



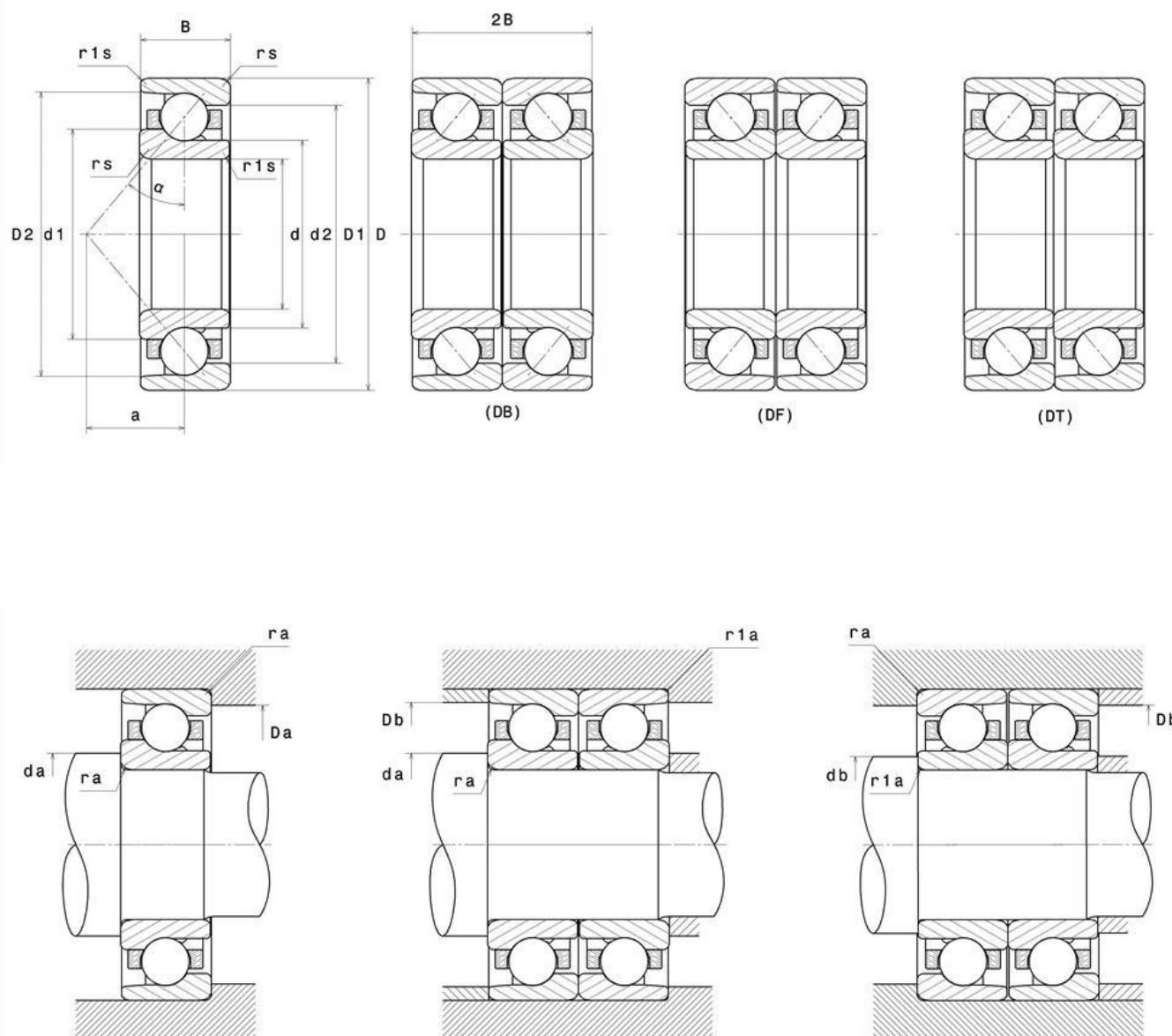
Technical data

7319BL1G

Single row or matched pairs of angular contact ball bearings

Angular contact ball bearing, brass cage inner ring guided

VISUAL (S)



7319BL1G

Single row or matched pairs of angular contact ball bearings

PRODUCT DEFINITION

Brand	NTN
d - Internal diameter	95 mm
D - External diameter	200 mm
B - Bearing/Inner ring width	45 mm
a - Charge load application point	84,5 mm
- Contact angle	40 °
rs - Min fillet radius	3 mm
r1s - Min fillet radius	1,1 mm
Radial clearance class	CN
Mass	6 kg

PRODUCT PERFORMANCE

C - Dynamic load	185000000 mN
C0 - Static load	149000000 mN
Cu - Fatigue limit load	9600000 mN
N lim - Oil lubrication limit speed	25200 °/s
N lim - Grease lubrication limit speed	19200 °/s
Tmin - Min operating temperature	233,15 °K
Tmax - Max operating temperature	393,15 °K

ABUTMENT

da min - Min shoulder diameter IR	109 mm
db min - Min IR shoulder diameter	102 mm
Da max - Max shoulder diameter OR	186 mm
Db max - Max OR shoulder diameter	193 mm



NTN Europe

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ABUTMENT

r1a - Max fillet radius	1 mm
ra max - Max shaft & housing fillet radius	2,5 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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