



Brand of NTN corporation

Technical data

6307HT200ZZ

Single row deep groove ball bearings



TOPLINE deep groove ball bearing, radial contact, pressed steel cage, shields on both sides, applications up to 200°C.

TOPLINE

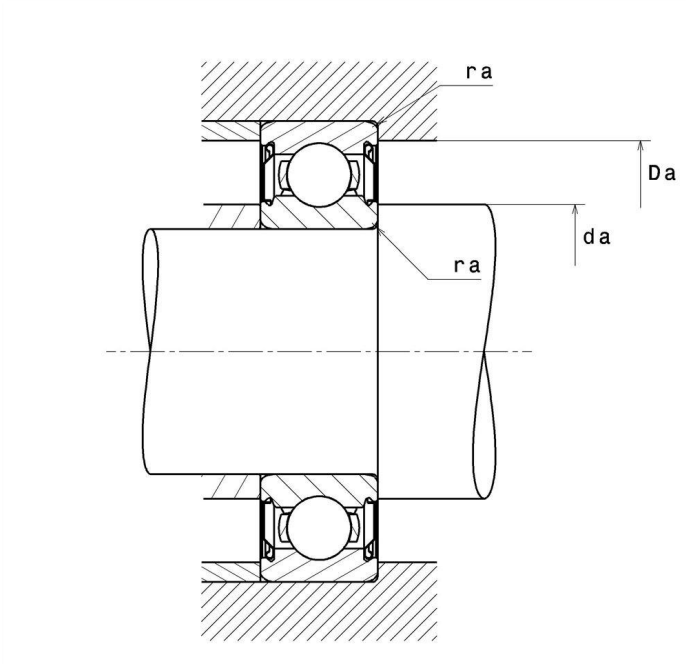
VISUAL (S)



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

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Single row deep groove ball bearings



PRODUCT DEFINITION

Brand	SNR
d - Internal diameter	35 mm
D - External diameter	80 mm
B - Bearing/Inner ring width	21 mm
d1 - External diameter inner ring	46,2 mm
D1 - Inner diameter outer ring	70,1 mm
rs - Min fillet radius	1,5 mm
Radial clearance class	C4
Mass	0,446 kg

PRODUCT PERFORMANCE

C - Dynamic load	35100000 mN
C0 - Static load	19200000 mN
Cu - Fatigue limit load	870000 mN



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PRODUCT PERFORMANCE

f0 - Coefficient	13.2
N lim - Mechanical Limit Speed	24600 °/s
Tmin - Min operating temperature	233,15 °K
Tmax - Max operating temperature	473,15 °K

BEARING FREQUENCIES

BPFO - Over rolling frequency on outer ring (60 rpm)	3.069 Hz
BPFI - Over rolling frequency on inner (60 rpm)	4.931 Hz
BSF - Over rolling frequency on rolling element (60 rpm)	4.066 Hz
BRF - Rotational frequency - rolling element (60 rpm)	2.033 Hz
FTF - Rotational frequency - cage (60 rpm)	0.384 Hz

ABUTMENT

da min - Min shoulder diameter IR	43 mm
da max - Max shoulder diameter IR	46,2 mm
Da max - Max shoulder diameter OR	72 mm
ra max - Max shaft & housing fillet radius	1,5 mm



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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

$$Po = X_0.Fr + Y_0.Fa$$

X_0	Y_0
0.6	0.5

For single or DT bearing arrangement :

If $Po < Fr$, then use $Po = Fr$