



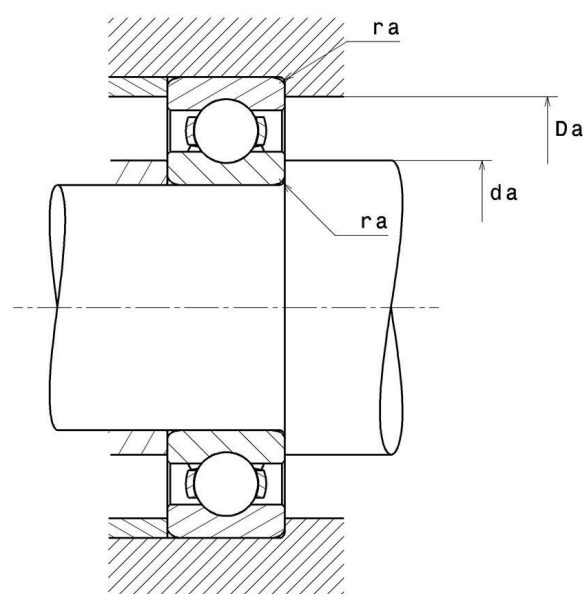
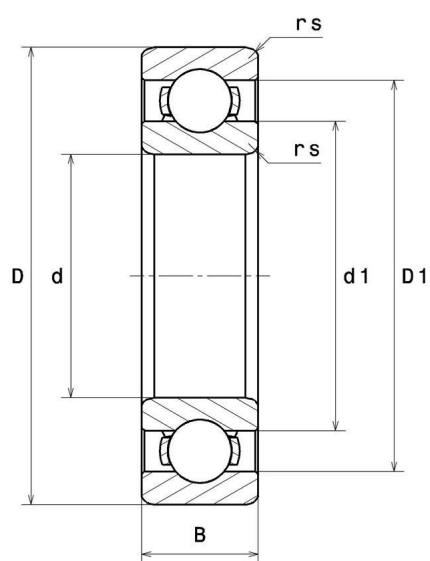
Technical data

6311CM

Single row deep groove ball bearings

Deep groove ball bearing, radial contact, pressed steel cage, open

VISUAL (S)



6311CM

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 - Oil lubrication limit speed	40800 °/s
N lim - Grease lubrication limit speed	34800 °/s
Tmin - Min operating temperature	233,15 °K
Tmax - Max operating temperature	393,15 °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

$$P = X \cdot Fr + Y \cdot Fa$$

$\frac{f_0 F_a}{C_0}$	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

$$P_0 = X_0 \cdot Fr + Y_0 \cdot Fa$$

X_0	Y_0
0.6	0.5

For single or DT bearing arrangement :

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

