



Brand of NTN corporation

Technical data

6301FT150ZZ

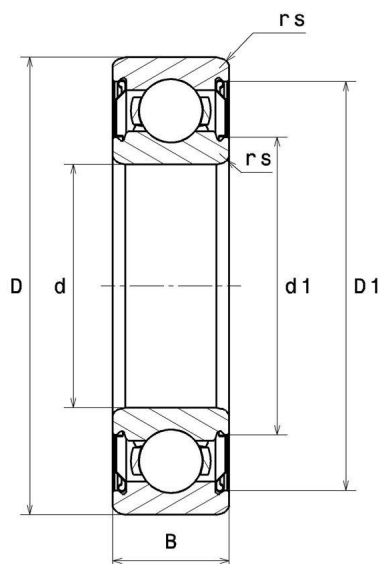
Single row deep groove ball bearings



TOPLINE deep groove ball bearing, radial contact, pressed steel cage, shields on both sides, applications up to 150°C.

TOPLINE

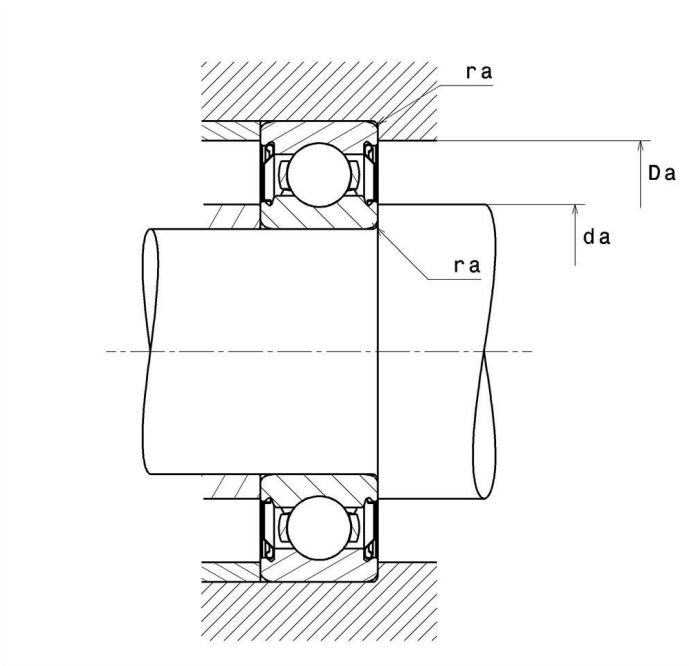
VISUAL (S)



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	12 mm
D - External diameter	37 mm
B - Bearing/Inner ring width	12 mm
d1 - External diameter inner ring	19,3 mm
D1 - Inner diameter outer ring	32 mm
rs - Min fillet radius	1 mm
Radial clearance class	C3
Mass	0,06 kg

PRODUCT PERFORMANCE

C - Dynamic load	10200000 mN
C0 - Static load	4200000 mN
Cu - Fatigue limit load	190000 mN



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PRODUCT PERFORMANCE

f0 - Coefficient	11.1
N lim - Mechanical Limit Speed	120000 %/s
Tmin - Min operating temperature	243,15 °K
Tmax - Max operating temperature	423,15 °K

BEARING FREQUENCIES

BPFO - Over rolling frequency on outer ring (60 rpm)	2.028 Hz
BPFI - Over rolling frequency on inner (60 rpm)	3.972 Hz
BSF - Over rolling frequency on rolling element (60 rpm)	2.762 Hz
BRF - Rotational frequency - rolling element (60 rpm)	1.381 Hz
FTF - Rotational frequency - cage (60 rpm)	0.338 Hz

ABUTMENT

da min - Min shoulder diameter IR	17 mm
da max - Max shoulder diameter IR	19,3 mm
Da max - Max shoulder diameter OR	32 mm
ra max - Max shaft & housing fillet radius	1 mm



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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 $P_0 = F_r$

