



STANDARD FEATURES	
Stage	Z Stage
Travel	24mm to 70mm
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	Pneumatic Cylinder
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	FORCE	LENGTH	WIDTH	HEIGHT	A	B	C	D	E	F	G
VC	24	120N	175	125	170	50	30	35	60	50	M5	M5
LM	60	50N	175	125	235	100	50	67	80	80	M6	M6
LM	70	50N	175	125	250	100	50	67	80	80	M6	M6

\* 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 DOCUMENT  
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NOTE: MODEL AI-VC-2400-120N-Z-CB SHOWN.

DRAWN	NBROWN	10/25/2015
CHECKED	NBROWN	10/25/2015
Tolerances:	Surface Roughness:	
x.x ± .05 in		
x.xx ± .01 in		
x.xxx ± .005 in	✓ RMS MAX.	
ANGLES ± 0.5°		
MATERIAL		
FINISH	SEE NOTES	

TITLE		
AI-(MOTOR)-(TRAVEL)00-(FORCE)-Z-CB		
SIZE	DWG NO	REV
B	0010-08005	003
SCALE	ALIO STD TEMPLATE - REV 006	SHEET 1 OF 1