

GEARBOX MODEL (X AXIS)
 MPG-064 ___ MPG-084 ___
 MRG-064 ___ MRG-084 ___
 RATIO: _____

GEARBOX MODEL (Y AXIS)
 MPG-064 ___ MPG-084 ___
 MRG-064 ___ MRG-084 ___
 RATIO: _____

FOR DIRECT DRIVE OPTION WITH MMK
 (NO GEARBOX) CHECK HERE: _____

MOTOR INFORMATION (X AXIS)
 MANUFACTURER: _____
 MODEL: _____

MOTOR INFORMATION (Y AXIS)
 MANUFACTURER: _____
 MODEL: _____

SENSOR INFORMATION X-AXIS:
 HOME-QTY ___ 244-____-____-____
 EOT-QTY ___ 244-____-____-____

SENSOR INFORMATION Y-AXIS:
 HOME-QTY ___ 244-____-____-____
 EOT-QTY ___ 244-____-____-____

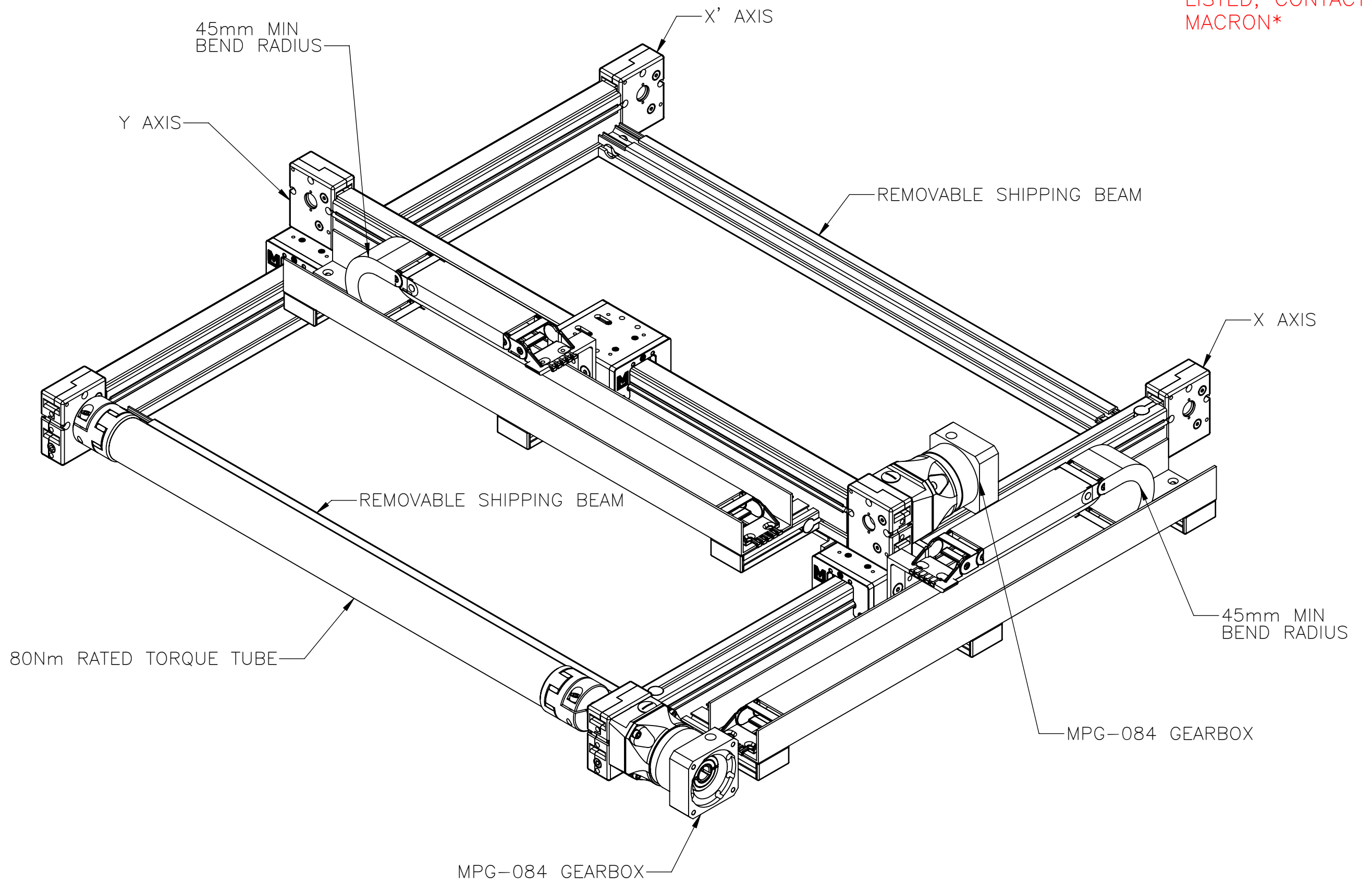
(SEE T-SLOT SENSOR KIT SHEET
 FOR PART NUMBER CONFIGURATION)

