



Brand of NTN corporation

Technical data

6209F600

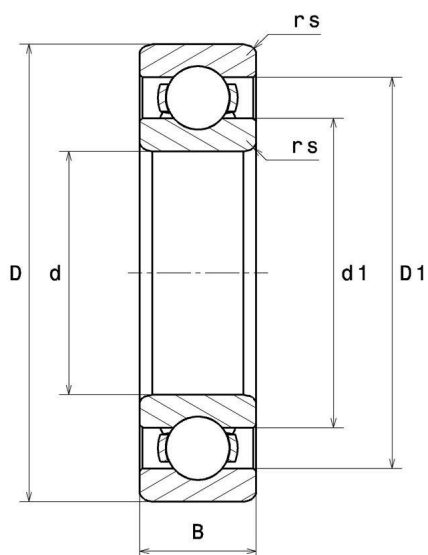
Single row deep groove ball bearings



TOPLINE deep groove ball bearing, radial contact, pressed steel cage, open, applications up to 350°C.

TOPLINE

VISUAL (S)

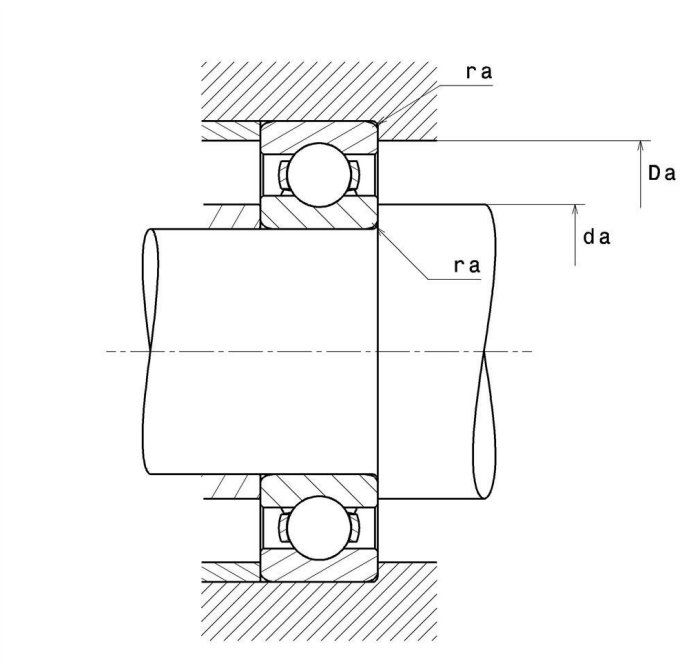


NTN Europe

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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

6209F600

Single row deep groove ball bearings



PRODUCT DEFINITION	
Brand	SNR
d - Internal diameter	45 mm
D - External diameter	85 mm
B - Bearing/Inner ring width	19 mm
d1 - External diameter inner ring	54,5 mm
D1 - Inner diameter outer ring	75,6 mm
rs - Min fillet radius	1,1 mm
Radial clearance class	> C5
Mass	0,393 kg

PRODUCT PERFORMANCE	
C0 - Static load	20400000 mN
f0 - Coefficient	14.1
N lim - Mechanical Limit Speed	420 °/s

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PRODUCT PERFORMANCE

Tmin - Min operating temperature	233,15 °K
Tmax - Max operating temperature	623,15 °K

BEARING FREQUENCIES

BPFO - Over rolling frequency on outer ring (60 rpm)	3.621 Hz
BPFI - Over rolling frequency on inner (60 rpm)	5.379 Hz
BSF - Over rolling frequency on rolling element (60 rpm)	4.923 Hz
BRF - Rotational frequency - rolling element (60 rpm)	2.462 Hz
FTF - Rotational frequency - cage (60 rpm)	0.402 Hz

ABUTMENT

da min - Min shoulder diameter IR	51,5 mm
Da max - Max shoulder diameter OR	78,5 mm
ra max - Max shaft & housing fillet radius	1 mm



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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

$$Po = X_0.Fr + Y_0.Fa$$

X ₀	Y ₀
0.6	0.5

For single or DT bearing arrangement :

If Po ≤Fr, then use Po = Fr