

Technical data

6209CM

Single row deep groove ball bearings



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

VISUAL (S)



6209CM

Single row deep groove ball bearings

PRODUCT DEFINITION

Brand	NTN
d - Internal diameter	45 mm
D - External diameter	85 mm
B - Bearing/Inner ring width	19 mm
rs - Min fillet radius	1,1 mm
Radial clearance class	CM
Mass	0,398 kg

PRODUCT PERFORMANCE

C - Dynamic load	36000000 mN
C0 - Static load	20400000 mN
Cu - Fatigue limit load	1600000 mN
f0 - Coefficient	14.1
N lim - Oil lubrication limit speed	55200 °/s
N lim - Grease lubrication limit speed	46800 °/s
Tmin - Min operating temperature	233,15 °K
Tmax - Max operating temperature	393,15 °K

ABUTMENT

da min - Min shoulder diameter IR	51,5 mm
Da max - Max shoulder diameter OR	78,5 mm
ra max - Max shaft & housing fillet radius	1 mm



NTN Europe

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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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