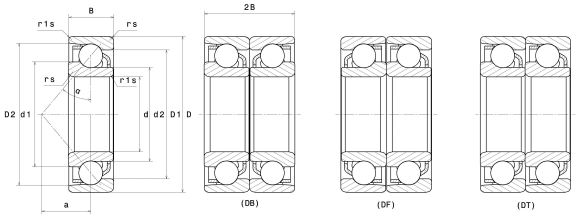
PDF technical sheet
7202BG

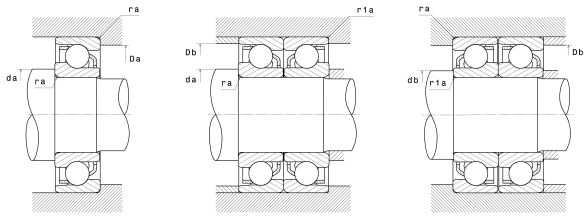
Single row or matched pairs of angular contact ball bearings

Angular contact ball bearings, pressed steel cage

Product definition	
d	15 mm
D	35 mm
B	11 mm
a	16 mm
Contact angle, a	40 °
rs min	0.60 mm
r1s min	0.30 mm
Radial clearance class	CN
Mass	0.05 kg
Brand	NTN



Product performance	
Dynamic load, C	8.35 kN
Static load, C0	4.35 kN
Fatigue limit load, Cu	0.20 kN
Nlim (oil)	25,000 Tr/min
Nlim (grease)	18,000 Tr/min
Min operating temperature, Tmin	−40 °C
Max operating temperature, Tmax	120 °C



Abutment dimensions	
da min	19.50 mm
db min	17.50 mm
Da max	30.50 mm
Db max	32.50 mm
r1a max	0.30 mm
ra max	0.30 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 $P_0 = Fr$