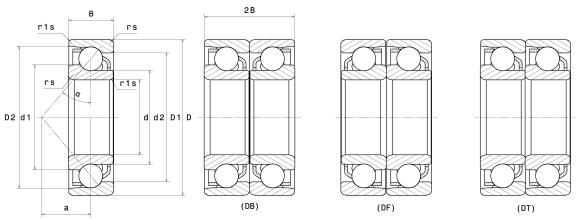
PDF technical sheet
7322B

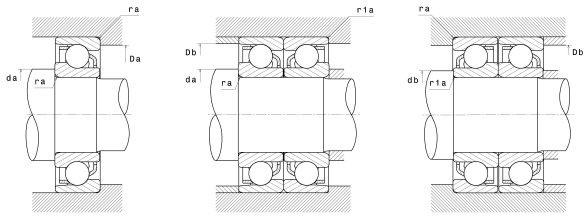
Single row or matched pairs of angular contact ball bearings

Angular contact ball bearings, pressed steel cage

Product definition	
d	110 mm
D	240 mm
B	50 mm
a	99 mm
Contact angle, a	40 °
rs min	3 mm
r1s min	1.10 mm
Mass	9.80 kg
Brand	NTN



Product performance	
Dynamic load, C	226 kN
Static load, C0	226 kN
Fatigue limit load, Cu	7.70 kN
Nlim (oil)	3,700 Tr/min
Nlim (grease)	2,700 Tr/min
Min operating temperature, Tmin	−40 °C
Max operating temperature, Tmax	120 °C
Characteristic cage frequency, FTF	0.41 Hz
Characteristic rolling element frequency, BSF	4.14 Hz
Characteristic outer ring frequency, BPF0	4.92 Hz
Characteristic inner ring frequency, BPFI	7.08 Hz



Abutment dimensions	
da min	124 mm
db min	117 mm
Da max	226 mm
Db max	233 mm
r1a max	1 mm
ra max	2.50 mm

Calculation factors

Equivalent dynamic radial load

P = X.Fr + Y.Fa

	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

Po = Xo.Fr + Yo.Fa

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 $P_0 < Fr$, then use $P_0 = Fr$