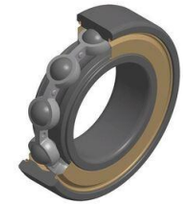
Brand of NTN corporation

Technical data



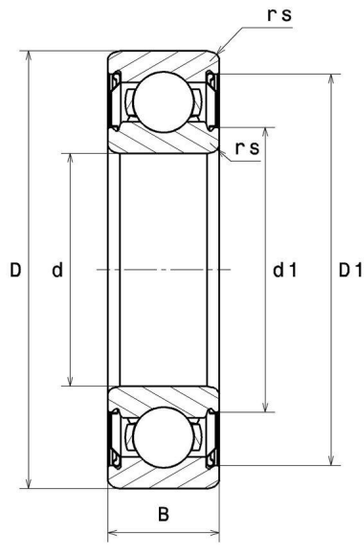
6202FT150ZZ

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.

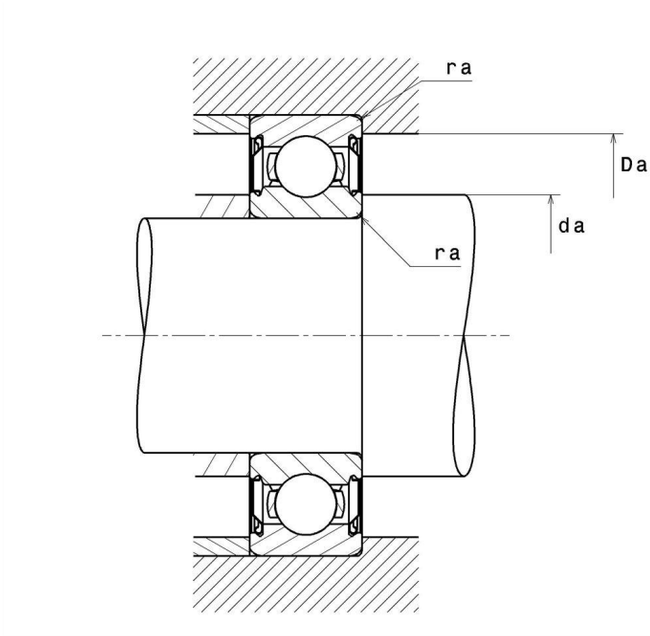
TOPLINE

VISUAL (S)



6202FT150ZZ

Single row deep groove ball bearings



PRODUCT DEFINITION	
Brand	SNR
d - Internal diameter	15 mm
D - External diameter	35 mm
B - Bearing/Inner ring width	11 mm
d1 - External diameter inner ring	21,1 mm
D1 - Inner diameter outer ring	30,5 mm
rs - Min fillet radius	0,6 mm
Radial clearance class	C3
Mass	0,04 kg

PRODUCT PERFORMANCE	
C - Dynamic load	8100000 mN
C0 - Static load	3750000 mN
Cu - Fatigue limit load	170000 mN

6202FT150ZZ
Single row deep groove ball bearings

PRODUCT PERFORMANCE	
f0 - Coefficient	13.1
N lim - Mechanical Limit Speed	120000 °/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)	3.05 Hz
BPFI - Over rolling frequency on inner (60 rpm)	4.95 Hz
BSF - Over rolling frequency on rolling element (60 rpm)	3.972 Hz
BRF - Rotational frequency – rolling element (60 rpm)	1.986 Hz
FTF - Rotational frequency - cage (60 rpm)	0.381 Hz

ABUTMENT	
da min - Min shoulder diameter IR	19 mm
da max - Max shoulder diameter IR	21,1 mm
Da max - Max shoulder diameter OR	31 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