Brand of NTN corporation

Technical data



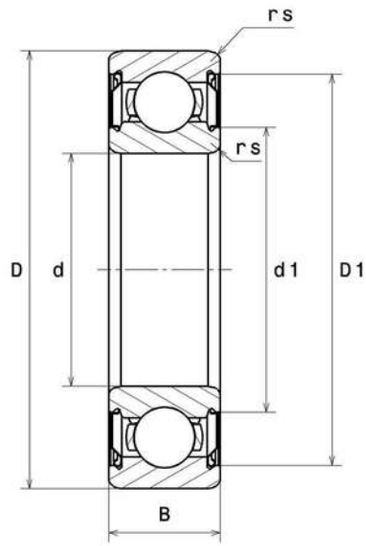
6207HT200ZZ

Single row deep groove ball bearings

TOPLINE deep groove ball bearing, radial contact, pressed steel cage, shields on both sides, applications up to 200°C.

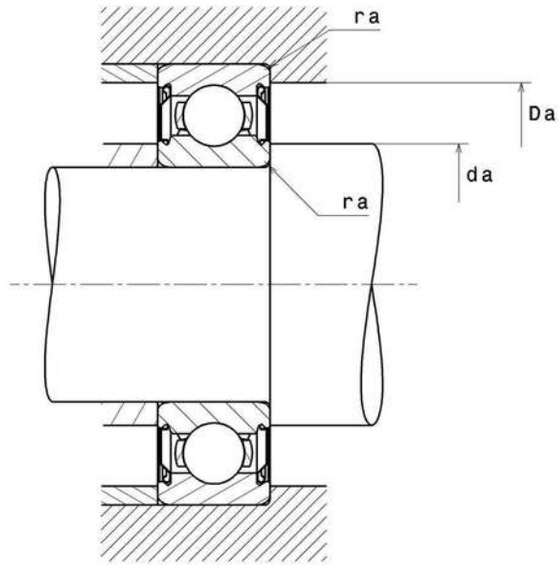
TOPLINE

VISUAL (S)



6207HT200ZZ

Single row deep groove ball bearings



PRODUCT DEFINITION	
Brand	SNR
d - Internal diameter	35 mm
D - External diameter	72 mm
B - Bearing/Inner ring width	17 mm
d1 - External diameter inner ring	44 mm
D1 - Inner diameter outer ring	62,7 mm
rs - Min fillet radius	1,1 mm
Radial clearance class	C4
Mass	0,285 kg

PRODUCT PERFORMANCE	
C - Dynamic load	27100000 mN
C0 - Static load	15300000 mN
Cu - Fatigue limit load	700000 mN

6207HT200ZZ
Single row deep groove ball bearings

PRODUCT PERFORMANCE	
f0 - Coefficient	13.8
N lim - Mechanical Limit Speed	26400 °/s
Tmin - Min operating temperature	233,15 °K
Tmax - Max operating temperature	473,15 °K

BEARING FREQUENCIES	
BPFO - Over rolling frequency on outer ring (60 rpm)	3.565 Hz
BPFI - Over rolling frequency on inner (60 rpm)	5.435 Hz
BSF - Over rolling frequency on rolling element (60 rpm)	4.606 Hz
BRF - Rotational frequency – rolling element (60 rpm)	2.303 Hz
FTF - Rotational frequency - cage (60 rpm)	0.396 Hz

ABUTMENT	
da min - Min shoulder diameter IR	41,5 mm
da max - Max shoulder diameter IR	44 mm
Da max - Max shoulder diameter OR	65,5 mm
ra max - Max shaft & housing fillet radius	1 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