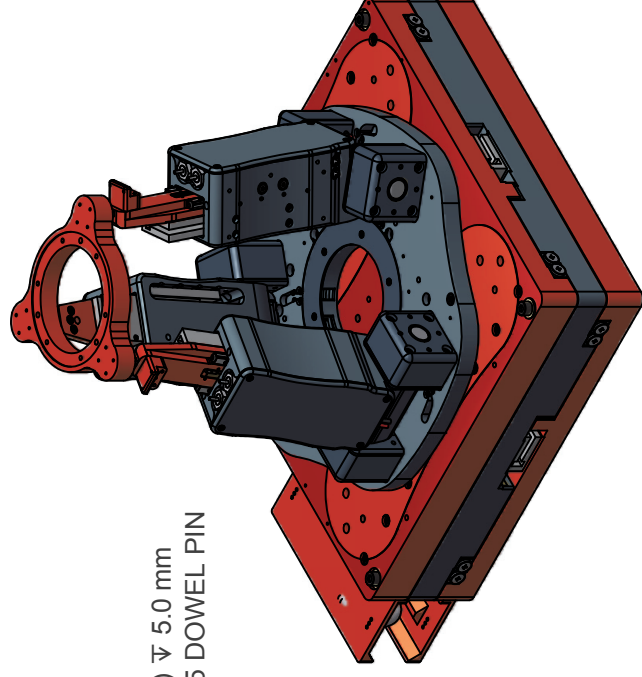
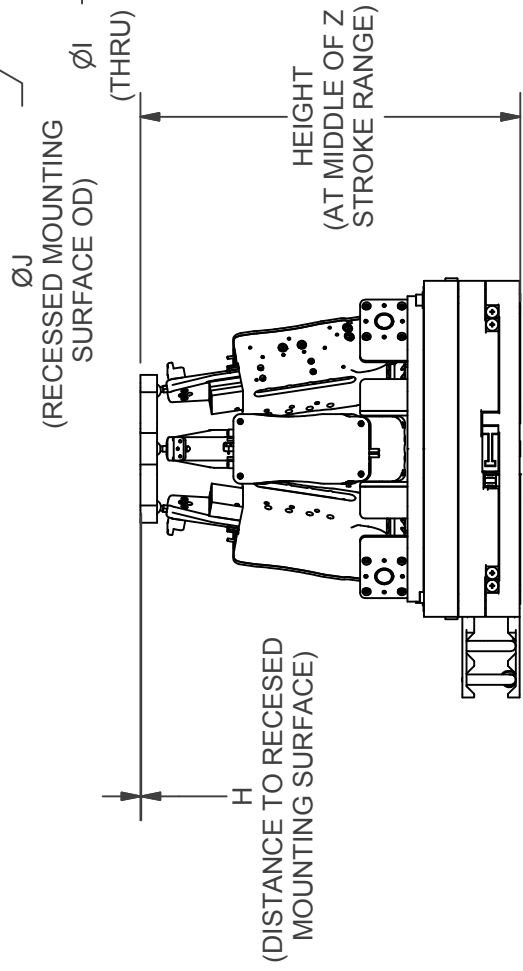
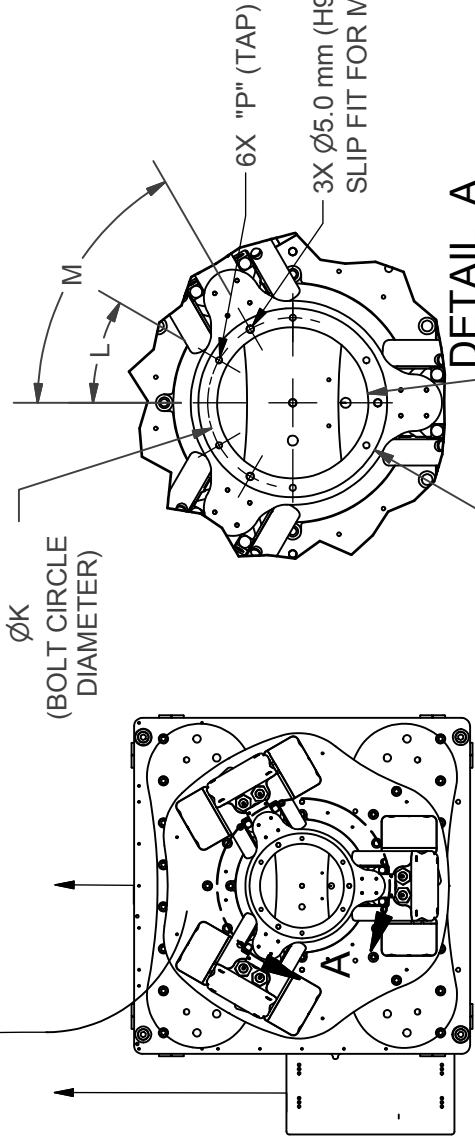




CABLE EXITS  
(TRIPOD CABLES LOOPED DOWN  
TO PIVOT POINT ON  
CUSTOMER'S SYSTEM BASE)



