

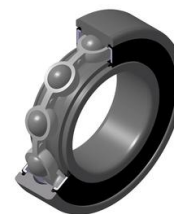


Brand of NTN corporation

Technical data

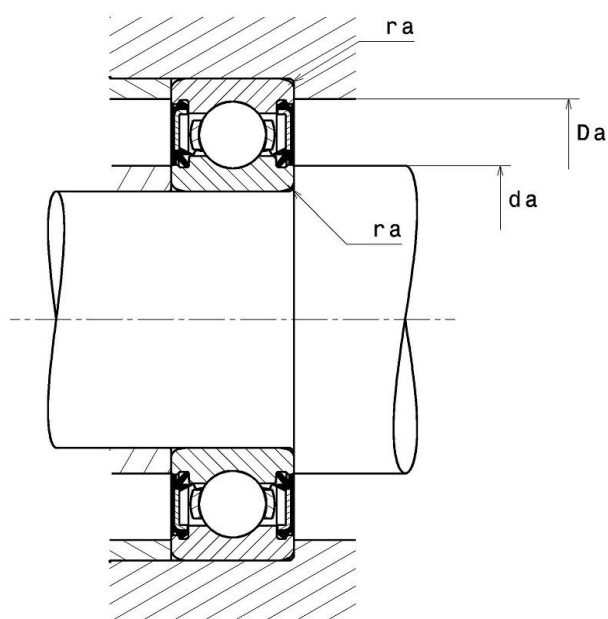
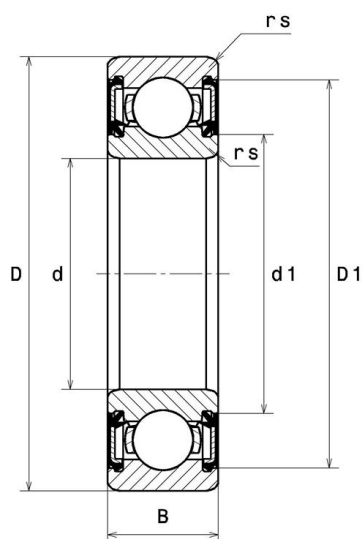
6316EE

Single row deep groove ball bearings



Deep groove ball bearing, radial contact, pressed steel cage, contact seals on both sides

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

PRODUCT DEFINITION

Brand	SNR
d - Internal diameter	80 mm
D - External diameter	170 mm
B - Bearing/Inner ring width	39 mm
d1 - External diameter inner ring	105,5 mm
D1 - Inner diameter outer ring	145,4 mm
rs - Min fillet radius	2,1 mm
Radial clearance class	CN
Mass	4,41 kg

PRODUCT PERFORMANCE

C - Dynamic load	130000000 mN
C0 - Static load	86700000 mN
Cu - Fatigue limit load	3550000 mN
f0 - Coefficient	13.3
N lim - Mechanical Limit Speed	16200 °/s
Tmin - Min operating temperature	243,15 °K
Tmax - Max operating temperature	393,15 °K

BEARING FREQUENCIES

BPFO - Over rolling frequency on outer ring (60 rpm)	3.086 Hz
BPFI - Over rolling frequency on inner (60 rpm)	4.914 Hz
BSF - Over rolling frequency on rolling element (60 rpm)	4.146 Hz
BRF - Rotational frequency - rolling element (60 rpm)	2.073 Hz
FTF - Rotational frequency - cage (60 rpm)	0.386 Hz



ABUTMENT

da min - Min shoulder diameter IR	91 mm
da max - Max shoulder diameter IR	105,5 mm
Da max - Max shoulder diameter OR	159 mm
ra max - Max shaft & housing fillet radius	2 mm

INDUSTRY CALCUL FACTORS

Equivalent dynamic radial load

$$P = X.F_r + Y.F_a$$

$\frac{f_0 F_a}{C_0}$	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

$$P_0 = X_0.F_r + Y_0.F_a$$

X_0	Y_0
0.6	0.5

For single or DT bearing arrangement :

If $P_0 < F_r$, then use $P_0 = F_r$

