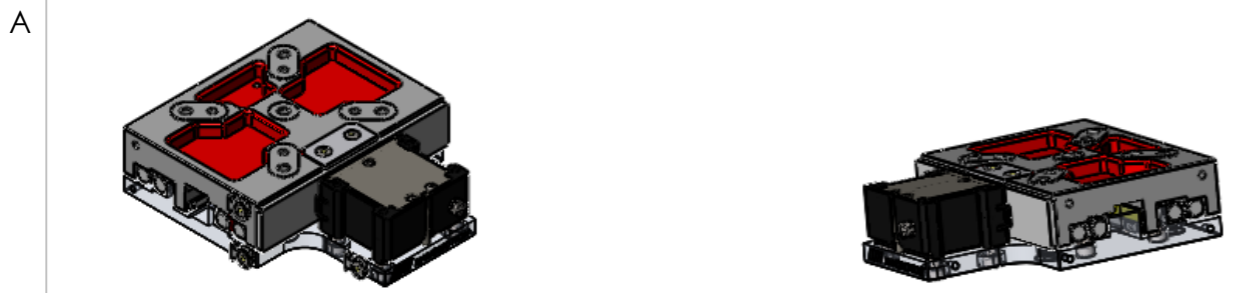
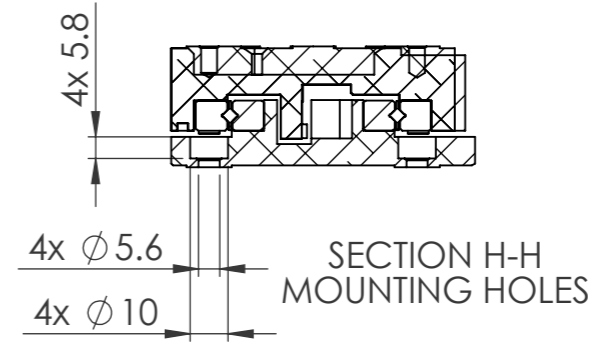
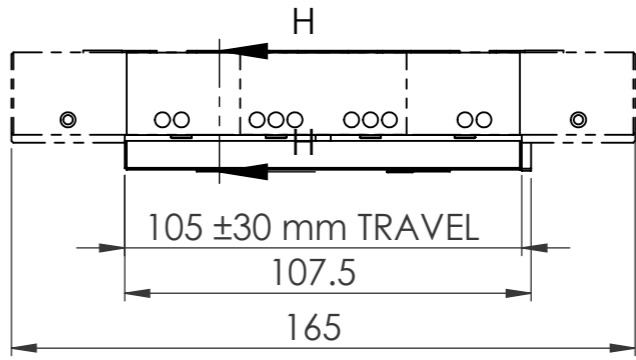
