

Technical data

6820C3

Single row deep groove ball bearings



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

VISUAL (S)



6820C3

Single row deep groove ball bearings

PRODUCT DEFINITION

Brand	NTN
d - Internal diameter	100 mm
D - External diameter	125 mm
B - Bearing/Inner ring width	13 mm
rs - Min fillet radius	1 mm
Radial clearance class	C3
Mass	0,313 kg

PRODUCT PERFORMANCE

C - Dynamic load	21700000 mN
C0 - Static load	21200000 mN
Cu - Fatigue limit load	1330000 mN
f0 - Coefficient	16
N lim - Oil lubrication limit speed	33600 °/s
N lim - Grease lubrication limit speed	28800 °/s
Tmin - Min operating temperature	233,15 °K
Tmax - Max operating temperature	393,15 °K

ABUTMENT

da min - Min shoulder diameter IR	105 mm
Da max - Max shoulder diameter OR	120 mm
ra max - Max shaft & housing fillet radius	1 mm



NTN Europe

1 rue des Usines · BP 2017 · 74010 Annecy Cedex · France · Tel. +33 (0)4 50 65 30 00
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

$P_0 = X_0.Fr + Y_0.Fa$

X_0	Y_0
0.6	0.5

For single or DT bearing arrangement :

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

