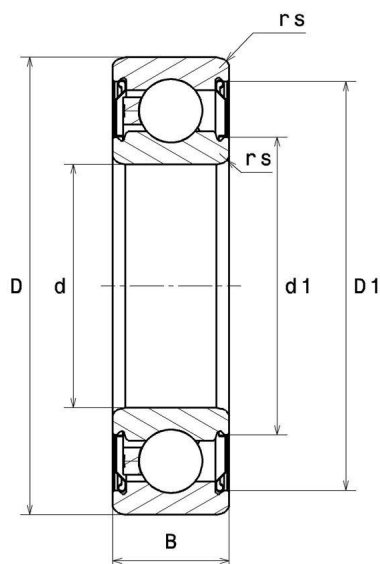
Single row deep groove ball bearings



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

TOPLINE

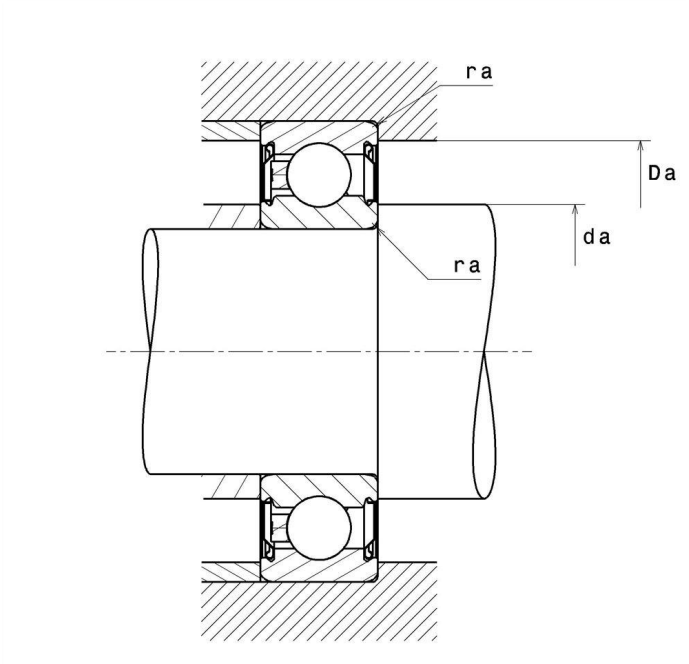
VISUAL (S)



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

6201HVZZ
Single row deep groove ball bearings



PRODUCT DEFINITION

Brand	SNR
d - Internal diameter	12 mm
D - External diameter	32 mm
B - Bearing/Inner ring width	10 mm
d1 - External diameter inner ring	18,3 mm
D1 - Inner diameter outer ring	27,9 mm
rs - Min fillet radius	0,6 mm
Radial clearance class	C3
Mass	0,038 kg

PRODUCT PERFORMANCE

C - Dynamic load	7300000 mN
C0 - Static load	3100000 mN
Cu - Fatigue limit load	140000 mN



6201HVZZ

Single row deep groove ball bearings

PRODUCT PERFORMANCE

f0 - Coefficient	12.2
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)	2.545 Hz
BPFI - Over rolling frequency on inner (60 rpm)	4.455 Hz
BSF - Over rolling frequency on rolling element (60 rpm)	3.394 Hz
BRF - Rotational frequency - rolling element (60 rpm)	1.697 Hz
FTF - Rotational frequency - cage (60 rpm)	0.364 Hz

ABUTMENT

da min - Min shoulder diameter IR	16 mm
da max - Max shoulder diameter IR	18,3 mm
Da max - Max shoulder diameter OR	28 mm
ra max - Max shaft & housing fillet radius	0,6 mm



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

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 $P_0 < Fr$, then use $P_0 = Fr$