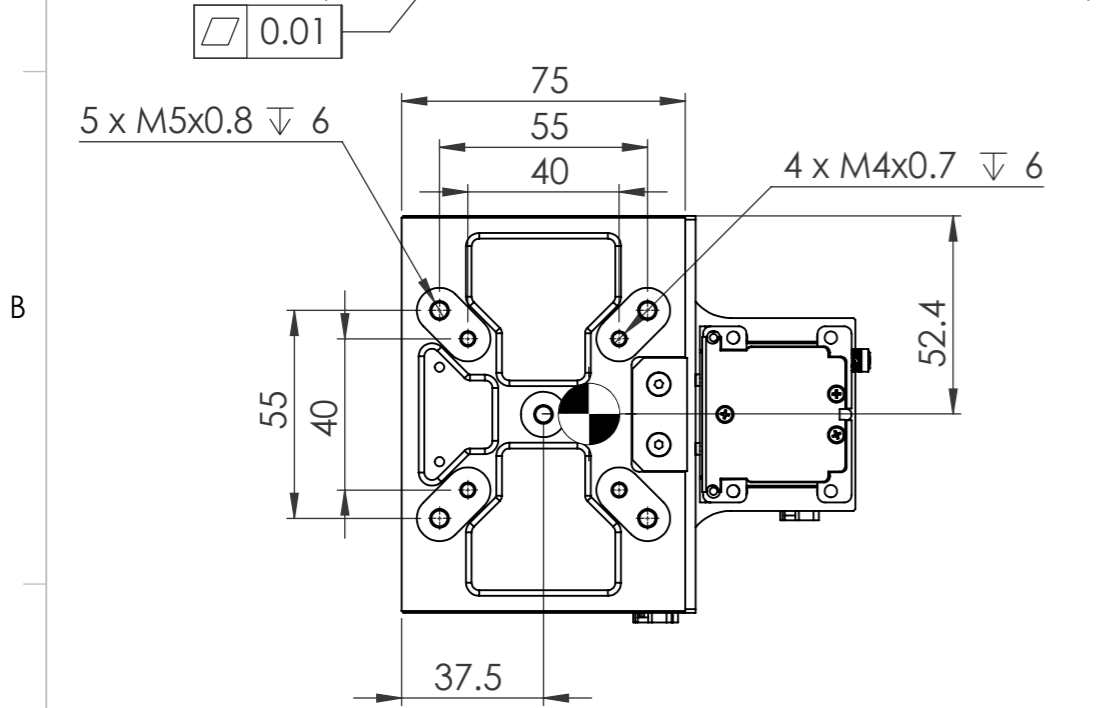
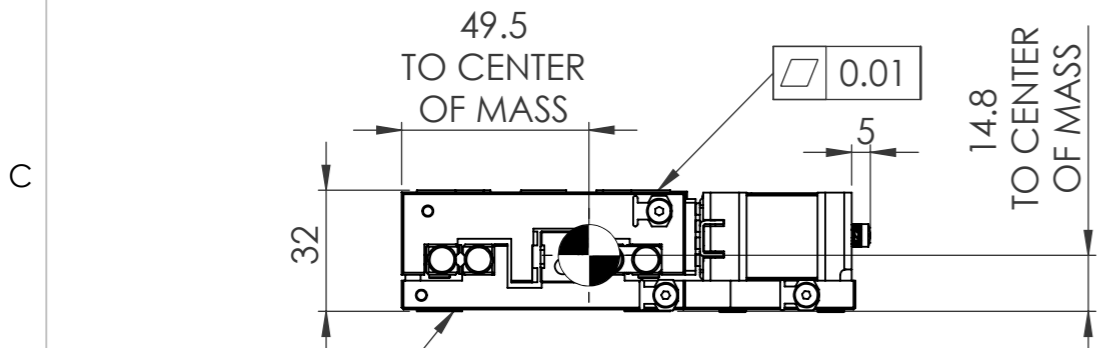
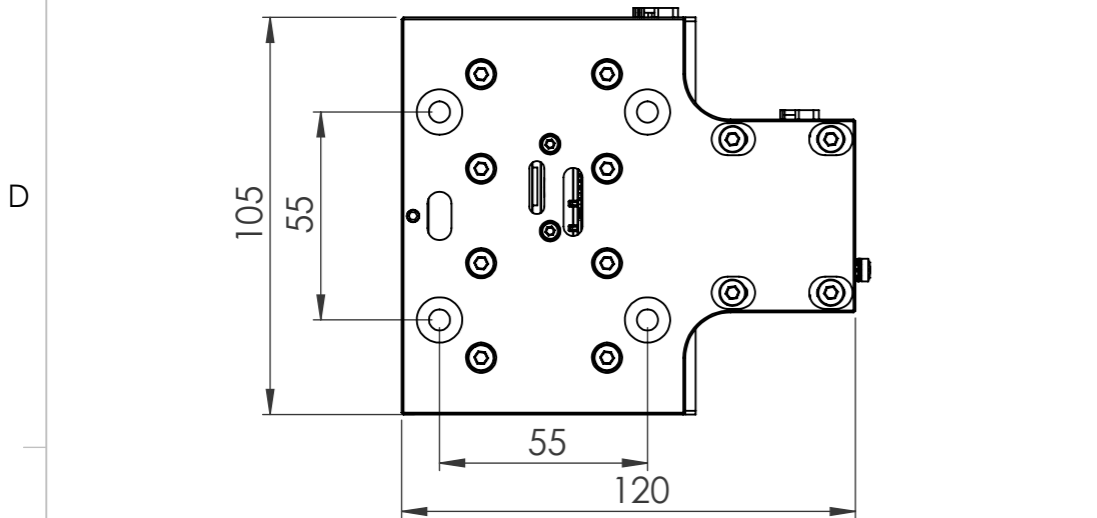


