



Technical data

7204BG

Single row or matched pairs of angular contact ball bearings

Angular contact ball bearings, pressed steel cage

VISUAL (S)



7204BG

Single row or matched pairs of angular contact ball bearings

PRODUCT DEFINITION

Brand	NTN
d - Internal diameter	20 mm
D - External diameter	47 mm
B - Bearing/Inner ring width	14 mm
a - Charge load application point	21,5 mm
- Contact angle	40 °
rs - Min fillet radius	1 mm
r1s - Min fillet radius	0,6 mm
Radial clearance class	CN
Mass	0,102 kg

PRODUCT PERFORMANCE

C - Dynamic load	14700000 mN
C0 - Static load	7700000 mN
Cu - Fatigue limit load	605000 mN
N lim - Oil lubrication limit speed	120000 °/s
N lim - Grease lubrication limit speed	90000 °/s
Tmin - Min operating temperature	233,15 °K
Tmax - Max operating temperature	393,15 °K

ABUTMENT

da min - Min shoulder diameter IR	25,5 mm
db min - Min IR shoulder diameter	24,5 mm
Da max - Max shoulder diameter OR	41,5 mm
Db max - Max OR shoulder diameter	42,5 mm



NTN Europe

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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

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ABUTMENT

r1a - Max fillet radius	0,6 mm
ra max - Max shaft & housing fillet radius	0,6 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 $P_0 = F_r$



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