



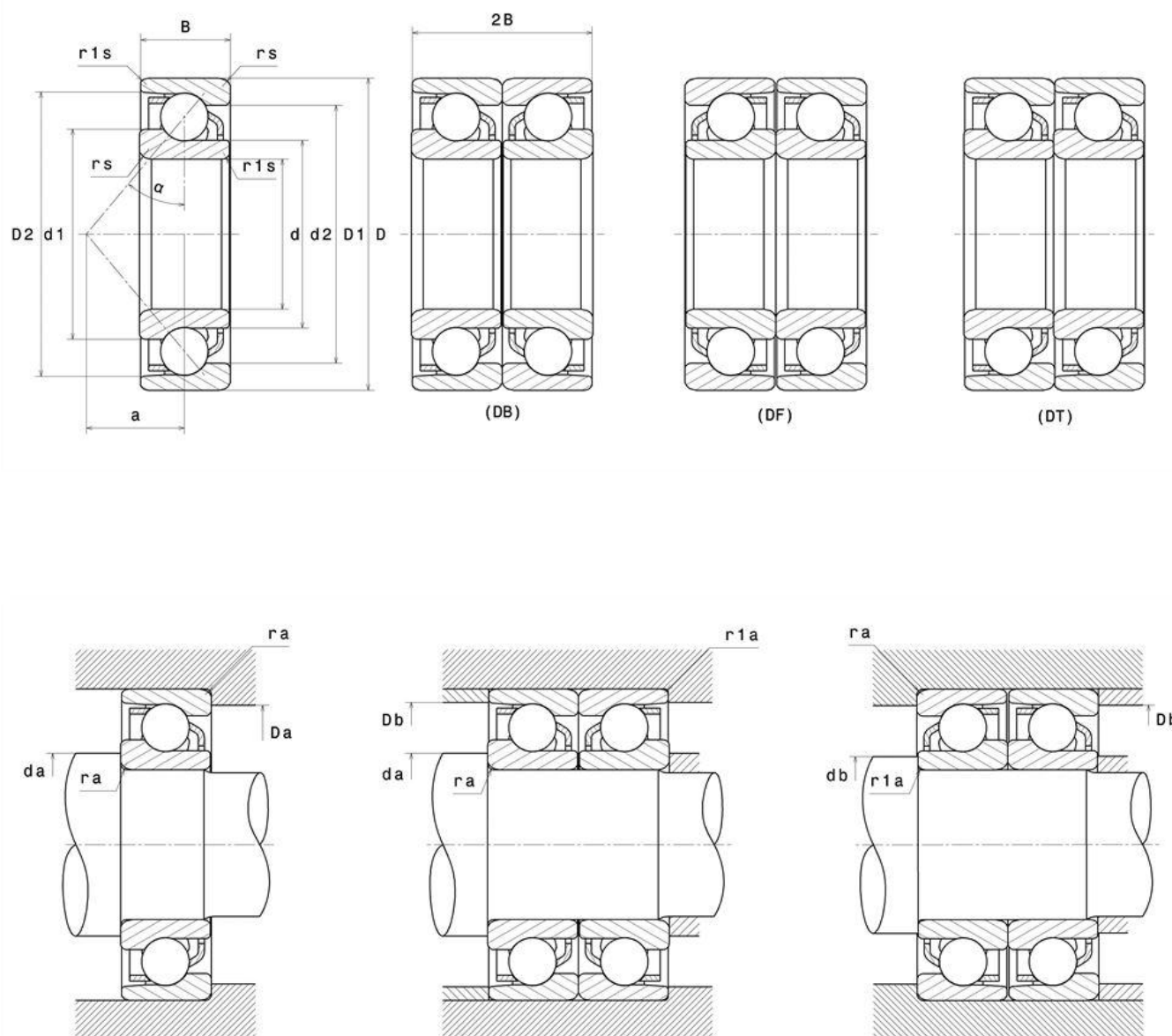
Technical data

7203BG

Single row or matched pairs of angular contact ball bearings

Angular contact ball bearings, pressed steel cage

VISUAL (S)



7203BG

Single row or matched pairs of angular contact ball bearings

PRODUCT DEFINITION

Brand	NTN
d - Internal diameter	17 mm
D - External diameter	40 mm
B - Bearing/Inner ring width	12 mm
a - Charge load application point	18 mm
- Contact angle	40 °
rs - Min fillet radius	0,6 mm
r1s - Min fillet radius	0,3 mm
Radial clearance class	CN
Mass	0,066 kg

PRODUCT PERFORMANCE

C - Dynamic load	12200000 mN
C0 - Static load	6100000 mN
Cu - Fatigue limit load	480000 mN
N lim - Oil lubrication limit speed	132000 °/s
N lim - Grease lubrication limit speed	102000 °/s
Tmin - Min operating temperature	233,15 °K
Tmax - Max operating temperature	393,15 °K

ABUTMENT

da min - Min shoulder diameter IR	21,5 mm
db min - Min IR shoulder diameter	19,5 mm
Da max - Max shoulder diameter OR	35,5 mm
Db max - Max OR shoulder diameter	37,5 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
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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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