

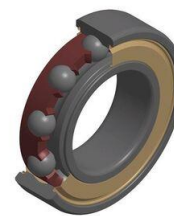


Brand of NTN corporation

Technical data

6202HVZZ

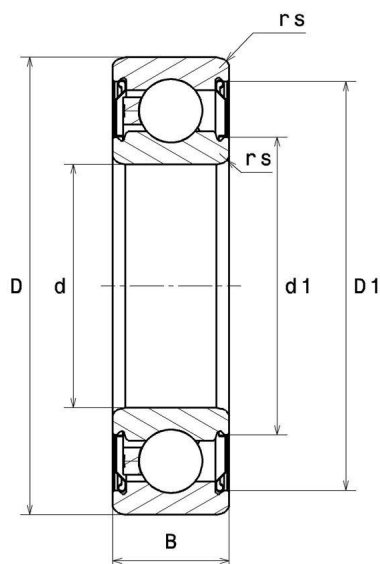
Single row deep groove ball bearings



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

TOPLINE

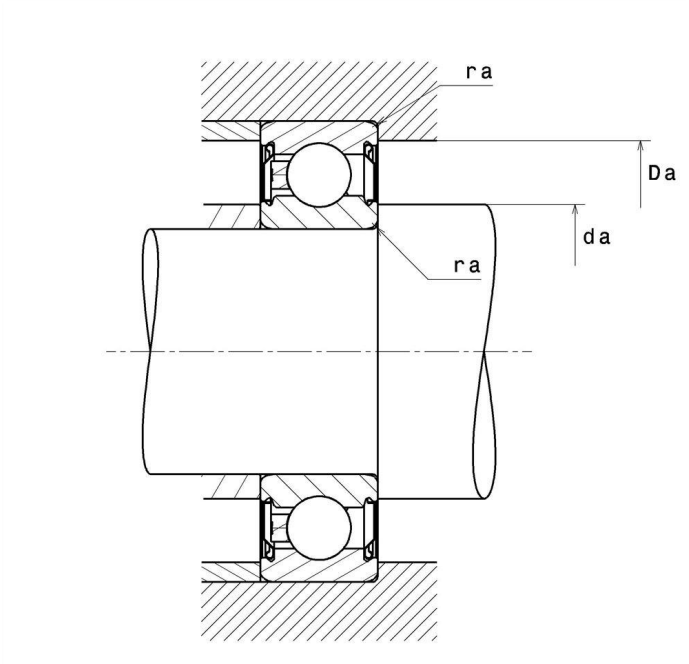
VISUAL (S)



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
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6202HVZZ
Single row deep groove ball bearings



PRODUCT DEFINITION

Brand	SNR
d - Internal diameter	15 mm
D - External diameter	35 mm
B - Bearing/Inner ring width	11 mm
d1 - External diameter inner ring	21,1 mm
D1 - Inner diameter outer ring	30,5 mm
rs - Min fillet radius	0,6 mm
Radial clearance class	C3
Mass	0,045 kg

PRODUCT PERFORMANCE

C - Dynamic load	8100000 mN
C0 - Static load	3750000 mN
Cu - Fatigue limit load	170000 mN



PRODUCT PERFORMANCE

f0 - Coefficient	13.1
N lim - Mechanical Limit Speed	174000 %/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)	3.05 Hz
BPFI - Over rolling frequency on inner (60 rpm)	4.95 Hz
BSF - Over rolling frequency on rolling element (60 rpm)	3.972 Hz
BRF - Rotational frequency - rolling element (60 rpm)	1.986 Hz
FTF - Rotational frequency - cage (60 rpm)	0.381 Hz

ABUTMENT

da min - Min shoulder diameter IR	19 mm
da max - Max shoulder diameter IR	21,1 mm
Da max - Max shoulder diameter OR	31 mm
ra max - Max shaft & housing fillet radius	0,6 mm



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 $P_0 = Fr$