



Brand of NTN corporation

Technical data

6003FT150ZZ

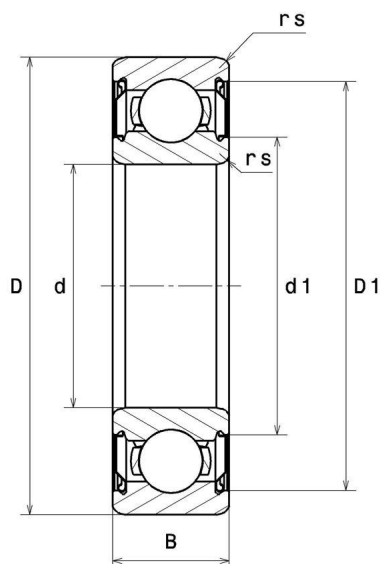
Single row deep groove ball bearings



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

TOPLINE

VISUAL (S)

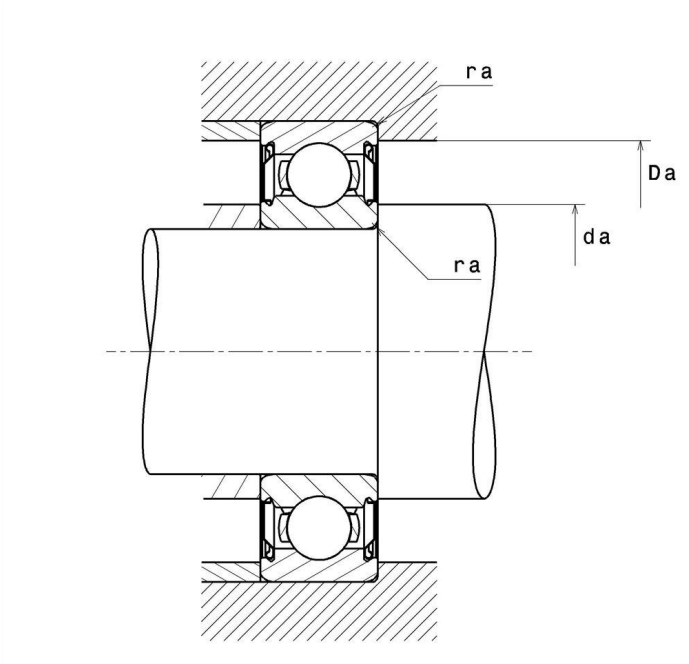


NTN Europe

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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

6003FT150ZZ

Single row deep groove ball bearings



PRODUCT DEFINITION	
Brand	SNR
d - Internal diameter	17 mm
D - External diameter	35 mm
B - Bearing/Inner ring width	10 mm
d1 - External diameter inner ring	22,8 mm
D1 - Inner diameter outer ring	31,4 mm
rs - Min fillet radius	0,3 mm
Radial clearance class	C3
Mass	0,039 kg

PRODUCT PERFORMANCE	
C - Dynamic load	6300000 mN
C0 - Static load	3250000 mN
Cu - Fatigue limit load	150000 mN

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PRODUCT PERFORMANCE

f0 - Coefficient	14.4
N lim - Mechanical Limit Speed	114000 %/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)	4.084 Hz
BPFI - Over rolling frequency on inner (60 rpm)	5.916 Hz
BSF - Over rolling frequency on rolling element (60 rpm)	5.276 Hz
BRF - Rotational frequency - rolling element (60 rpm)	2.638 Hz
FTF - Rotational frequency - cage (60 rpm)	0.408 Hz

ABUTMENT

da min - Min shoulder diameter IR	19 mm
da max - Max shoulder diameter IR	22,8 mm
Da max - Max shoulder diameter OR	33 mm
ra max - Max shaft & housing fillet radius	0,3 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