Brand of NTN corporation

Technical data



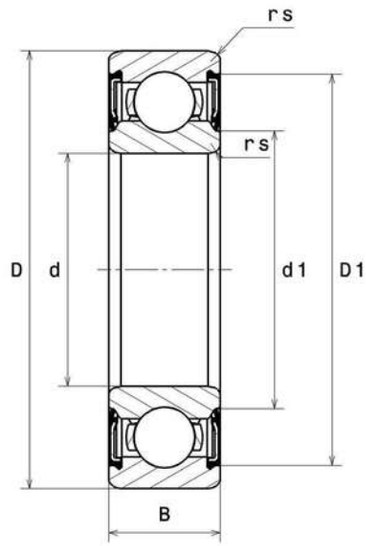
6201FT150

Single row deep groove ball bearings

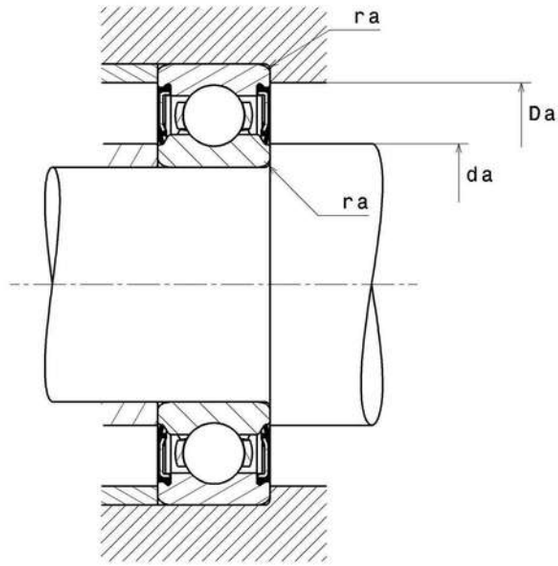
TOPLINE deep groove ball bearing, radial contact, pressed steel cage, contact seals on both sides, applications up to 150°C.

TOPLINE

VISUAL (S)



6201FT150
Single row deep groove ball bearings



PRODUCT DEFINITION	
Brand	SNR
d - Internal diameter	12 mm
D - External diameter	32 mm
B - Bearing/Inner ring width	10 mm
d1 - External diameter inner ring	18,3 mm
D1 - Inner diameter outer ring	27,9 mm
rs - Min fillet radius	0,6 mm
Radial clearance class	C3
Mass	0,038 kg

PRODUCT PERFORMANCE	
C - Dynamic load	7300000 mN
C0 - Static load	3100000 mN
Cu - Fatigue limit load	140000 mN

6201FT150
Single row deep groove ball bearings

PRODUCT PERFORMANCE	
f0 - Coefficient	12.2
N lim - Mechanical Limit Speed	96000 °/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)	2.545 Hz
BPFI - Over rolling frequency on inner (60 rpm)	4.455 Hz
BSF - Over rolling frequency on rolling element (60 rpm)	3.394 Hz
BRF - Rotational frequency – rolling element (60 rpm)	1.697 Hz
FTF - Rotational frequency - cage (60 rpm)	0.364 Hz

ABUTMENT	
da min - Min shoulder diameter IR	16 mm
da max - Max shoulder diameter IR	51,9 mm
Da max - Max shoulder diameter OR	28 mm
ra max - Max shaft & housing fillet radius	0,6 mm

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 = Xo.Fr + Yo.Fa

X_0	Y_0
0.6	0.5

For single or DT bearing arrangement :

If Po <Fr, then use Po = Fr