



Brand of NTN corporation

Technical data

6203FT150

Single row deep groove ball bearings



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

TOPLINE

VISUAL (S)

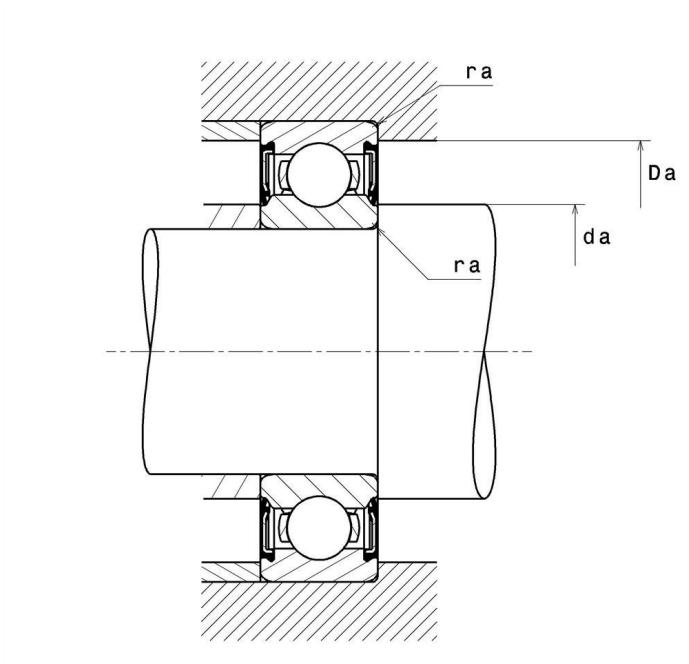


NTN Europe

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

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PRODUCT DEFINITION	
Brand	SNR
d - Internal diameter	17 mm
D - External diameter	40 mm
B - Bearing/Inner ring width	12 mm
d1 - External diameter inner ring	24,1 mm
D1 - Inner diameter outer ring	34,9 mm
rs - Min fillet radius	0,6 mm
Radial clearance class	C3
Mass	0,068 kg

PRODUCT PERFORMANCE	
C - Dynamic load	10100000 mN
C0 - Static load	4750000 mN
Cu - Fatigue limit load	220000 mN

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PRODUCT PERFORMANCE

f0 - Coefficient	13.1
N lim - Mechanical Limit Speed	72000 °/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)	3.053 Hz
BPFI - Over rolling frequency on inner (60 rpm)	4.947 Hz
BSF - Over rolling frequency on rolling element (60 rpm)	3.987 Hz
BRF - Rotational frequency - rolling element (60 rpm)	1.994 Hz
FTF - Rotational frequency - cage (60 rpm)	0.382 Hz

ABUTMENT

da min - Min shoulder diameter IR	21 mm
da max - Max shoulder diameter IR	24,1 mm
Da max - Max shoulder diameter OR	36 mm
ra max - Max shaft & housing fillet radius	0,6 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 $P_0 = F_r$

