



Technical data

7205B

Single row or matched pairs of angular contact ball bearings

Angular contact ball bearings, pressed steel cage

VISUAL (S)



7205B

Single row or matched pairs of angular contact ball bearings

PRODUCT DEFINITION

Brand	NTN
d - Internal diameter	25 mm
D - External diameter	52 mm
B - Bearing/Inner ring width	15 mm
a - Charge load application point	24 mm
- Contact angle	40 °
rs - Min fillet radius	1 mm
r1s - Min fillet radius	0,6 mm
Radial clearance class	CN
Mass	0,129 kg

PRODUCT PERFORMANCE

C - Dynamic load	16400000 mN
C0 - Static load	9400000 mN
Cu - Fatigue limit load	740000 mN
N lim - Oil lubrication limit speed	96000 °/s
N lim - Grease lubrication limit speed	72000 °/s
Tmin - Min operating temperature	233,15 °K
Tmax - Max operating temperature	393,15 °K

ABUTMENT

da min - Min shoulder diameter IR	30,5 mm
db min - Min IR shoulder diameter	29,5 mm
Da max - Max shoulder diameter OR	46,5 mm
Db max - Max OR shoulder diameter	47,5 mm



NTN Europe

1 rue des Usines · BP 2017 · 74010 Annecy Cedex · France · Tel. +33 (0)4 50 65 30 00
S.A. au capital de 322 639 919 € · RCS ANNECY B 325 821 072 · Id. Fiscale : FR 48 325 821 072
SIRET 325 821 072 00015 · Code APE 2815 Z · Code NACE 28.15

7205B

Single row or matched pairs of angular contact ball bearings

ABUTMENT

r1a - Max fillet radius	0,6 mm
ra max - Max shaft & housing fillet radius	1 mm

INDUSTRY CALCUL FACTORS

Equivalent dynamic radial load

$$P = X.F_r + Y.F_a$$

	e	Single or DT bearing arrangement				DB or DF arrangement			
		Fa / Fr ≤ e		Fa / Fr > e		Fa / Fr ≤ e		Fa / Fr > e	
		X	Y	X	Y	X	Y	X	Y
30°	0.8	1	0	0.9	0.76	1	0.78	0.63	1.24
40°	1.14			0.35	0.57		0.55	0.57	0.93

Equivalent static radial load

$$P_0 = X_0.F_r + Y_0.F_a$$

a	Single or DT bearing arrangement		DB or DF arrangement	
	X ₀	Y ₀	X ₀	Y ₀
30°	0.5	0.33	1	0.66
40°		0.26		0.52

For single or DT bearing arrangement :

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



NTN Europe

1 rue des Usines · BP 2017 · 74010 Annecy Cedex · France · Tel. +33 (0)4 50 65 30 00
S.A. au capital de 322 639 919 € · RCS ANNECY B 325 821 072 · Id. Fiscale : FR 48 325 821 072
SIRET 325 821 072 00015 · Code APE 2815 Z · Code NACE 28.15