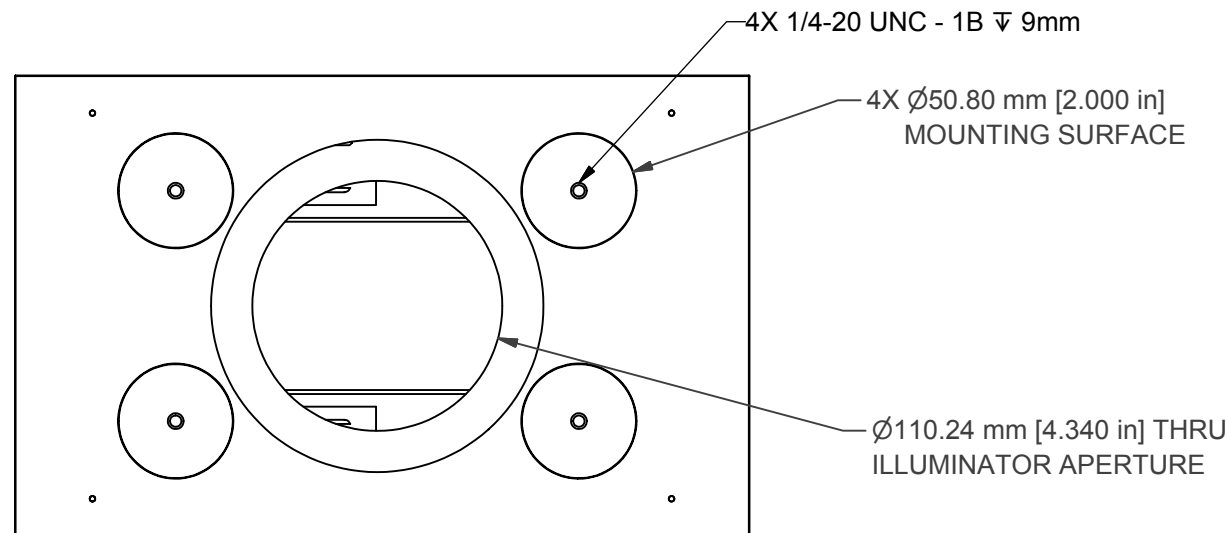
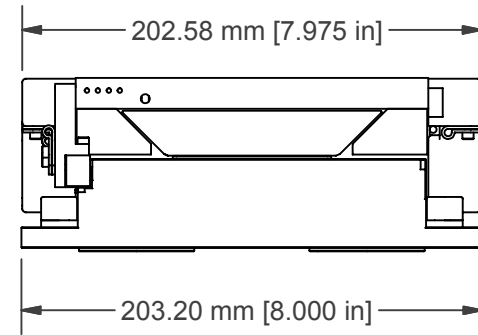
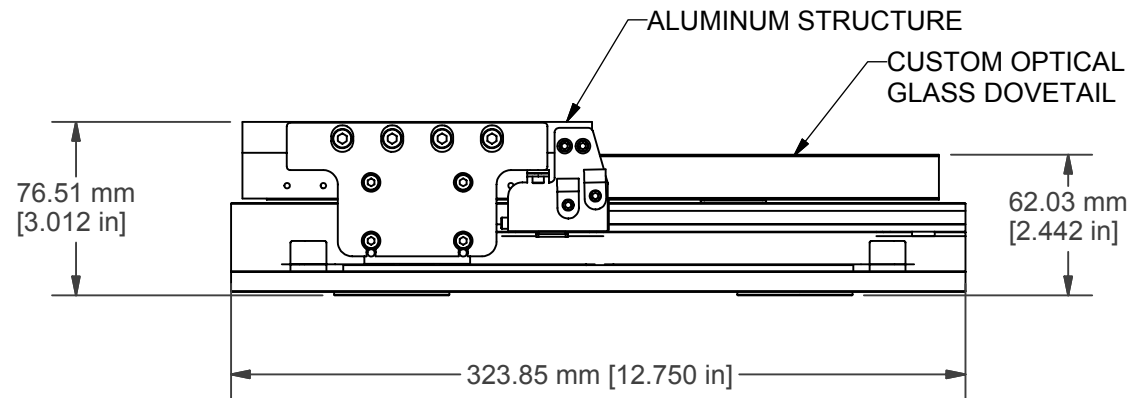
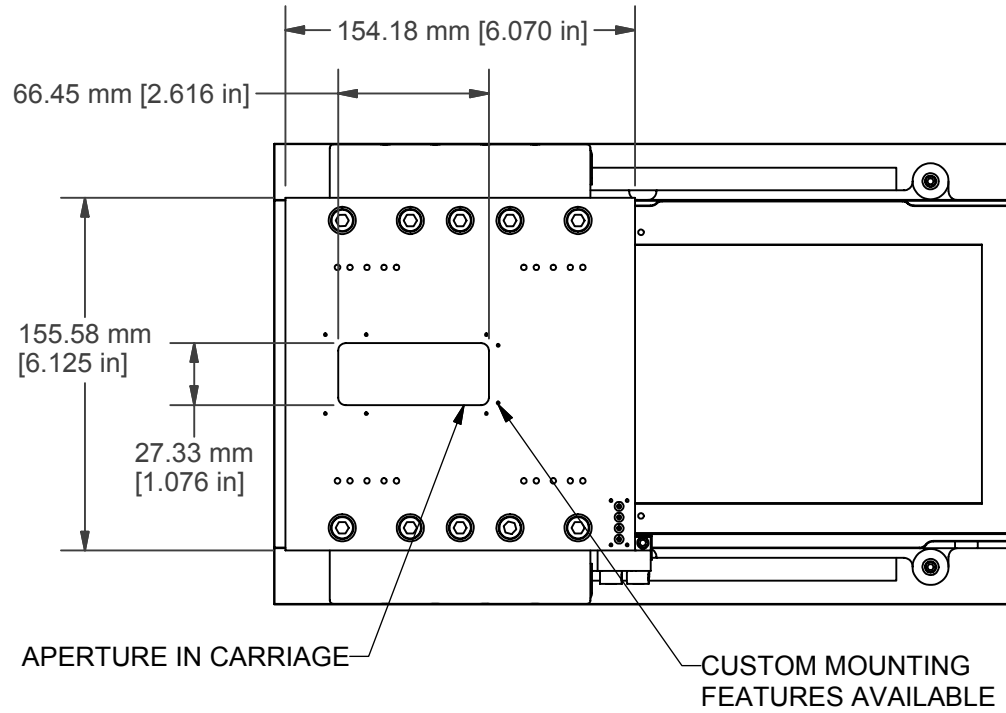


