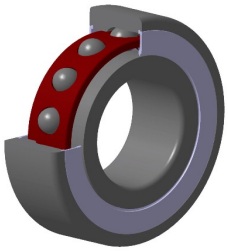
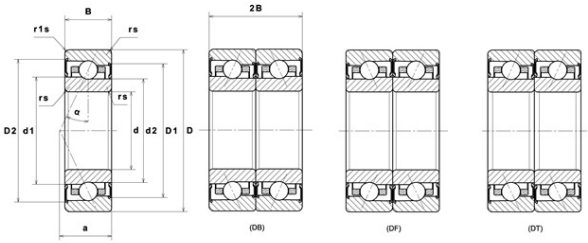
PDF technical sheet
MLE71903HVUJ74S



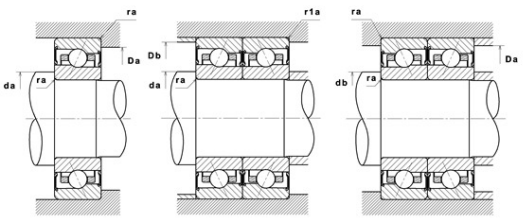
High precision angular contact ball bearings

High precision angular contact ball bearing, sealed series ML, laminated resin cage centred on outer ring

Product definition	
d	0.6693 "
D	1.1811 "
B	0.2756 "
d1	0.8268 "
d2	0.7894 "
D1	1.0492 "
D2	1.0728 "
a	0.3543 "
Contact angle, a	25 °
rs min	0.0118 "
r1s min	0.0118 "
f0	8.138
Precision class	P4S
Mass	0.06 oz
Brand	SNR



Product performance	
Dynamic load, C	2.05 kN
Static load, C0	1.02 kN
Fatigue limit load, Cu	0.08 kN
Nlim (grease)	57,000 RPM
Axial displacement K Factor	1.03
Preload level	7
Peload value	17 kN
axial rigidity	35 N/μm
radial rigidity	78 N/μm
Min operating temperature, Tmin	−4 °C
Max operating temperature, Tmax	248 °C
Characteristic cage frequency, FTF	0.45 Hz
Characteristic rolling element frequency, BSF	8.29 Hz
Characteristic outer ring frequency, BPF0	8.03 Hz
Characteristic inner ring frequency, BPFI	9.97 Hz



Abutment dimensions	
da min	0.7677 "
db min	0.7677 "
Da max	1.0827 "
Db max	1.0827 "
r1a max	0.0118 "
ra max	0.0118 "
D6	0.8740 "

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

Po = Xo.Fr + Yo.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