Brand of NTN corporation

Technical data

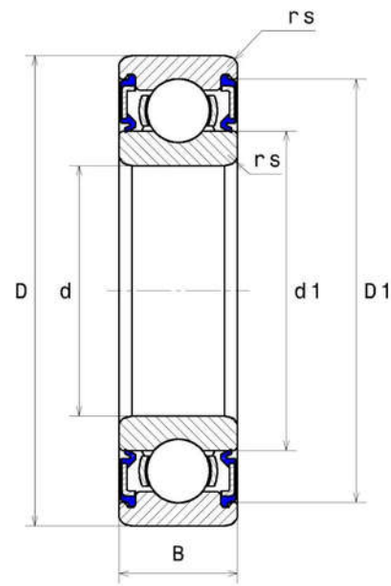
S6004EEFD

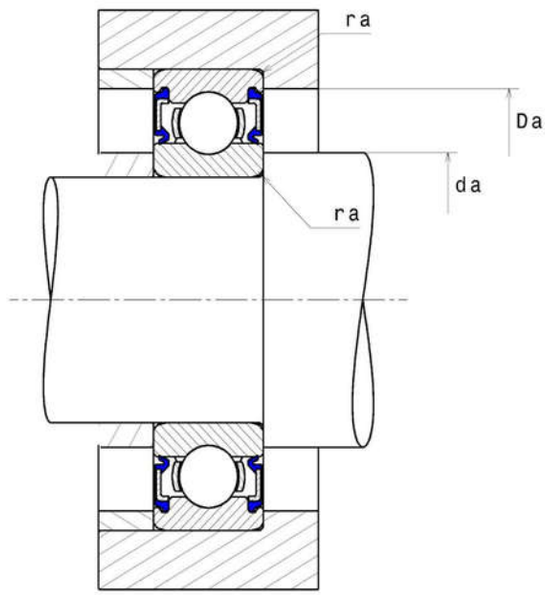
Single row deep groove ball bearings



Stainless steel deep groove ball bearing, with pressed stainless steel cage, seals with stainless steel frame on both sides, food grease lubrication.

VISUAL (S)





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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

S6004EEFD
Single row deep groove ball bearings

PRODUCT DEFINITION	
Brand	SNR
d - Internal diameter	20 mm
D - External diameter	42 mm
B - Bearing/Inner ring width	12 mm
d1 - External diameter inner ring	26,9 mm
D1 - Inner diameter outer ring	37 mm
rs - Min fillet radius	0,6 mm
Radial clearance class	CN
Mass	0,067 kg

PRODUCT PERFORMANCE	
C - Dynamic load	7,2 kN
C0 - Static load	5 kN
Cu - Fatigue limit load	0,23 kN
f0 - Coefficient	13.85
Nlim - Mechanical Limit Speed	11000 tr/min
Tmin - Min operating temperature	-30 °C
Tmax - Max operating temperature	120 °C

BEARING FREQUENCIES	
BPFO - Characteristic outer ring frequency (60 rpm)	3.578 Hz
BPFI - Characteristic inner ring frequency (60 rpm)	5.422 Hz
FTF - Characteristic cage frequency (60 rpm)	0.398 Hz
BSF - Characteristic rolling element frequency (60 rpm)	4.677 Hz

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ABUTMENT	
da min - Min shoulder diameter IR	24 mm
da max - Max shoulder diameter IR	26,9 mm
Da max - Max shoulder diameter OR	38 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