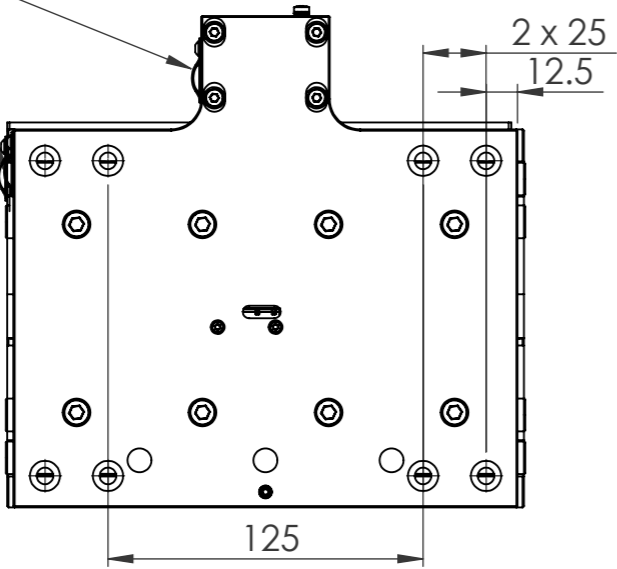
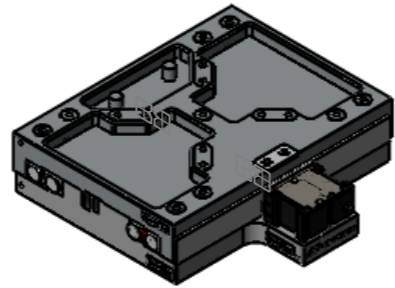
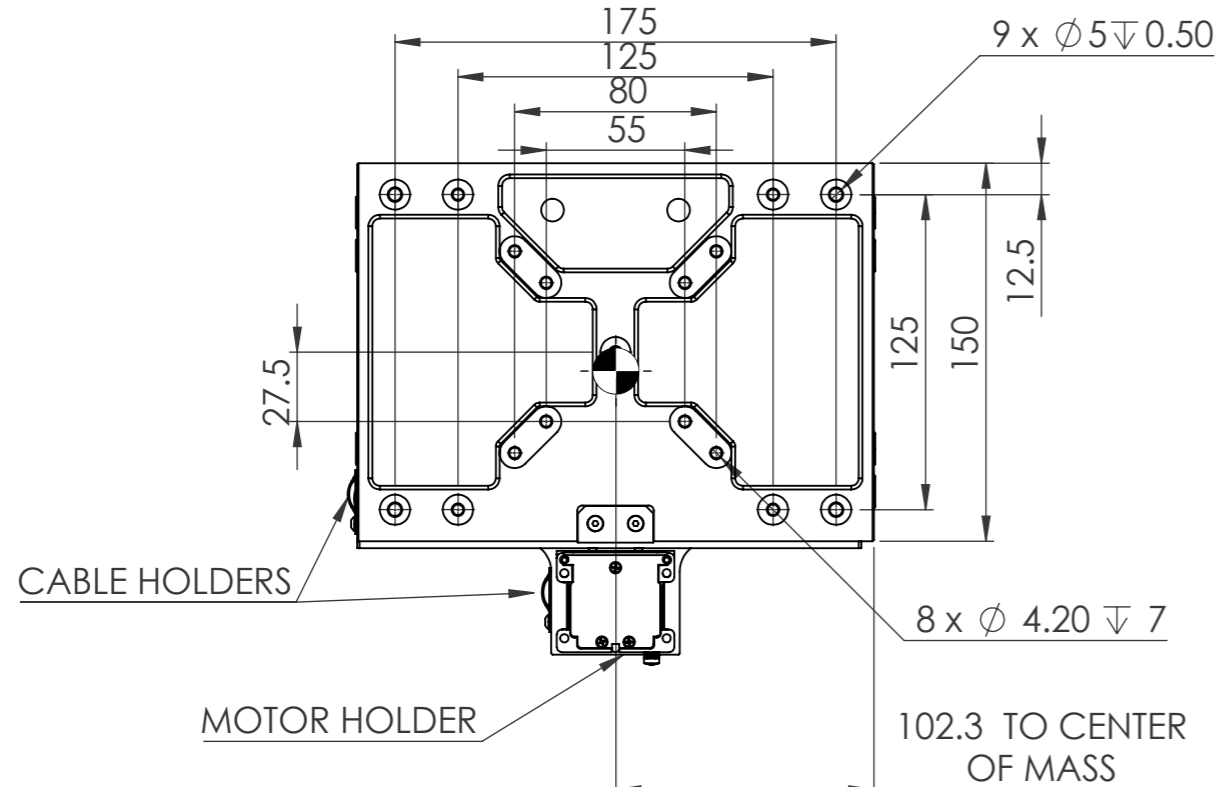
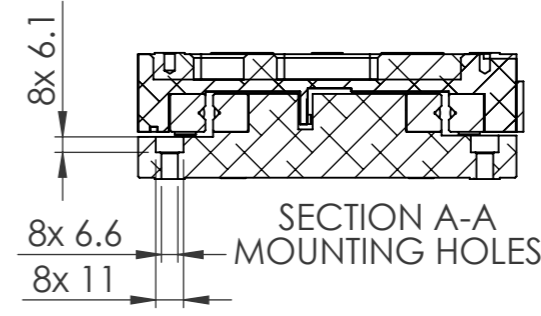
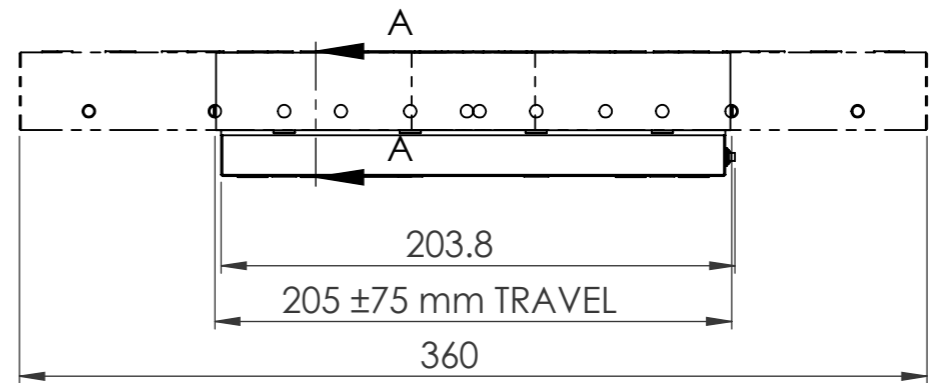
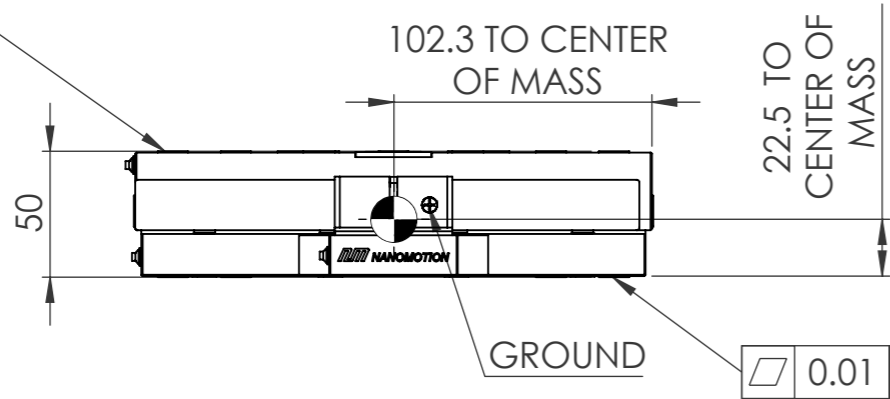


