

Technical data

6809JR

Single row deep groove ball bearings



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

VISUAL (S)



PRODUCT DEFINITION

Brand	NTN
d - Internal diameter	45 mm
D - External diameter	58 mm
B - Bearing/Inner ring width	7 mm
rs - Min fillet radius	0,3 mm
Radial clearance class	CN
Mass	0,04 kg

PRODUCT PERFORMANCE

C - Dynamic load	5950000 mN
C0 - Static load	4950000 mN
Cu - Fatigue limit load	325000 mN
f0 - Coefficient	16.1
N lim - Oil lubrication limit speed	72000 °/s
N lim - Grease lubrication limit speed	66000 °/s
Tmin - Min operating temperature	233,15 °K
Tmax - Max operating temperature	393,15 °K

ABUTMENT

da min - Min shoulder diameter IR	47 mm
Da max - Max shoulder diameter OR	56 mm
ra max - Max shaft & housing fillet radius	0,3 mm



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 P₀ <F_r, then use P₀ = F_r

