



STANDARD FEATURES	
Stage	Linear Motor Tripod
Travel	3 Degrees of Freedom (Z, Pitch, and Roll Axis Motion)
Z Travel	6 - 106 mm
Angular Travel	+/- 3 to +/- 20 degrees
Max Payload	2.0 - 10.0+ kg
Motor	Ironless Core Linear Motor
Feedback	Non-Contact Optical Encoder
Scale	Gold Tape Scale
Linear Resolution	Optional: Near Zero CTE ZeroMet
Angular Resolution	~5 nm
Sensors	< 0.04 arc-sec
Bearings	Integrated Home and End of Travel Limits
Counterbalance	High Precision Crossed Roller Bearings
Cables	Frictionless Pneumatic Cylinder
Structure	High Flex, 10M Cycle, 3m Length
Environment	Anodized Aluminum 6061-T6
Temperature	Optional: Stainless Steel
Humidity	Standard (Additional Options are Available)
Precision	0°C to 50°C
	10% to 80% Non-Condensing
	6-D Nano Precision™ Test Methods

Z TRAVEL	PITCH & ROLL TRAVEL	OPTION	LENGTH	WIDTH	HEIGHT	A (inch)	B (inch)	C	D	E	F	G	H	I	J	K	L (degrees)	M (degrees)	N	O
6	+/- 3 degrees	--	172.5	164.3	142.6	2	2	172.5	196	1	12	50	50	30	50	40	30	0	M6 or 1/4-20	M4
24	+/- 15 degrees	--	208	196.3	173	3	3	208	225	1	12	80	100	50	70	60	30	0	M6 or 1/4-20	M4
55	+/- 20 degrees	--	363.8	339.9	308.6	4	7	363.9	363.9	1	19.1	100	100	100	125	112.5	30	60	M6 or 1/4-20	M5
106	+/- 20 degrees	--	393.8	368	459.9	4	7	395	395	1	19.1	100	100	100	125	112.5	30	60	M6 or 1/4-20	M5

* All units millimeters unless otherwise noted.
 * All hole patterns centered on M5 dowel pin hole pattern on base and top stage.
 * See specification sheet and contact ALIO technical sales for assistance in model selection.

ALIO INDUSTRIES PROPRIETARY INFORMATION
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DRAWN		5/12/2012	
NBROWN			
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] Angles ± 0.5° MATERIAL			
TITLE		ALIO STD. TEMPLATE - REV 006	
AI-TRI-LM-(Z TRAVEL)00		DWG NO	
-(OPTION)		0010-08008	
SIZE	B	REV	001
FINISH	SEE NOTES	SCALE	1 OF 1

NOTE: MODEL AI-TRI-LM-5500 SHOWN.