



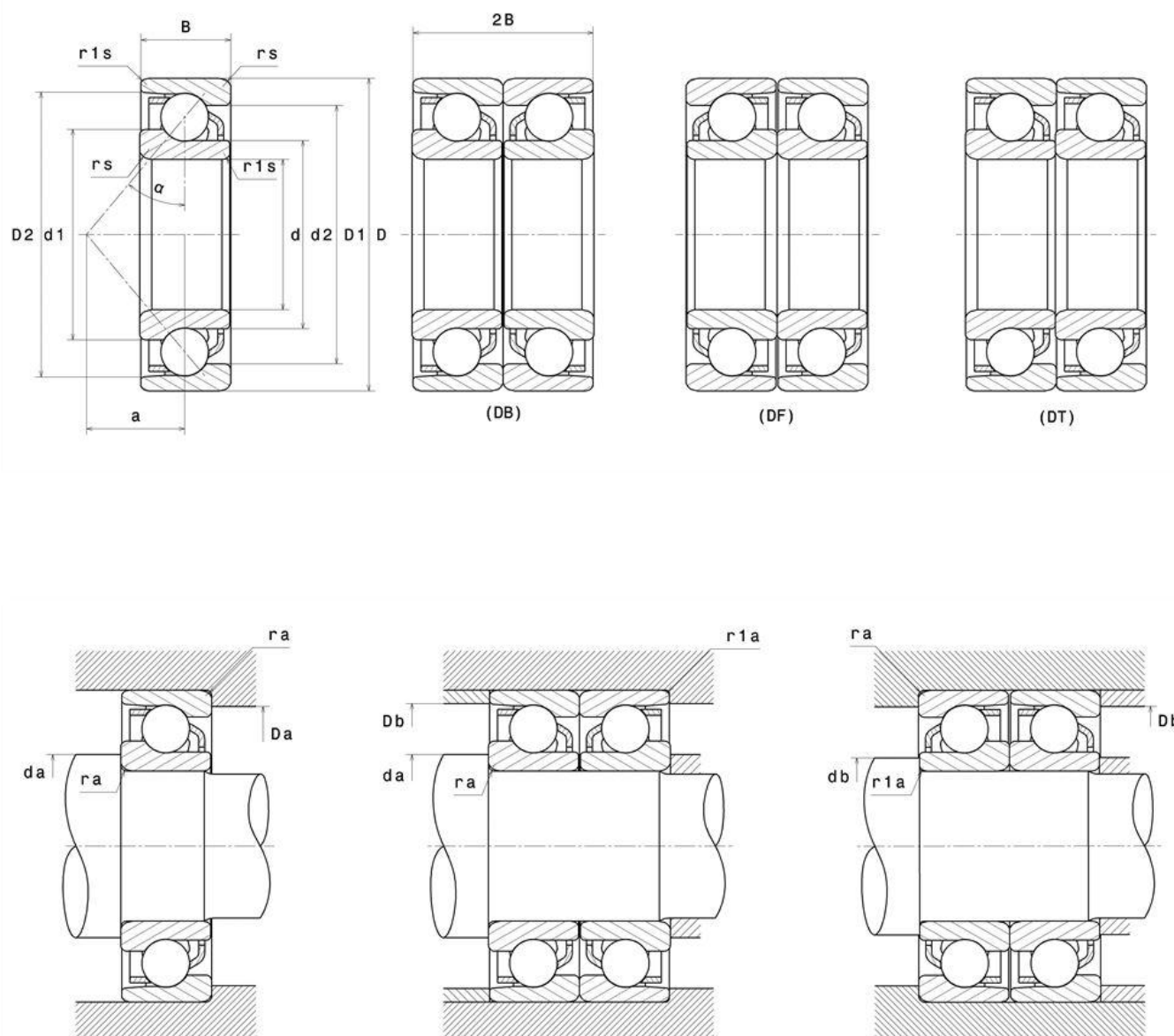
Technical data

7202BG

Single row or matched pairs of angular contact ball bearings

Angular contact ball bearings, pressed steel cage

VISUAL (S)



7202BG

Single row or matched pairs of angular contact ball bearings

PRODUCT DEFINITION

Brand	NTN
d - Internal diameter	15 mm
D - External diameter	35 mm
B - Bearing/Inner ring width	11 mm
a - Charge load application point	16 mm
- Contact angle	40 °
rs - Min fillet radius	0,6 mm
r1s - Min fillet radius	0,3 mm
Radial clearance class	CN
Mass	0,046 kg

PRODUCT PERFORMANCE

C - Dynamic load	9250000 mN
C0 - Static load	4350000 mN
Cu - Fatigue limit load	340000 mN
N lim - Oil lubrication limit speed	150000 °/s
N lim - Grease lubrication limit speed	108000 °/s
Tmin - Min operating temperature	233,15 °K
Tmax - Max operating temperature	393,15 °K

ABUTMENT

da min - Min shoulder diameter IR	19,5 mm
db min - Min IR shoulder diameter	17,5 mm
Da max - Max shoulder diameter OR	30,5 mm
Db max - Max OR shoulder diameter	32,5 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
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ABUTMENT

r1a - Max fillet radius	0,3 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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