



STANDARD FEATURES	
Stage	Z Stage
Travel	24 mm
Motor	Voice Coil or Ironless Core Linear Motor
Feedback	Non-Contact Optical Encoder
Scale	Gold Tape Scale Optional: Near Zero CTE ZeroMet
Resolution	1Vp-p Analog Output (5nm with 4096 Interpolation) Digital Output Options: 5um, 1um, 0.5um, 0.2um, 100nm, 50nm, 20nm**, 10nm**, and 5nm** (* Reduced Speeds Apply)
Sensors	Integrated Home and End of Travel Limits
Bearings	High Precision Crossed Roller Bearings
Counterbalance	Non-Contact Magnetic Spring (Constant Force)
Payload	0 to 2.0+ kg
Cables	High Flex, 10M Cycle, 3m Length
Structure	Anodized Aluminum 6061-T6 Optional: Stainless Steel
Environment	Standard Optional: Clean Room and Vacuum (10-6 Torr)
Temperature	0°C to 50°C
Humidity	10% to 80% Non-Condensing
Precision	6-D Nano Precision™ Test Methods

MOTOR	TRAVEL	PAYLOAD OPTIONS (NEWTONS)	ORIENTATION	LENGTH	WIDTH	HEIGHT	A	B	C	D	E	F
LM	24	2N, 8N, 14N, 19N, or 24N	(blank) = Upright "INV" = Inverted	165	96	130	82	107.5	20	70.8	40	130
LM	50	2N, 8N, 14N, 19N, or 24N	(blank) = Upright "INV" = Inverted	165	96	156	95	107.5	46	96.8	40	143
LM	50	30N, 50N, 60N, 70N, 80N, or 90N	(blank) = Upright "INV" = Inverted	182	106	176	113.5	121	46	96.8	30	156.5

* All units millimeters unless otherwise noted. Force units are Newtons.
* Motor type is voice coil (VC) or linear brushless motor (LM) designator in model number.
* All hole patterns centered on M5 dowel pin hole at center of stage (if not otherwise indicated).

ALIO INDUSTRIES PROPRIETARY INFORMATION
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DRAWN	NBROWN	5/12/2012	TITLE AI-(MOTOR)-(TRAVEL)00- (PAYLOAD)-Z-MCB-(ORIENTATION)		
CHECKED					
Tolerances: Surface Roughness: x.x ± .05 in [1.3 mm] x.xx ± .01 in [0.25 mm] x.xxx ± .005 in [0.13 mm] ✓ RMS MAX. Angles ± 0.5°			SIZE	DWG NO	REV
MATERIAL			B	0010-08039	003
FINISH SEE NOTES			SCALE	ALIO STD TEMPLATE - REV 006	SHEET 1 OF 1

NOTE: MODEL AI-LM-2400-8N-Z-MCB SHOWN.