



Brand of NTN corporation

Technical data

6010FT150ZZ

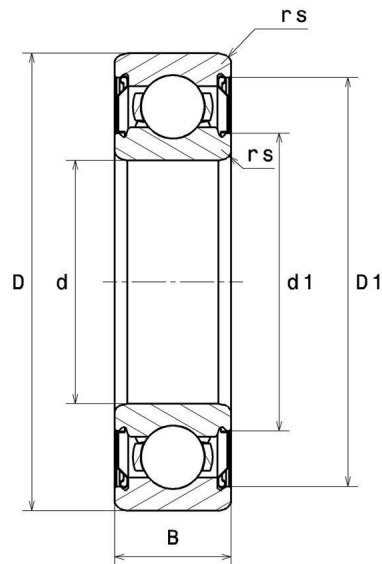
Single row deep groove ball bearings



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

TOPLINE

VISUAL (S)

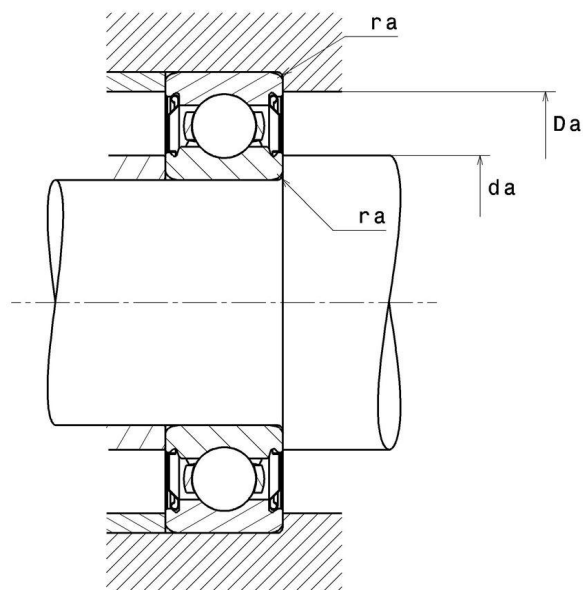


NTN Europe

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

6010FT150ZZ

Single row deep groove ball bearings



PRODUCT DEFINITION

Brand	SNR
d - Internal diameter	50 mm
D - External diameter	80 mm
B - Bearing/Inner ring width	16 mm
d1 - External diameter inner ring	59,7 mm
D1 - Inner diameter outer ring	74,4 mm
rs - Min fillet radius	1 mm
Radial clearance class	C3
Mass	0,267 kg

PRODUCT PERFORMANCE

C - Dynamic load	23000000 mN
C0 - Static load	16600000 mN
Cu - Fatigue limit load	750000 mN



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

6010FT150ZZ

Single row deep groove ball bearings

PRODUCT PERFORMANCE

f0 - Coefficient	15.6
N lim - Mechanical Limit Speed	45000 °/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)	6.067 Hz
BPFI - Over rolling frequency on inner (60 rpm)	7.933 Hz
BSF - Over rolling frequency on rolling element (60 rpm)	7.369 Hz
BRF - Rotational frequency - rolling element (60 rpm)	3.685 Hz
FTF - Rotational frequency - cage (60 rpm)	0.433 Hz

ABUTMENT

da min - Min shoulder diameter IR	55 mm
da max - Max shoulder diameter IR	59,7 mm
Da max - Max shoulder diameter OR	75 mm
ra max - Max shaft & housing fillet radius	1 mm



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

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 $P_0 = F_r$