MGS-M6S- [] - [] - X

ENTER Y-AXIS TRAVEL
 TRAVEL IN INCREMENTS OF 25mm
 TRAVEL LIMITS: 150mm-2500mm

ENTER X-AXIS TRAVEL
 TRAVEL IN INCREMENTS OF 25mm
 TRAVEL LIMITS: 150mm-5825mm


*IF TRAVEL IS
 OUTSIDE LIMITS
 LISTED, CONTACT
 MACRON*



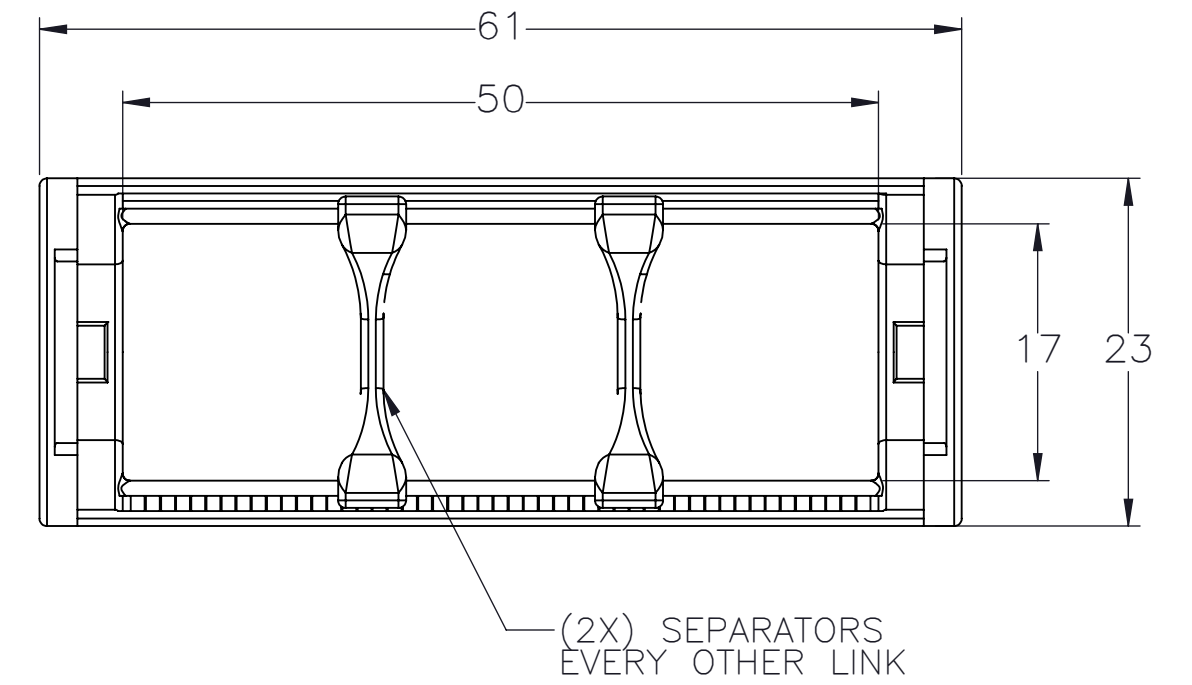
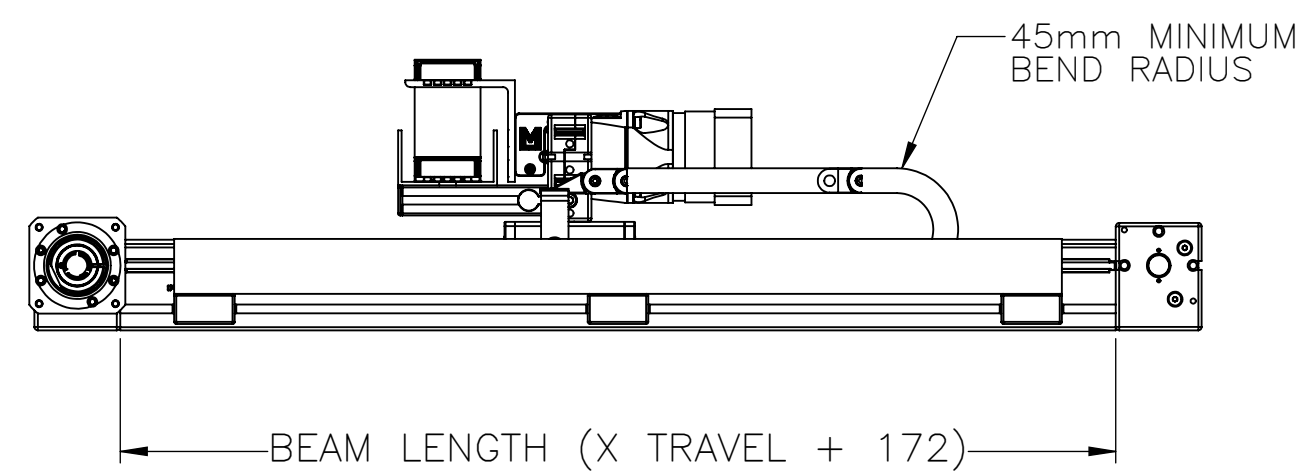
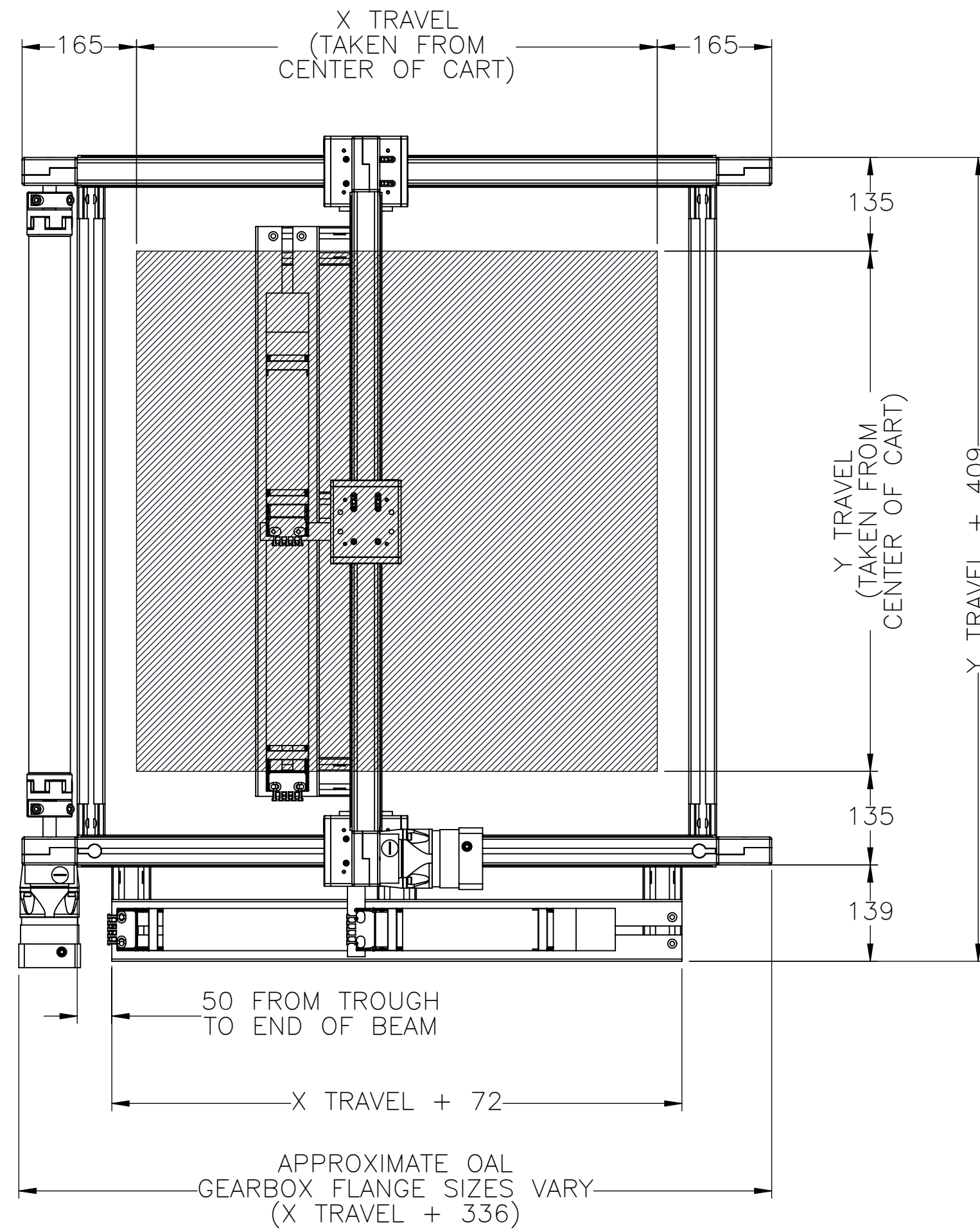
APPROVED: _____
 SIGN & PRINT

