



Technical data

7316BG

Single row or matched pairs of angular contact ball bearings

Angular contact ball bearings, pressed steel cage

VISUAL (S)



7316BG

Single row or matched pairs of angular contact ball bearings

PRODUCT DEFINITION

Brand	NTN
d - Internal diameter	80 mm
D - External diameter	170 mm
B - Bearing/Inner ring width	39 mm
a - Charge load application point	72 mm
- Contact angle	40 °
rs - Min fillet radius	2,1 mm
r1s - Min fillet radius	1,1 mm
Radial clearance class	CN
Mass	3,72 kg

PRODUCT PERFORMANCE

C - Dynamic load	149000000 mN
C0 - Static load	109000000 mN
Cu - Fatigue limit load	7650000 mN
N lim - Oil lubrication limit speed	30600 °/s
N lim - Grease lubrication limit speed	22800 °/s
Tmin - Min operating temperature	233,15 °K
Tmax - Max operating temperature	393,15 °K

ABUTMENT

da min - Min shoulder diameter IR	92 mm
db min - Min IR shoulder diameter	87 mm
Da max - Max shoulder diameter OR	158 mm
Db max - Max OR shoulder diameter	163 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

7316BG

Single row or matched pairs of angular contact ball bearings

ABUTMENT

r1a - Max fillet radius	1 mm
ra max - Max shaft & housing fillet radius	2 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