



Brand of NTN corporation

Technical data

6310FT150

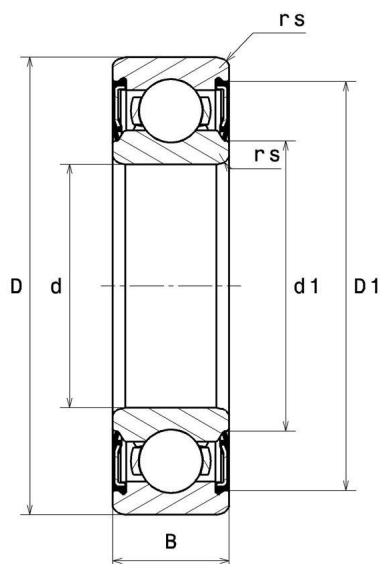
Single row deep groove ball bearings



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

TOPLINE

VISUAL (S)

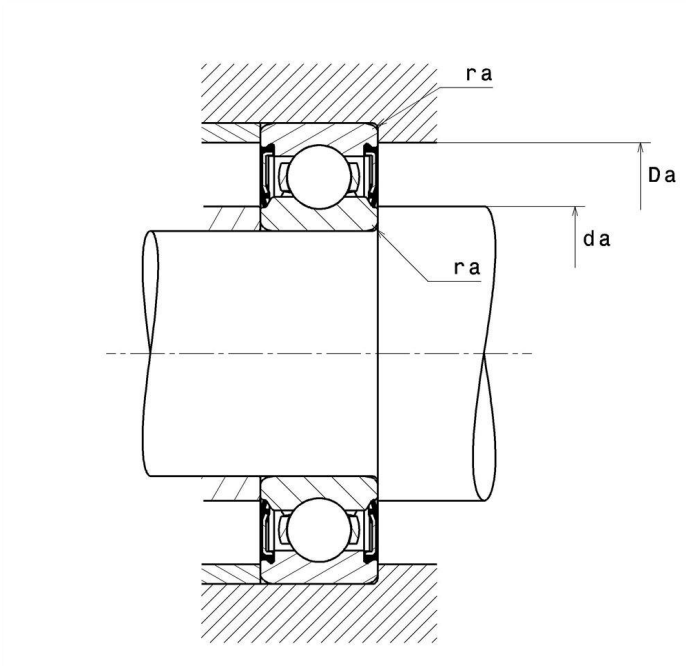


NTN Europe

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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

6310FT150

Single row deep groove ball bearings



PRODUCT DEFINITION

Brand	SNR
d - Internal diameter	50 mm
D - External diameter	110 mm
B - Bearing/Inner ring width	27 mm
d1 - External diameter inner ring	64,7 mm
D1 - Inner diameter outer ring	98 mm
rs - Min fillet radius	2 mm
Radial clearance class	C3
Mass	1,07 kg

PRODUCT PERFORMANCE

C - Dynamic load	65400000 mN
C0 - Static load	38300000 mN
Cu - Fatigue limit load	1740000 mN

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PRODUCT PERFORMANCE

f0 - Coefficient	13.2
N lim - Mechanical Limit Speed	25200 °/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)	3.071 Hz
BPFI - Over rolling frequency on inner (60 rpm)	4.929 Hz
BSF - Over rolling frequency on rolling element (60 rpm)	4.072 Hz
BRF - Rotational frequency - rolling element (60 rpm)	2.036 Hz
FTF - Rotational frequency - cage (60 rpm)	0.384 Hz

ABUTMENT

da min - Min shoulder diameter IR	59 mm
da max - Max shoulder diameter IR	64,7 mm
Da max - Max shoulder diameter OR	101 mm
ra max - Max shaft & housing fillet radius	2 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 $P_0 = F_r$



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