



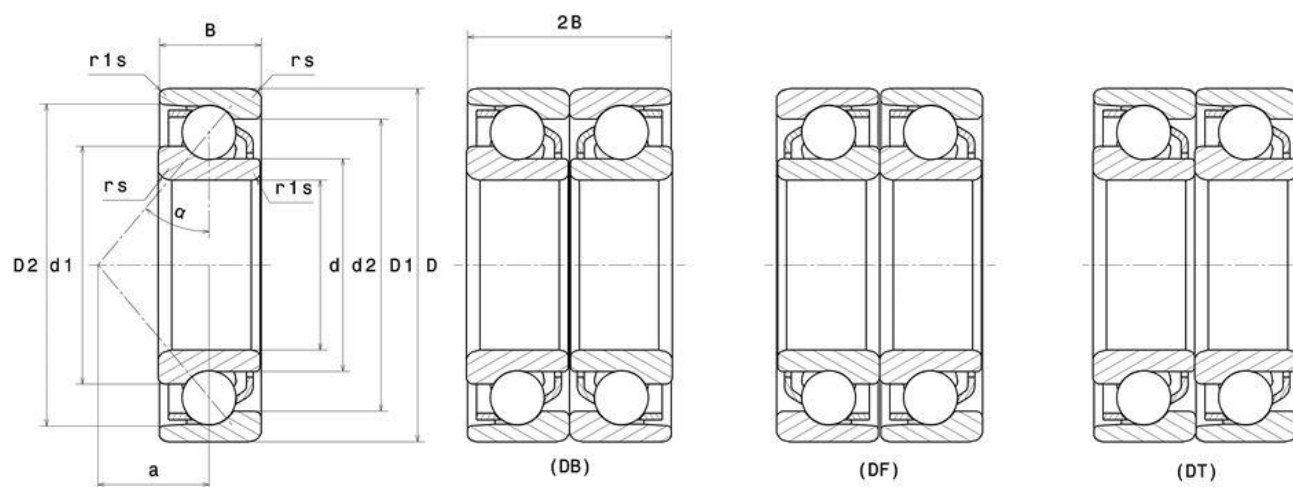
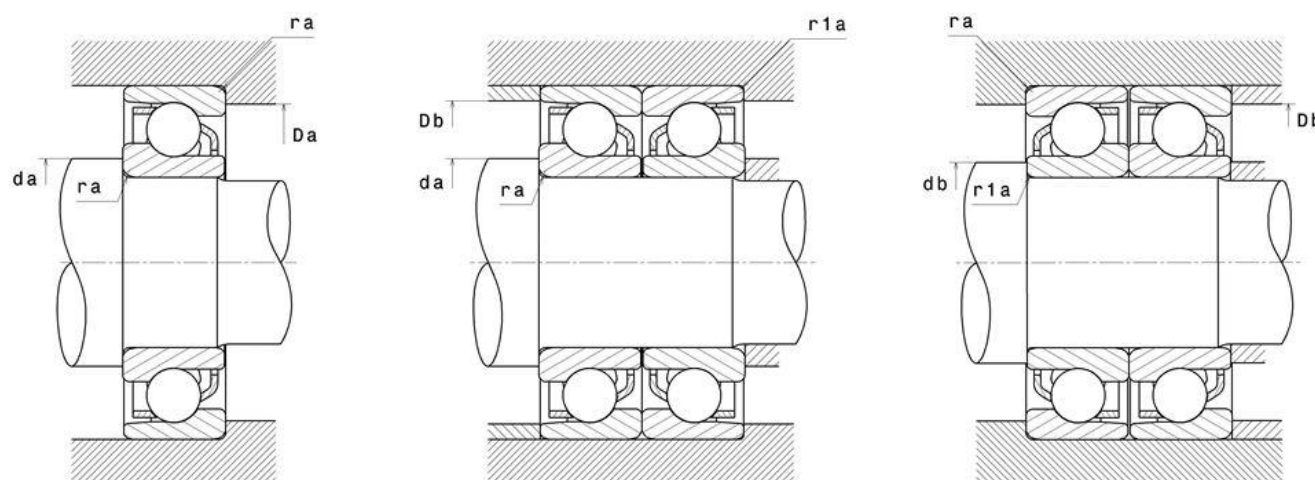
Technical data

7222BG

Single row or matched pairs of angular contact ball bearings

Angular contact ball bearings, pressed steel cage

VISUAL (S)



7222BG

Single row or matched pairs of angular contact ball bearings

PRODUCT DEFINITION

Brand	NTN
d - Internal diameter	110 mm
D - External diameter	200 mm
B - Bearing/Inner ring width	38 mm
a - Charge load application point	84 mm
- Contact angle	40 °
rs - Min fillet radius	2,1 mm
r1s - Min fillet radius	1,1 mm
Radial clearance class	CN
Mass	4,54 kg

PRODUCT PERFORMANCE

C - Dynamic load	170000000 mN
C0 - Static load	144000000 mN
Cu - Fatigue limit load	8800000 mN
N lim - Oil lubrication limit speed	24000 °/s
N lim - Grease lubrication limit speed	18000 °/s
Tmin - Min operating temperature	233,15 °K
Tmax - Max operating temperature	393,15 °K

ABUTMENT

da min - Min shoulder diameter IR	122 mm
db min - Min IR shoulder diameter	117 mm
Da max - Max shoulder diameter OR	188 mm
Db max - Max OR shoulder diameter	193 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	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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