



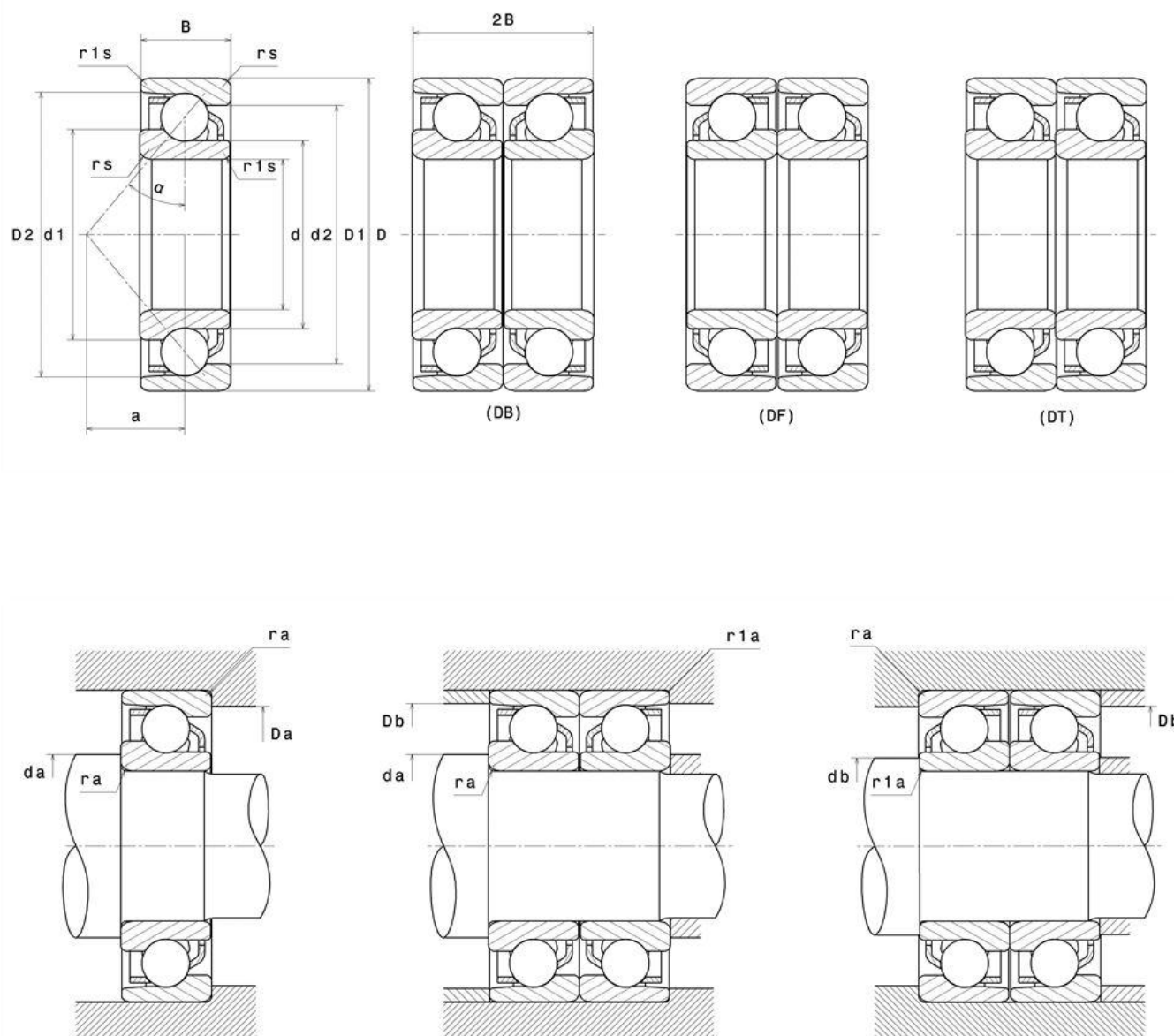
Technical data

7218BG

Single row or matched pairs of angular contact ball bearings

Angular contact ball bearings, pressed steel cage

VISUAL (S)



7218BG

Single row or matched pairs of angular contact ball bearings

PRODUCT DEFINITION

Brand	NTN
d - Internal diameter	90 mm
D - External diameter	160 mm
B - Bearing/Inner ring width	30 mm
a - Charge load application point	67,5 mm
- Contact angle	40 °
rs - Min fillet radius	2 mm
r1s - Min fillet radius	1 mm
Radial clearance class	CN
Mass	2,22 kg

PRODUCT PERFORMANCE

C - Dynamic load	118000000 mN
C0 - Static load	94000000 mN
Cu - Fatigue limit load	6300000 mN
N lim - Oil lubrication limit speed	30000 °/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	100 mm
db min - Min IR shoulder diameter	95,5 mm
Da max - Max shoulder diameter OR	150 mm
Db max - Max OR shoulder diameter	154,5 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	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 $P_0 = F_r$



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