



Brand of NTN corporation

Technical data

6305FT150

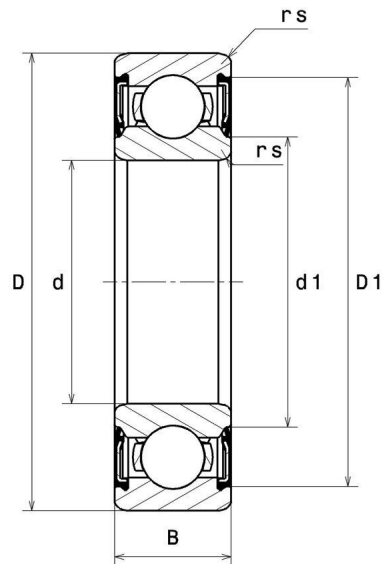
Single row deep groove ball bearings



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

TOPLINE

VISUAL (S)

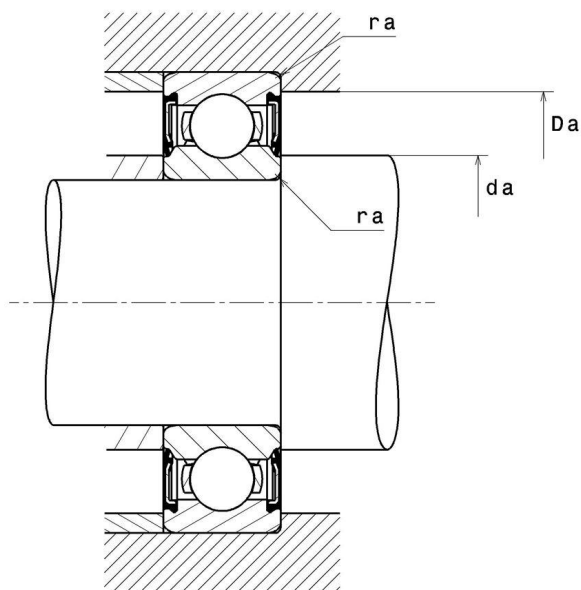


NTN Europe

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

6305FT150

Single row deep groove ball bearings



PRODUCT DEFINITION

Brand	SNR
d - Internal diameter	25 mm
D - External diameter	62 mm
B - Bearing/Inner ring width	17 mm
d1 - External diameter inner ring	33,6 mm
D1 - Inner diameter outer ring	52,6 mm
rs - Min fillet radius	1,1 mm
Radial clearance class	C3
Mass	0,225 kg

PRODUCT PERFORMANCE

C - Dynamic load	24900000 mN
C0 - Static load	12100000 mN
Cu - Fatigue limit load	550000 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

6305FT150

Single row deep groove ball bearings

PRODUCT PERFORMANCE

f0 - Coefficient	12.2
N lim - Mechanical Limit Speed	49200 °/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)	2.542 Hz
BPFI - Over rolling frequency on inner (60 rpm)	4.458 Hz
BSF - Over rolling frequency on rolling element (60 rpm)	3.38 Hz
BRF - Rotational frequency - rolling element (60 rpm)	1.69 Hz
FTF - Rotational frequency - cage (60 rpm)	0.363 Hz

ABUTMENT

da min - Min shoulder diameter IR	31,5 mm
da max - Max shoulder diameter IR	37,9 mm
Da max - Max shoulder diameter OR	55,5 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 $P_0 = F_r$