DATE: _____

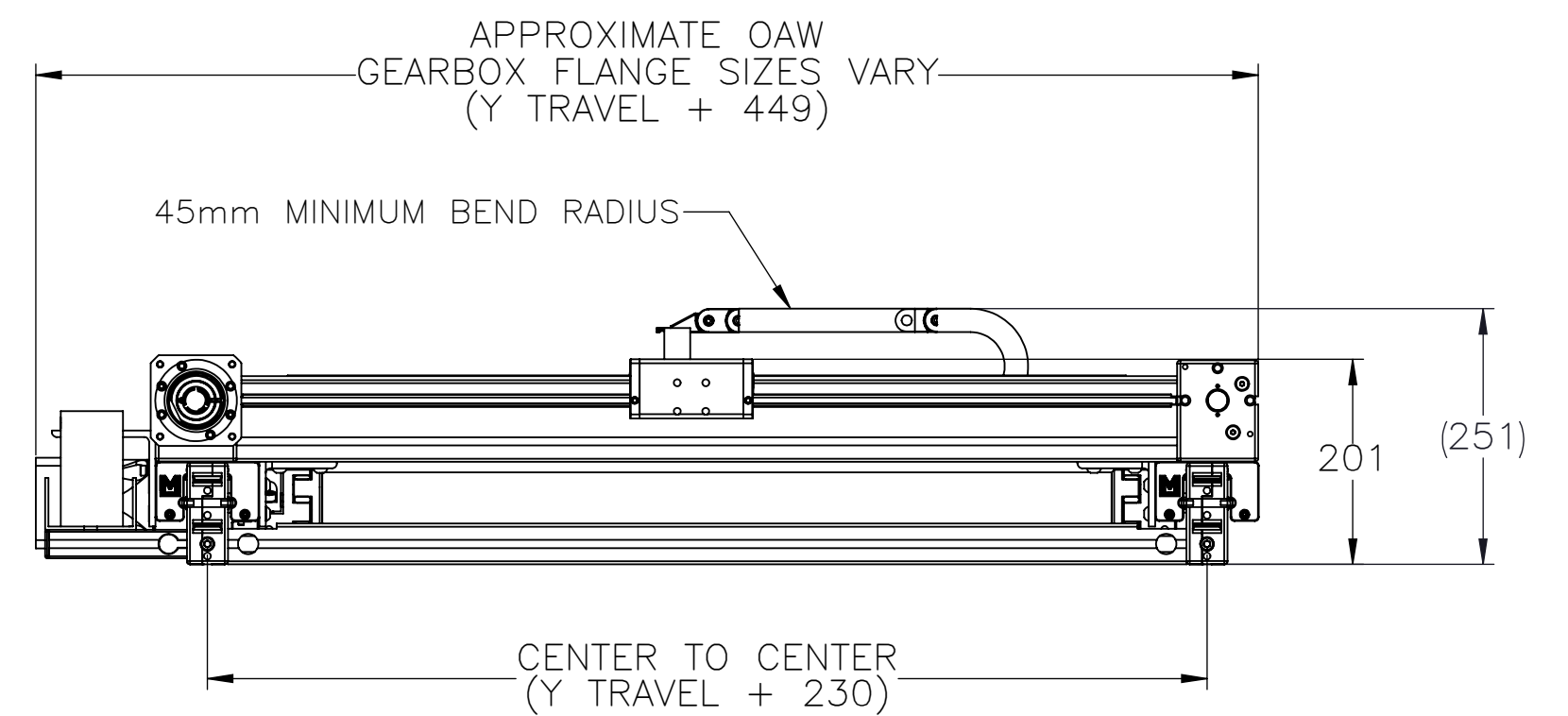
PO:REFERENCE#: _____

| | | | | |
|---|---|---|------------------------|---------------------------------------|
|  MACRON DYNAMICS INC | DRAWN BY: PHW CHECKED BY: -- LAST SAVED BY: Tim | DATE: 11/26/2017 DATE: DD/MM/YYYY DATE: 9/15/2023 | MATERIAL: | TITLE: MACRON M6S XY GANTRY |
| | <small>UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. TOLERANCES UNLESS NOTED OTHERWISE:</small> .X ± .762 .XX ± .254 .XXX ± .127 ANG ± 0°30' | | FINISH: | SCALE 1:1 SHEET SIZE C |
| | SURFACE FINISH ✓ <small>BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING</small> THIRD ANGLE PROJECTION | | SHEET 1 OF 6 | PART NUMBER MGS-M6S-X-X-X |