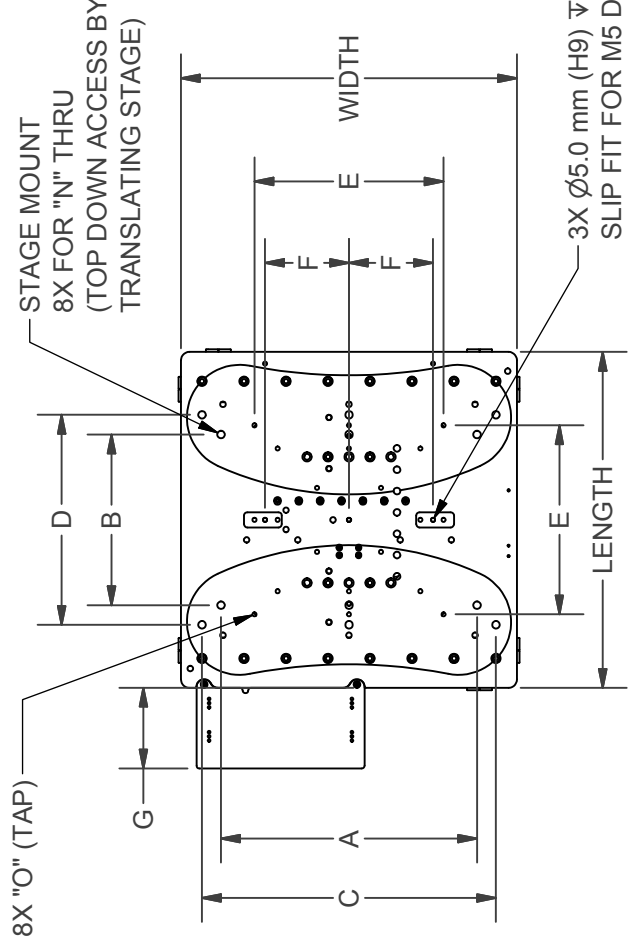
DETAIL A

**STANDARD FEATURES**

Stage	Hybrid Hexapod
Travel	5 Degrees of Freedom (X, Y, Z, Pitch, and Roll)
XY Travel	50 - 300+ mm
Z Travel	6 - 106 mm
Angular Travel	+/- 3 to +/- 18 degrees (Pitch and Roll)
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	Optional: Non-Contact Magnetic Spring
Environment	High Flex, 10M Cycle, 3m Length
Temperature	Anodized Aluminum 6061-T6
Humidity	Optional: Stainless Steel
Precision	Standard
	Optional: Vacuum 10-5 Torr, Vacuum 10-7 Torr
	0°C to 50°C
	10% to 80% Non-Condensing
	6-D Nano Precision™ Test Methods

XY TRAVEL	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	P
100	6	+/- 3 degrees	-	244	244	202.6	6	6	175	125	170	70	52	1	30	50	40	30	0	M6 or 1/4-20	M6	M4
100	6	+/- 3 degrees	CM	184	184	202.6	6	4	125	100	120	70	52	1	30	50	40	30	0	M6 or 1/4-20	M5 (6X)	M4
100	24	+/- 15 degrees	-	244	244	253	6	6	175	125	170	70	52	1	50	70	60	30	0	M6 or 1/4-20	M6	M4
100	24	+/- 16 degrees	CM, MS	252	221	230	6	4	125	100	120	70	52	1	50	70	60	30	0	M6 or 1/4-20	M6	M4
100	24	+/- 16 degrees	MS	252	244	250	6	6	175	125	170	70	52	1	50	70	60	30	0	M6 or 1/4-20	M6	M4
150	40	+/- 16 degrees	-	332	304	326.9	6	6	175	125	170	70	52	1	75	100	87.5	30	60	M6 or 1/4-20	M6	M5
200	40	+/- 16 degrees	-	336	336	336.9	7	5	225	200	170	100	65	1	75	100	87.5	30	60	M8 or 5/16-18	M6	M5
250	55	+/- 20 degrees	-	400	400	423.6	12	8	350	250	275x300	100	96	1	100	125	112.5	30	60	M8 or 5/16-18	M8 (6X)	M5
250	92	+/- 20 degrees	-	435	400	597.5	12	8	350	250	275x300	100	96	--	--	--	200	30	60	M8 or 5/16-18	M8 (6X)	M6
250	106	+/- 20 degrees	-	400	400	574.1	12	8	350	250	275x300	100	96	1	100	125	112.5	30	60	M8 or 5/16-18	M8 (6X)	M5

\* All units millimeters unless otherwise noted.  
\* All hole patterns centered on M5 dowel pin at center of XY stage or centered on thru hole of top rotary stage.  
\* See specification sheet and contact ALIO technical sales for assistance in model selection.



**ALIO 6-D**

**AI-6D-(XY TRAVEL)XY-(Z TRAVEL)Z-(OPTION)**

5/12/2012

NBROWN

CHECKED

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°

MATERIAL

SIZE B

DWG NO 0010-08032

REV 004

FINISH SEE NOTES

SCALE 1 OF 1

ALIO INDUSTRIES PROPRIETARY INFORMATION  
(Te) 303.339.7500 - SALES@ALIOINDUSTRIES.COM - WWW.ALIOINDUSTRIES.COM

NOTE: MODEL AI-6D-250XY-55Z SHOWN.