CABLE HOLDERS

| REVISIONS | | | | |
|-----------|------|-----------------|------|----------|
| ECO | REV. | DESCRIPTION | DATE | APPROVED |
| | A | INITIAL RELEASE | | |



0.01



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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:

PART NUMBER:

REV.

DESIGNED _____

CHECKED _____

APPROVED _____

NAME SIGNATURE DATE

SCALE 1:3

DWG. SIZE A3

SHEET 1 OF 2



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 20µm signal period and 0.1µm resolution, with home reference mark and electrical limits |
| Cable Lengths | 3m |
| MTBF | 30,000 hours |
| Stage Mass (g) | 4399 |
| Moving Mass (g) | 1677 |

Performance Specifications

| | |
|------------------------------------|--------------------------------|
| Travel Range (mm) | 150 |
| Encoder Resolution (µm) | 0.1 standard; (10nm optional) |
| Bi-directional Repeatability (µm) | 1.0 standard; (0.1µm optional) |
| Maximum Velocity (mm/sec) | 250 |
| Straightness & Flatness (µm) | +/- 5 |
| Pitch & Yaw (µrad) | +/- 50 |
| Load Capacity(Horizontal) (kg) | 1.8 |
| Load Capacity (vertical lift) (kg) | N/A |
| Dynamic Stall Force (N) | 32 |
| Stage Stiffness (N/µ) | 3.09 |

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 |
|-------|----------|------------------------|
| 7,8 | 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: _____ REV. _____

SCALE 1:3

DWG. SIZE A3

SHEET 2 OF 2