



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

ØG  
(THRU TOP PLATE)

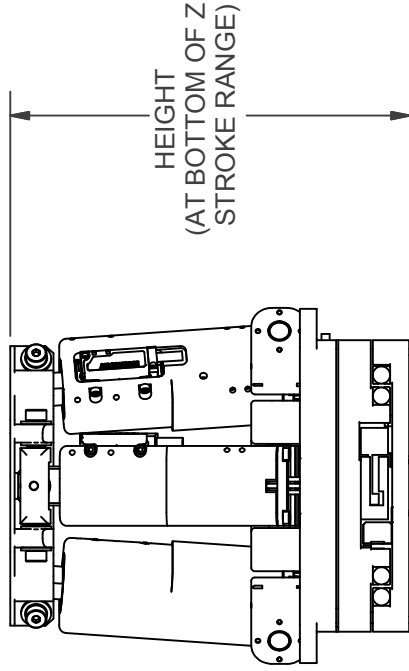
ØI  
(BOLT CIRCLE  
DIAMETER)

ØH  
(BOLT CIRCLE  
DIAMETER)

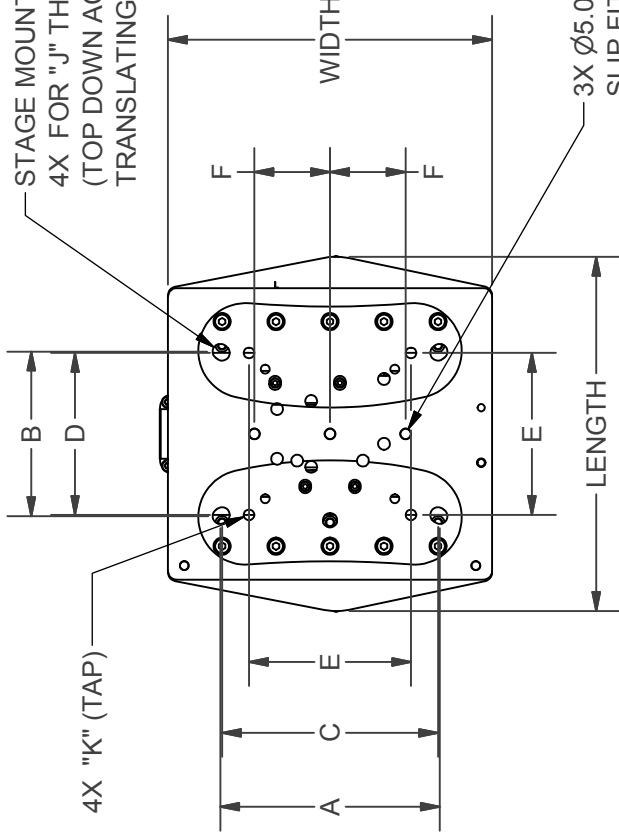
3X "L" (TAP)  
(EQUALLY SPACED  
ON BOLT CIRCLE  
DIAMETER "H")

### DETAIL A

3X Ø5.0 mm (H9)  $\nabla$  5.0 mm  
SLIP FIT FOR M5 DOWEL PIN  
(EQUALLY SPACED ON BOLT  
CIRCLE DIAMETER "I")

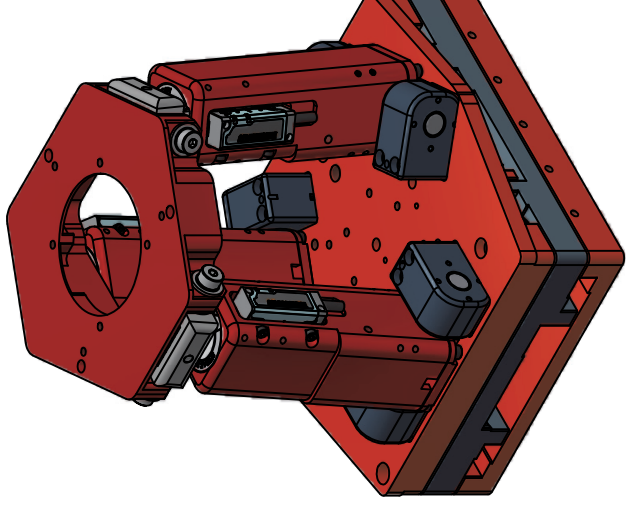


STAGE MOUNT  
4X FOR "J" THRU  
(TOP DOWN ACCESS BY  
TRANSLATING STAGE)



NOTE: MODEL AI-HH-60XY-15Z SHOWN.

STANDARD FEATURES	
Stage	Hybrid Hexapod
Travel	5 Degrees of Freedom (X, Y, Z, Pitch, and Roll)
XY Travel	60 - 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 and Frameless Torque Motor
Feedback	Non-Contact Optical Encoder
Scale	Gold Tape Scale and Stainless Steel Ring Optional: Near Zero CTE ZeroMet
Linear Resolution	~5 nm
Angular Resolution	< 0.04 arc-sec
Sensors	Integrated Home and End of Travel Limits
Bearings	High Precision Crossed Roller Bearings, Ball Bushing
Counterbalance	None
Cables	High Flex, 10M Cycle, 3m Length
Structure	Anodized Aluminum 6061-T6 / Stainless Steel
Environment	Standard Optional: Vacuum 10-5 Torr, Vacuum 10-7 Torr
Temperature	0°C to 50°C
Humidity	10% to 80% Non-Condensing
Precision	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
60	15	+/- 10 degrees	--	164	150	185.1	4	3	100	75	75	35	56.5	88	100	M6 or 1/4-20	M6	M4

\* 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 INDUSTRIES PROPRIETARY INFORMATION  
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TITLE

AI-HH-(XY TRAVEL)XY-  
(Z TRAVEL)Z-(OPTION)

DRAWN NBROWN 5/12/2012

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°  
RMS MAX.

MATERIAL

FINISH SEE NOTES

SCALE

DWG NO 0010-08041

ALIO STD TEMPLATE - REV 006

SHEET 1 OF 1

REV 001