

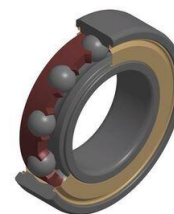


Brand of NTN corporation

Technical data

6007HVZZ

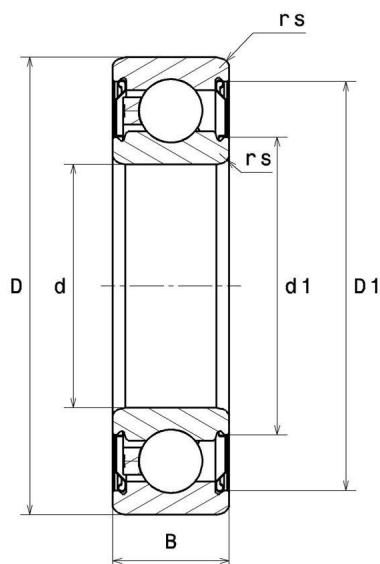
Single row deep groove ball bearings



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

TOPLINE

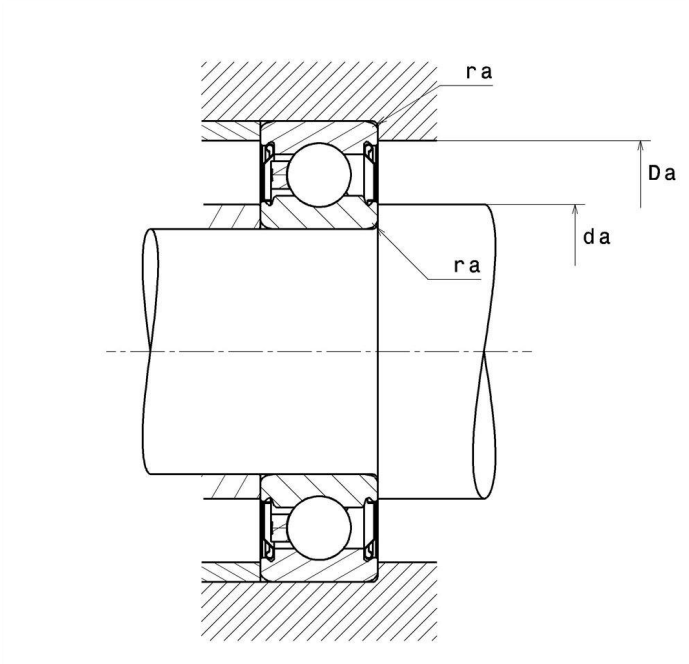
VISUAL (S)



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

6007HVZZ
Single row deep groove ball bearings



PRODUCT DEFINITION	
Brand	SNR
d - Internal diameter	35 mm
D - External diameter	62 mm
B - Bearing/Inner ring width	14 mm
d1 - External diameter inner ring	43,5 mm
D1 - Inner diameter outer ring	55,9 mm
rs - Min fillet radius	1 mm
Radial clearance class	C3
Mass	0,153 kg

PRODUCT PERFORMANCE	
C - Dynamic load	16800000 mN
C0 - Static load	10300000 mN
Cu - Fatigue limit load	470000 mN

PRODUCT PERFORMANCE

f0 - Coefficient	14.8
N lim - Mechanical Limit Speed	114000 %/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)	4.6 Hz
BPFI - Over rolling frequency on inner (60 rpm)	6.4 Hz
BSF - Over rolling frequency on rolling element (60 rpm)	5.946 Hz
BRF - Rotational frequency - rolling element (60 rpm)	2.973 Hz
FTF - Rotational frequency - cage (60 rpm)	0.418 Hz

ABUTMENT

da min - Min shoulder diameter IR	40 mm
da max - Max shoulder diameter IR	43,5 mm
Da max - Max shoulder diameter OR	57 mm
ra max - Max shaft & housing fillet radius	1 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 P₀ <Fr, then use P₀ = Fr