

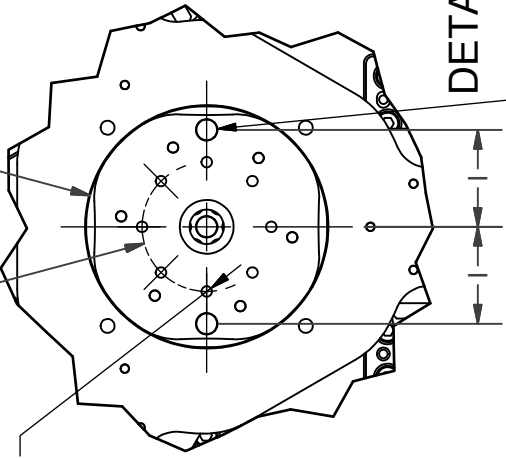


CABLE EXITS
(TRIPOD CABLES LOOPED DOWN
TO PIVOT POINT ON
CUSTOMER'S SYSTEM BASE)

8X "L" (TAP)
(EQUALLY SPACED
ON BOLT CIRCLE
DIAMETER "H")

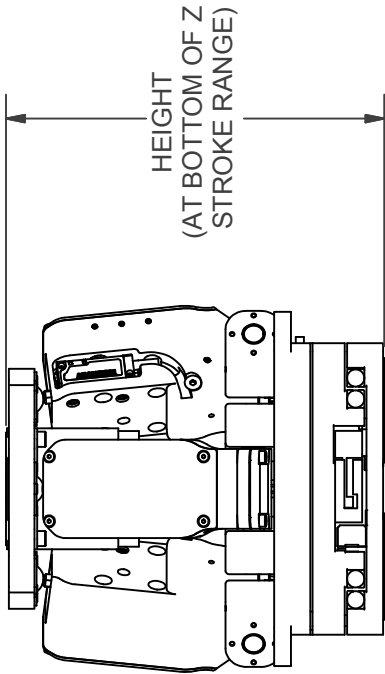
ØH
(BOLT CIRCLE
DIAMETER)

ØR DIAMETER
(MOUNTING SURFACE)



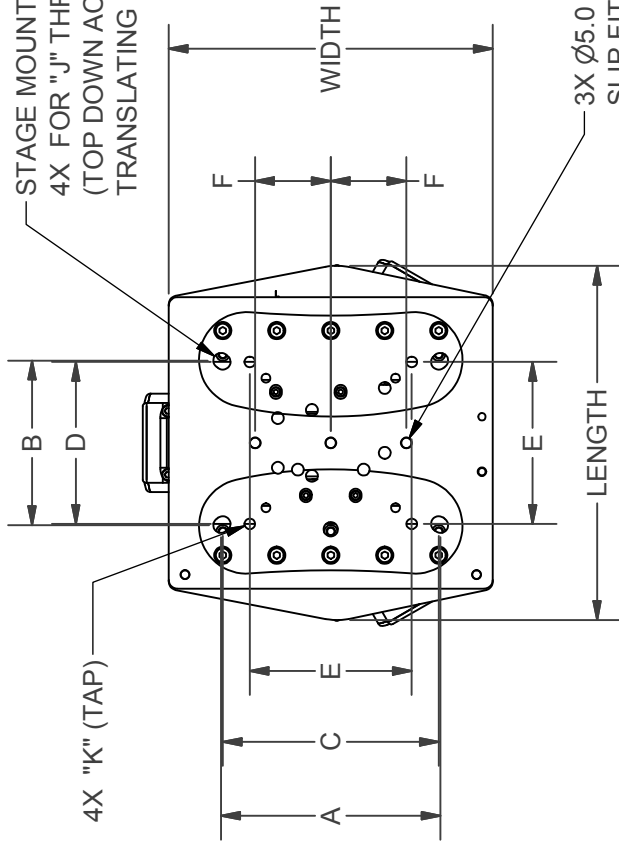
DETAIL A

2X Ø5.0 mm (H9) ∇ 4.5 mm
SLIP FIT FOR M5 DOWEL PIN



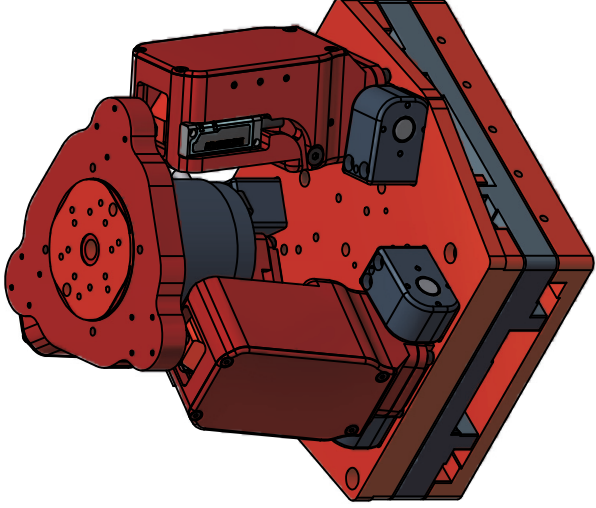
HEIGHT
(AT BOTTOM OF Z
STROKE RANGE)

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



4X "K" (TAP)

3X Ø5.0 mm (H9) ∇ 5.0 mm
SLIP FIT FOR M5 DOWEL PIN



STANDARD FEATURES

Stage	Hybrid Hexapod
Travel	6 Degrees of Freedom (X, Y, Z, Pitch, Roll, and Yaw)
XY Travel	60 - 300+ mm
Z Travel	6 - 106 mm
Angular Travel	+/- 3 to +/- 18 degrees (Pitch and Roll) 360 degrees continuous (Yaw)
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	R DIAMETER	OPTION LENGTH	WIDTH	HEIGHT	A (inch)	B (inch)	C	D	E	F	H	I	J	K	L
60	15	+/- 10 degrees	56	--	150	175.2	4	3	100	75	75	35	30	22.5	M6 or 1/4-20	M6	M3

* 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-(R DIAMETER)R
-(OPTION)**

DWG NO

0010-08040

REV
002

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°	✓ RMS MAX.
MATERIAL	
FINISH	SEE NOTES
SCALE	1 OF 1

NOTE: MODEL AI-HH-60XY-16Z-56R-CM SHOWN.