WORK ENVELOPE AND GANTRY FOOTPRINT

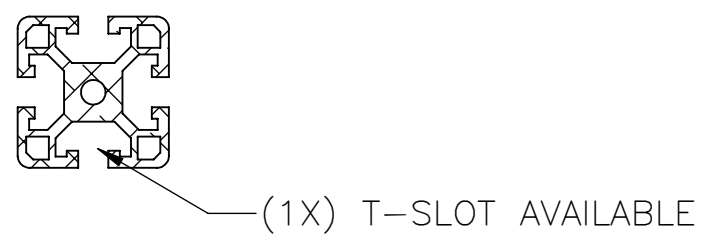
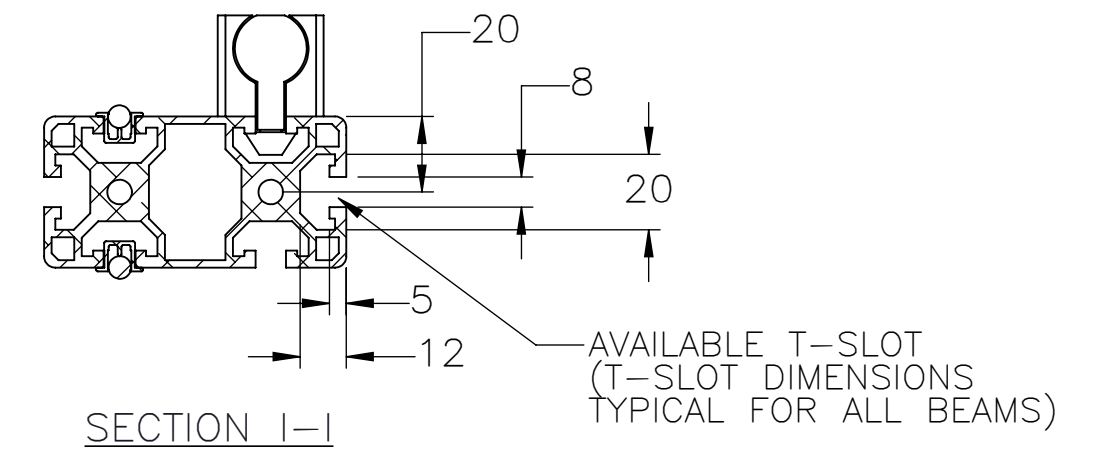
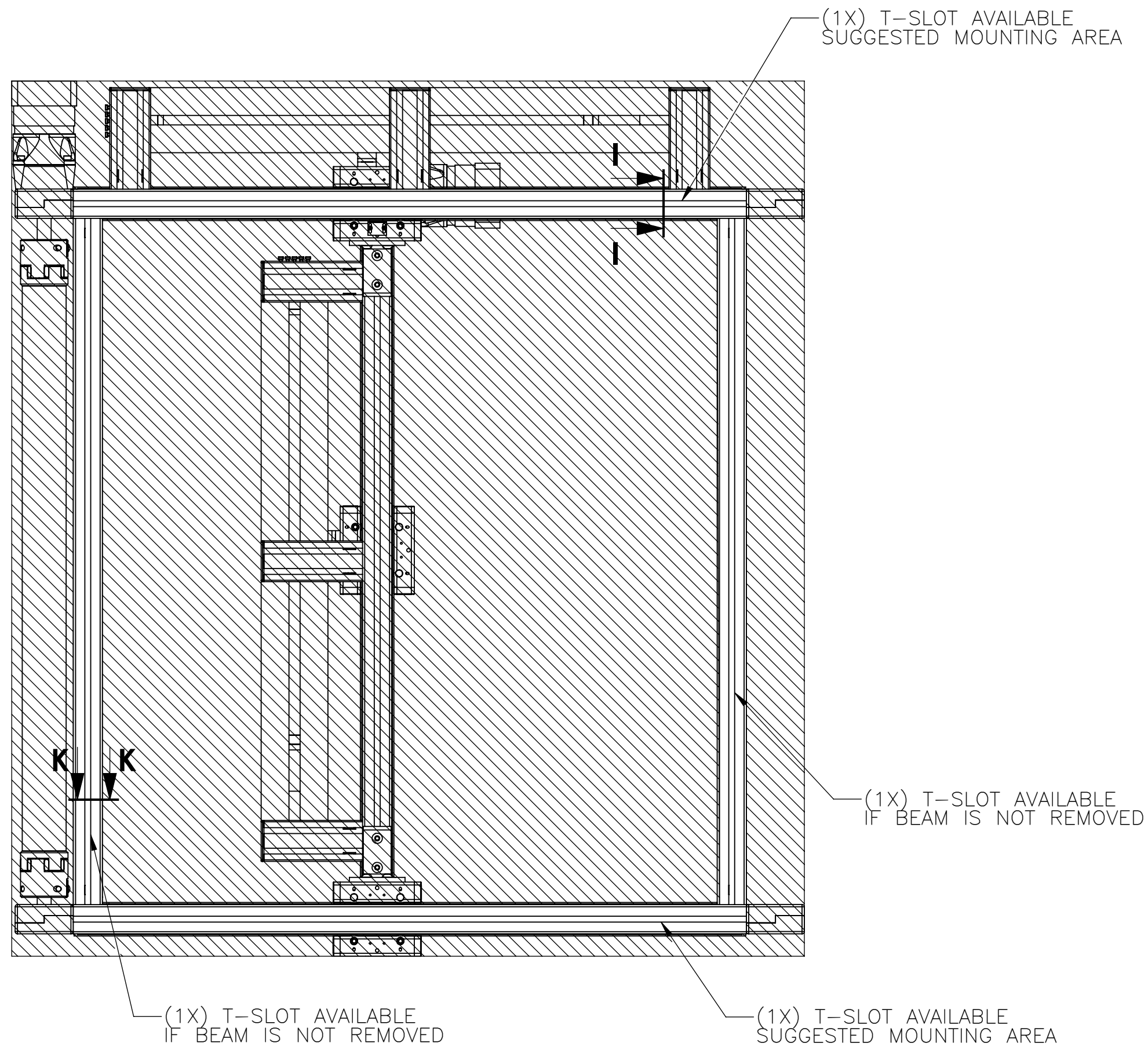


