Technical data

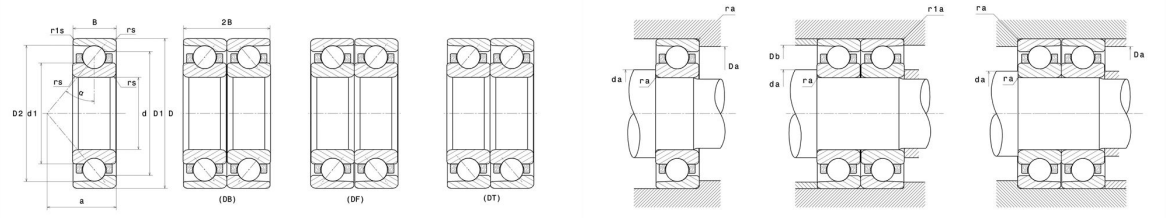
7414BG

Single row or matched pairs of angular contact ball bearings

Angular contact ball bearing, brass cage inner ring guided



Visual(s)



Product definition

d	70 mm
D	180 mm
B	42 mm
Contact angle α	40 °
rs min	3 mm
r1s min	1.1 mm
Radial clearance class	CN
Mass	5.7 kg
Brand	NTN

Product performance

Dynamic load, C	139 kN
Static load, C0	109 kN
Fatigue limit load, Cu	4.45 kN
Min operating temperature, Tmin	-40 °C
Max operating temperature, Tmax	120 °C
Characteristic cage frequency, FTF	0.4 Hz
Characteristic rolling element frequency, BSF	3.79 Hz
Characteristic outer ring frequency, BPF0	4.03 Hz
Characteristic inner ring frequency, BPFI	5.97 Hz

Abutment dimensions

da min	402 mm
Da max	166 mm
Db max	173 mm
r1a max	1 mm
ra max	2.5 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 $P_0 = Fr$