CUSTOM OPTICAL AIR BEARING

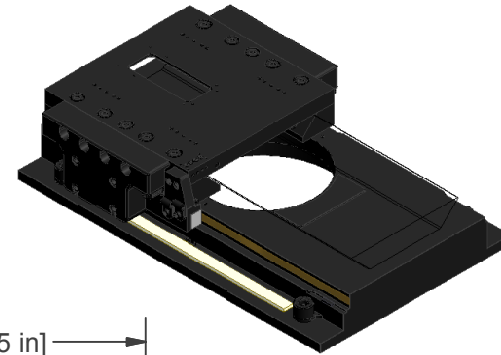


AIR QUALITY

AIR SUPPLY MUST BE FREE OF CONTAMINANTS AND MOISTURE. FILTERED AIR SUPPLY TO ISO 8573.1 QUALITY CLASS 3

CLASS: 3 (RECOMMENDED)
 DIRT: 5 MICRON PARTICAL SIZE OR SMALLER
 WATER: -4 F, PRESSURE DEWPOINT (128 ppm. vol.) AT 100 psig
 OIL: 1.0 mg/m**3 (INCLUDING VAPOR)

CLASS: 4 (MINIMUM)
 DIRT: 15 MICRON PARTICAL SIZE OR SMALLER
 WATER: +37.4 F, PRESSURE DEWPOINT (940 ppm. vol.) AT 100 psig
 OIL: 5 mg/m**3 (INCLUDING VAPOR)



STANDARD FEATURES

MOTORS: DUAL HR-4, MAX FORCE 30 to 36 N
 TRAVEL: 150mm
 SPEED: 250mm/sec MAX.
 ENCODER OUTPUT: ANALOG 1 Vp-p (STANDARD)
 OPTIONAL: 5um, 1um, 0.5um, 0.1um, 50nm, 20nm, 10nm or 5nm USING 4096 INTERPOLATION (NOTE 1.)
 SYSTEM REPEATABILITY: +/- 1 ENCODER COUNT (NOTE 1.)
 LIMIT SWITCH SENSOR: STANDARD
 BEARINGS: PRECISION AIR BEARING
 REFER TO AIR PURITY SPECIFICATION
 OPERATING PRESSURE: 60 PSIG TO 80 PSIG, 120 PSIG Max.
 MAXIMUM LOAD RATING: 750N (@ 60 psig)
 HORIZONTAL STRAIGHTNESS: 5 micro-inch /inch
 VERTICAL STRAIGHTNESS: 5 micro-inch /inch
 HORIZONTAL STIFFNESS: 105*10e6 N/m (600,000 lbs/in)
 VERTICAL STIFFNESS: 140*10e6 N/m (800,000 lbs/in)
 ENCLOSURES: ALUMINUM & GLASS
 ATMOSPHERES: STANDARD & CLEAN ROOM
 TEMPERATURE: 10 to 35 DEG C
 HUMIDITY: 10% to 80% NON-CONDENSING

NOTE 1 - FOR OPTIMAL AXIS PERFORMANCE, ALIO RECOMMENDS THE USAGE OF A DELTA TAU PMAC2A-PC/104 CONTROLLER WITH THE DELTA TAU ACCESSORY ACC-51S: 4096x SINUSOIDAL INTERPOLATOR.

ACCESSORIES

MOTOR AMPLIFIER

OPTIONAL EQUIPMENT

MOTION CONTROLLERS
 ENCODER INTERPOLATION, DESCRETE VALUE

CUSTOM DESIGNS FOR OEM INTEGRATION

ALIO INDUSTRIES PROPRIETARY INFORMATION

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 (Tel) 303.339.7500 - SALES@ALIOINDUSTRIES.COM - WWW.ALIOINDUSTRIES.COM

DRAWN	NBROWN	10/26/2005
CHECKED		
Tolerances:	Surface Roughness:	
x.x ± .04 in	✓ RMS MAX.	
x.xx ± .02 in		
x.xxx ± .005 in		
MATERIAL		
FINISH	SEE NOTES	

TITLE		
AI-D4-15000E-AB-OPT		
SIZE	DWG NO	REV
B	0010-00570	001
SCALE	ALIO STD TEMPLATE - REV 005	SHEET 1 OF 1