



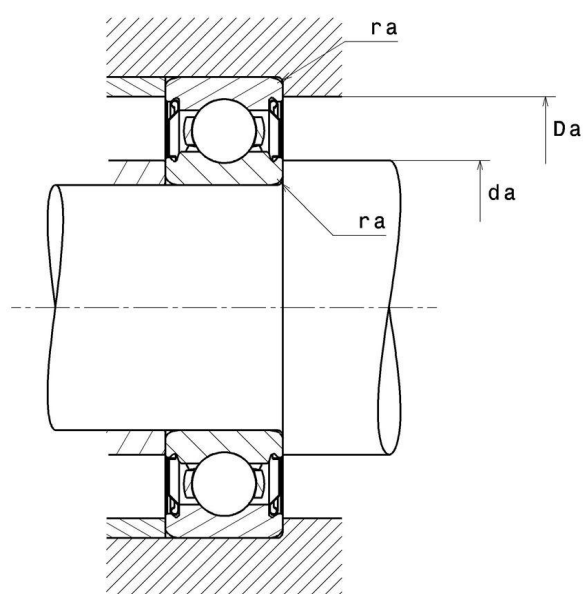
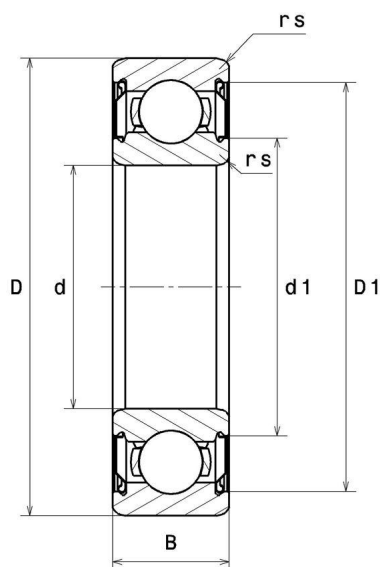
Technical data

6311ZZCM/5K

Single row deep groove ball bearings

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

VISUAL (S)



6311ZZCM/5K

Single row deep groove ball bearings

PRODUCT DEFINITION

Brand	NTN
d - Internal diameter	55 mm
D - External diameter	120 mm
B - Bearing/Inner ring width	29 mm
rs - Min fillet radius	2 mm
Radial clearance class	CM
Mass	1,37 kg

PRODUCT PERFORMANCE

C - Dynamic load	79500000 mN
C0 - Static load	45000000 mN
Cu - Fatigue limit load	3500000 mN
f0 - Coefficient	13.2
N lim - Grease lubrication limit speed	34800 °/s
Tmin - Min operating temperature	233,15 °K
Tmax - Max operating temperature	423,15 °K

ABUTMENT

da min - Min shoulder diameter IR	64 mm
Da max - Max shoulder diameter OR	111 mm
ra max - Max shaft & housing fillet radius	2 mm



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

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