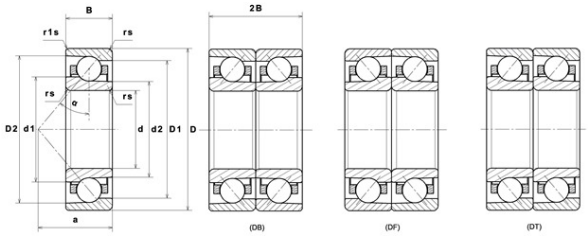
PDF technical sheet
7001UADG/GLP42

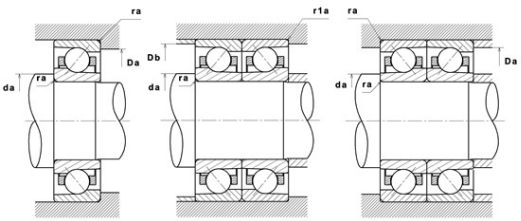
High precision angular contact ball bearings

High precision angular contact ball bearing, moulded polyamide cage centred on balls

Product definition	
d	0.4724 "
D	1.1024 "
B	0.3150 "
d1	0.7047 "
d2	0.6575 "
D1	0.9094 "
D2	1.0079 "
a	0.3465 "
Contact angle, a	25 °
rs min	0.0118 "
r1s min	0.0059 "
f0	13.7
Precision class	P42
Mass	0.07 oz
Brand	NTN



Product performance	
Dynamic load, C	5.60 kN
Static load, C0	2.82 kN
Nlim (oil)	80,000 RPM
Nlim (grease)	49,500 RPM
Preload level	GL
Peload value	20 kN
axial rigidity	34.5 N/μm
radial rigidity	75.2 N/μm
Min operating temperature, Tmin	−4 °C
Max operating temperature, Tmax	248 °C
Characteristic cage frequency, FTF	0.40 Hz
Characteristic rolling element frequency, BSF	4.12 Hz
Characteristic outer ring frequency, BPF0	3.95 Hz
Characteristic inner ring frequency, BPFI	6.05 Hz



NTN-SNR ROULEMENTS – www.ntn-snr.com
1 rue des Usines – 74010 Annecy Cedex – France – Tel. +33 (0)4 50 65 30 00

Abutment dimensions	
da min	0.5709 "
Da max	1.0039 "
Db max	1.0551 "
r1a max	0.0059 "
ra max	0.0118 "
D6	0.7126 "

Calculation factors

Equivalent dynamic radial load

P = X.Fr + Y.Fa

Series			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
70 (NTN & SNR) 72 (NTN & SNR) 78 (NTN) 79 (NTN) 719 (SNR)		15°	0.178	0.38	1	0	0.44	1.47	1	1.65	0.72	2.39
			0.357	0.4				1.4		1.57		2.28
			0.714	0.43				1.3		1.46		2.11
			1.07	0.46				1.23		1.38		2
			1.43	0.47				1.19		1.34		1.93
			2.14	0.5				1.12		1.26		1.82
			3.57	0.55				1.02		1.14		1.66
			5.35	0.56						1.12		1.63
			7.14	0.56				1		1.12		1.63
		25°		0.68			0.41	0.87		0.92	0.67	1.41
		30°		0.8			0.39	0.76		0.78	0.63	1.24

Equivalent static radial load

$P_o = X_o.Fr + Y_o.Fa$

Series			Single or DT bearing arrangement		DB or DF arrangement	
			X_0	Y_0	X_0	Y_0
70 (NTN & SNR) 72 (NTN & SNR) 78 (NTN) 79 (NTN) 719 (SNR)		15°	0.5	0.46	1	0.92
		25°		0.38		0.76
		30°		0.33		0.66

For single or DT bearing arrangement :

If Po <Fr, then use Po = Fr