

Technical data

6309CM

Single row deep groove ball bearings



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

VISUAL (S)



6309CM

Single row deep groove ball bearings

PRODUCT DEFINITION

Brand	NTN
d - Internal diameter	45 mm
D - External diameter	100 mm
B - Bearing/Inner ring width	25 mm
rs - Min fillet radius	1,5 mm
Radial clearance class	CM
Mass	0,814 kg

PRODUCT PERFORMANCE

C - Dynamic load	58500000 mN
C0 - Static load	32000000 mN
Cu - Fatigue limit load	2500000 mN
f0 - Coefficient	13.1
N lim - Oil lubrication limit speed	49200 °/s
N lim - Grease lubrication limit speed	42000 °/s
Tmin - Min operating temperature	233,15 °K
Tmax - Max operating temperature	393,15 °K

ABUTMENT

da min - Min shoulder diameter IR	53 mm
Da max - Max shoulder diameter OR	92 mm
ra max - Max shaft & housing fillet radius	1,5 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
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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 $P_0 = F_r$



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