REVISIONS				
ECO	REV.	DESCRIPTION	DATE	APPROVED
	A	INITIAL RELEASE		



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**MATERIAL:** N.A.

**FINISH:**

ALL DIMENSIONS UNIT: mm

**SURFACE ROUGHNESS:** N7

**GENERAL TOLERANCES ACCORDING TO ISO 2768-FH REFERENCE TABLE**

NOMINAL MEASURE (mm)	TOLERANCE	
	OVER	MAX
0 - 6	±0.1*	
6 - 30	±0.1	
30 - 120	±0.15	
120 - 400	±0.2	
ANGULAR		±1**

\*TOLERANCES DIFFER FROM ISO 2768-FH

**PROJECT:**

**PART NAME:** ICD, FB STAGE, 75MM WIDE 60MM TRAVEL

**PART NUMBER:** **FB0075060-129**

**REV.:** **A**

**SCALE:** 1:2

**DWG. SIZE:** A3

**SHEET:** 1 OF 2

DESIGNED	CHECKED	APPROVED	NAME	SIGNATURE	DATE
	Amos Y	Tuvia			07/07/20

# TECHNICAL SPECIFICATIONS:

## Mechanical Design Characteristics

Stage Plate Structure	Aluminum - Black Anodize
Motor	Piezo Electric, Ultrasonic Standing Wave HR 8
Linear Bearings	Precision crossed roller with anti-migration device
Encoder	Linear optical scale with 20 $\mu$ m signal period and 0.1 $\mu$ m resolution, with home reference mark with electrical limits
Cable Lengths	3m
MTBF	30,000 hours
Stage Mass (g)	918
Moving Mass (g)	447

## Performance Specifications

Travel Range (mm)	60
Encoder Resolution ( $\mu$ m)	0.1 standard; (10nm optional)
Bi-directional Repeatability ( $\mu$ m)	1.0 standard; (0.1 $\mu$ m optional)
Maximum Velocity (mm/sec)	250
Straightness & Flatness ( $\mu$ m)	+/- 5
Pitch & Yaw ( $\mu$ rad)	+/- 60
Load Capacity(Horizontal) (kg)	2.93
Load Capacity (vertical lift) (kg)	0.64
Dynamic Stall Force (N)	32
Stage Stiffness (N/ $\mu$ )	3

## MOTOR CONECTOR- 9 pin D-type female

Pin	Function	Description
1	GND	System ground
2	N.C.	With AB1A Driver - Phase
3	Motor-Up	White wire - High voltage input
4	Motor-Common	Black wire - High Voltage input for AB1A, GND for AB5 AB2 and AB4 drivers as well as XCD Controller/Drivers
5	Motor-Down	Red wire - High voltage input
6	Motor-Connected Safety input	Short pin 6 to pin 1 - enables Driver. Open on pin 6 - disables the Driver.
7	GND	System ground - Connected to connector hood
8	N.C.	Not connected
9	N.C.	Not connected

## ENCODER CONNECTOR- D-Type 15 pin, MALE

Pin #	Pin Name	Function
7,9	5V	Power
2,9	0V	
14	A+	Incremental signals
6	A-	
13	B+	
5	B-	Reference mark / Index
12	Z+/Q-	
4	Z-/Q+	Inner shield
15	Shield	
Case	Shield	Outer shield
1,3	N.C.	Not connected
10-11	N.C.	Not connected



PART NUMBER: **FB0075060-129** REV. **A**

SCALE 1:2 DWG. SIZE A3 SHEET 2 OF 2