

Technical data

6905C3

Single row deep groove ball bearings



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

VISUAL (S)



6905C3

Single row deep groove ball bearings

PRODUCT DEFINITION

Brand	NTN
d - Internal diameter	25 mm
D - External diameter	42 mm
B - Bearing/Inner ring width	9 mm
rs - Min fillet radius	0,3 mm
Radial clearance class	C3
Mass	0,042 kg

PRODUCT PERFORMANCE

C - Dynamic load	7800000 mN
C0 - Static load	4550000 mN
Cu - Fatigue limit load	345000 mN
f0 - Coefficient	15.4
N lim - Oil lubrication limit speed	114000 °/s
N lim - Grease lubrication limit speed	96000 °/s
Tmin - Min operating temperature	233,15 °K
Tmax - Max operating temperature	393,15 °K

ABUTMENT

da min - Min shoulder diameter IR	27 mm
Da max - Max shoulder diameter OR	40 mm
ra max - Max shaft & housing fillet radius	0,3 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 $P_0 = F_r$

