



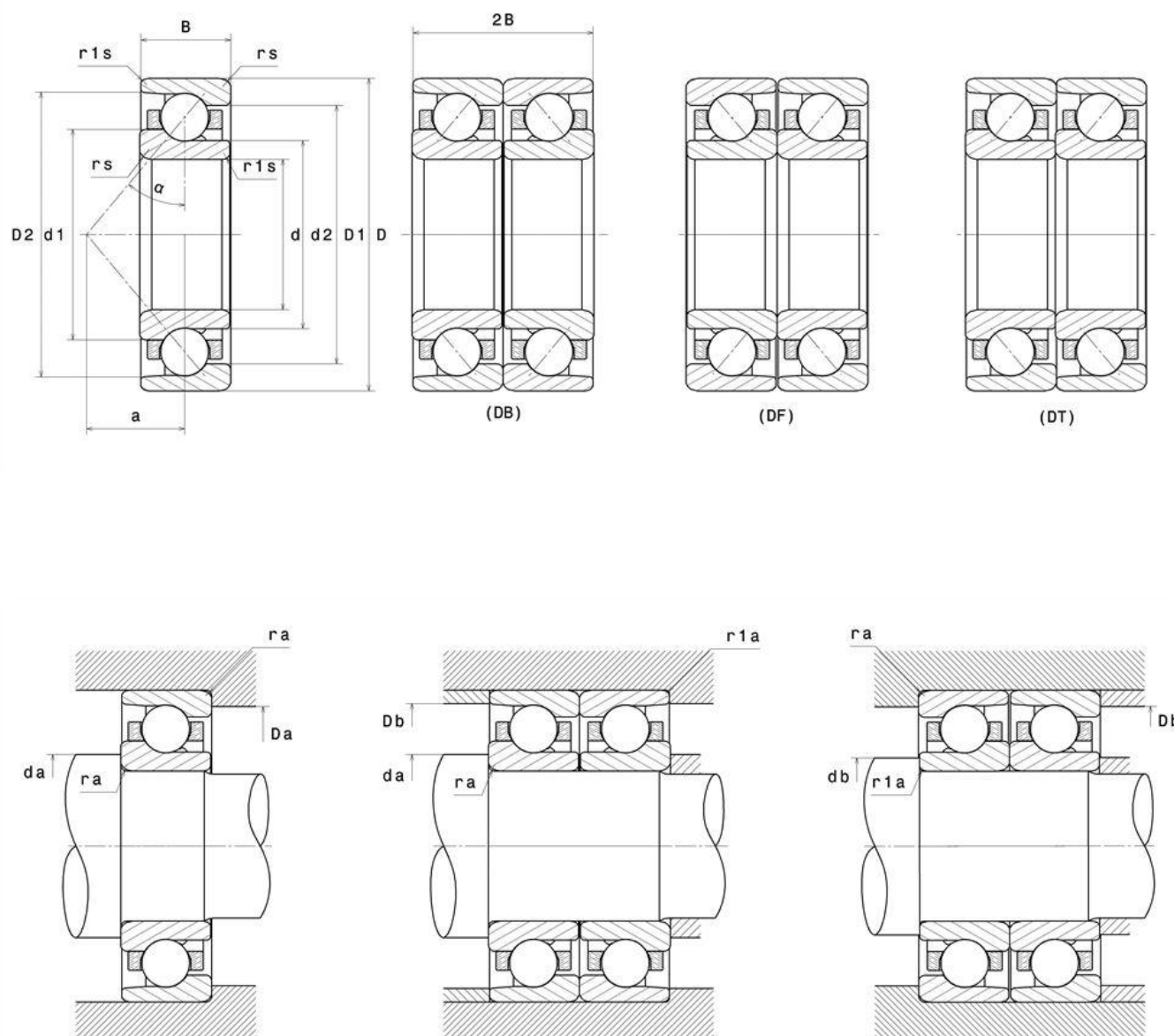
Technical data

7310BL1G

Single row or matched pairs of angular contact ball bearings

Angular contact ball bearing, brass cage inner ring guided

VISUAL (S)



7310BL1G

Single row or matched pairs of angular contact ball bearings

PRODUCT DEFINITION

Brand	NTN
d - Internal diameter	50 mm
D - External diameter	110 mm
B - Bearing/Inner ring width	27 mm
a - Charge load application point	47 mm
- Contact angle	40 °
rs - Min fillet radius	2 mm
r1s - Min fillet radius	1 mm
Radial clearance class	CN
Mass	1,11 kg

PRODUCT PERFORMANCE

C - Dynamic load	75500000 mN
C0 - Static load	48500000 mN
Cu - Fatigue limit load	38000000 mN
N lim - Oil lubrication limit speed	48600 °/s
N lim - Grease lubrication limit speed	36000 °/s
Tmin - Min operating temperature	233,15 °K
Tmax - Max operating temperature	393,15 °K

ABUTMENT

da min - Min shoulder diameter IR	60 mm
db min - Min IR shoulder diameter	55,5 mm
Da max - Max shoulder diameter OR	100 mm
Db max - Max OR shoulder diameter	104,5 mm



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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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