

Technical data

6905

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	25 mm
D - External diameter	42 mm
B - Bearing/Inner ring width	9 mm
rs - Min fillet radius	0,3 mm
Radial clearance class	CN
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



INDUSTRY CALCUL FACTORS

Equivalent dynamic radial load

$$P = X \cdot Fr + Y \cdot Fa$$

$\frac{f_0 F_a}{C_0}$	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

$$P_0 = X_0 \cdot Fr + Y_0 \cdot Fa$$

X_0	Y_0
0.6	0.5

For single or DT bearing arrangement :

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

