



Technical Data

2-phase Dual Axis Forcers

Catalog Number	No. of phases (1)	Static Force		Force @ 1 m/s		Inductance (Coil)	Resistance/Phase	Amps/Phase	Weight		Air Bearing Requirement		Attractive Force		Forcer Size (mm)	
		N	Lbs	N	Lbs				mH	ohms	Amps	kg	Lbs	L/min	CFM	N
LMDS0602-2A0	2	15	3.3	7	1.5	3.3	3.1	2	0.36	0.8	6	0.20	160	36	80	28
LMDS1302-2A0	2	33	7.4	15	3.4	5.2	4.2	2	0.50	1.1	8	0.27	400	90	96	30
LMDS2002-2A0	2(1)	54	12.1	25	5.5	1.7	1.7	2	0.73	1.6	12	0.42	710	160	120	30
LMDS1304-2A0	2(1)	67	15.0	30	6.8	2.9	2.2	4	1.45	3.2	18	0.64	890	200	149	30
LMDS2004-2A0	2(1)	110	24.5	48	10.8	3.3	3.2	4	2.05	4.5	22	0.78	1420	320	165	30
LMDS2504-2A0	2(1)	134	30.0	60	13.5	4.4	3.8	4	2.32	5.1	25	0.90	1780	400	178	37

NOTES:

- (1) Four phase is available with the same force ratings and physical size. Typically, a 4-phase motor has twice the resolution as a 2-phase. The maximum 4-phase resolution is about $\pm 2 \mu\text{m}$.
- › Bi-directional repeatability = $\pm 5 \mu\text{m}$ ($\pm 0.0002 \text{ in}$). Unidirectional repeatability better than $\pm 2.5 \text{ mm}$ ($\pm 0.0001 \text{ inch}$).
- › Resolution = $2.5 \mu\text{m}$ (0.0002 in), Cyclic error = $\pm 5 \mu\text{m}$ ($\pm 0.0002 \text{ in}$) independent on drive electronics and system implementation
- › Standard Pitch 1.016 mm (0.04 in), Optional Pitch 0.508 mm (0.02 in)
- › Air Bearing Airgap = $20 \mu\text{m}$ (0.0008 in), Air Pressure= 4-5.5 bar (60-80 psi) with a 5 micron filter.
- › All specifications are for reference only.