CABLE TRACK CROSS SECTION
(SAME FOR BOTH AXES)




| | | | | | |
|----------------------------|--|---|---|-----------------------------------|-----|
| <p>MACRON DYNAMICS INC</p> | DRAWN BY: PHW CHECKED BY: -- LAST SAVED BY: Tim | DATE: 11/26/2017 DATE: DD/MM/YYYY DATE: 9/15/2023 | MATERIAL: | TITLE: MACRON M6S XY GANTRY | |
| | UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES UNLESS NOTED OTHERWISE: | | FINISH: | SCALE 1:1 SHEET SIZE C | |
| | SURFACE FINISH 63 | | SHEET 2 OF 6 | PART NUMBER MGS-M6S-XY | REV |
| | THIS DRAWING IS THE PROPERTY OF MACRON DYNAMICS. ANY REPRODUCTIONS SHALL BE FOR QUOTATION, MANUFACTURING, OR PURCHASING PURPOSES ONLY. RELEASE OF DRAWINGS TO OTHER CONCERNS DOES NOT CONSTITUTE LICENSING IN ANY WAY. INFORMATION CONTAINED HEREIN IS PROPRIETARY AND CONFIDENTIAL. | | BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION | | |

GANTRY MOUNTING FEATURES

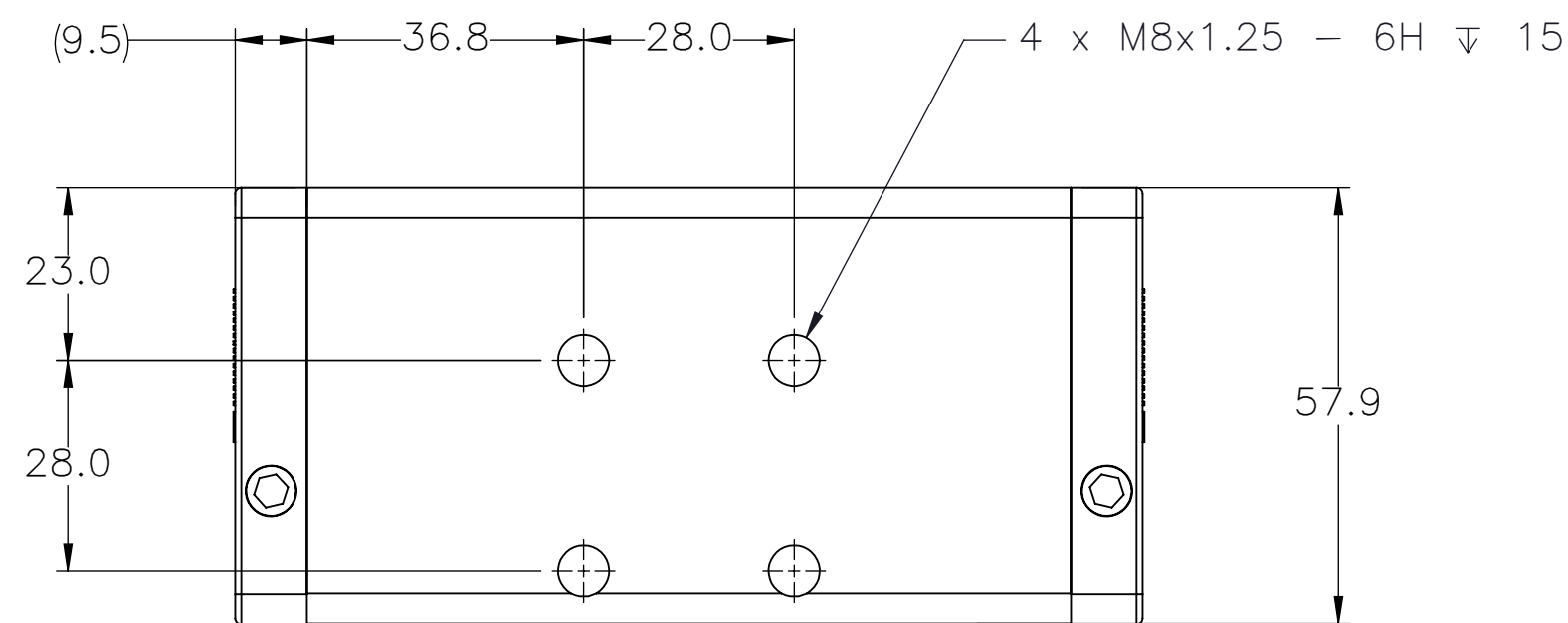
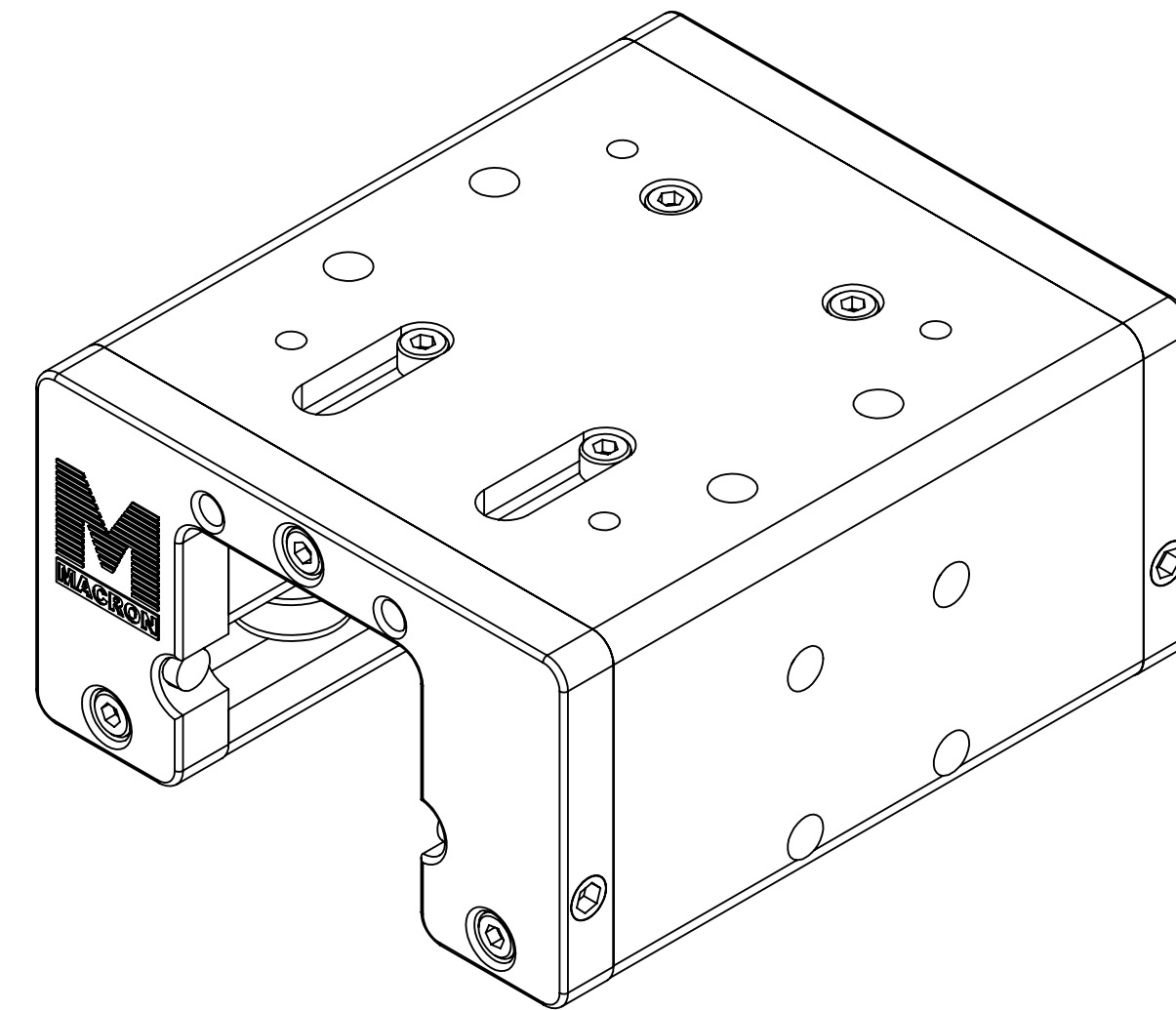
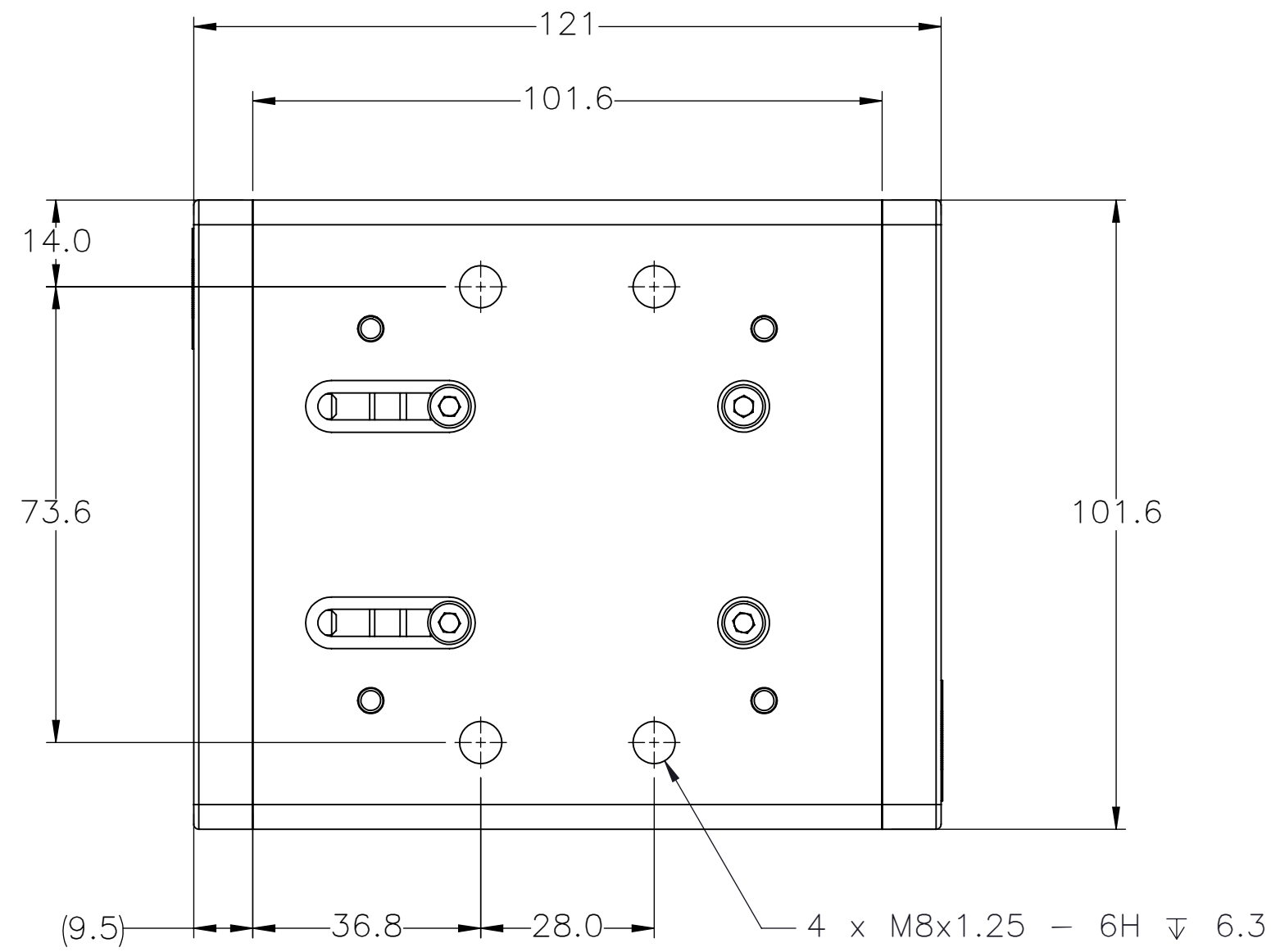


SECTION K-K


BOTTOM VIEW

| | | | |
|---|--|--|---|
|  MACRON DYNAMICS INC | DRAWN BY: PHW DATE: 11/26/2017 | MATERIAL: | TITLE: MACRON M6S XY GANTRY |
| | CHECKED BY: -- DATE: DD/MM/YYYY | FINISH: | |
| | LAST SAVED BY: Tim DATE: 9/15/2023 | UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES: TOLERANCES UNLESS NOTED OTHERWISE: | SCALE 1:1 SHEET SIZE C |
| | THIS DRAWING IS THE PROPERTY OF MACRON DYNAMICS. ANY REPRODUCTIONS SHALL BE FOR QUOTATION, MANUFACTURING, OR PURCHASING PURPOSES ONLY. RELEASE OF DRAWINGS TO OTHER CONCERNS DOES NOT CONSTITUTE LICENSING IN ANY WAY. INFORMATION CONTAINED HEREIN IS PROPRIETARY AND CONFIDENTIAL. | SURFACE FINISH 63 BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION | SHEET 3 OF 6 PART NUMBER MGS-M6S-X-X-X |

CART MOUNTING FEATURES



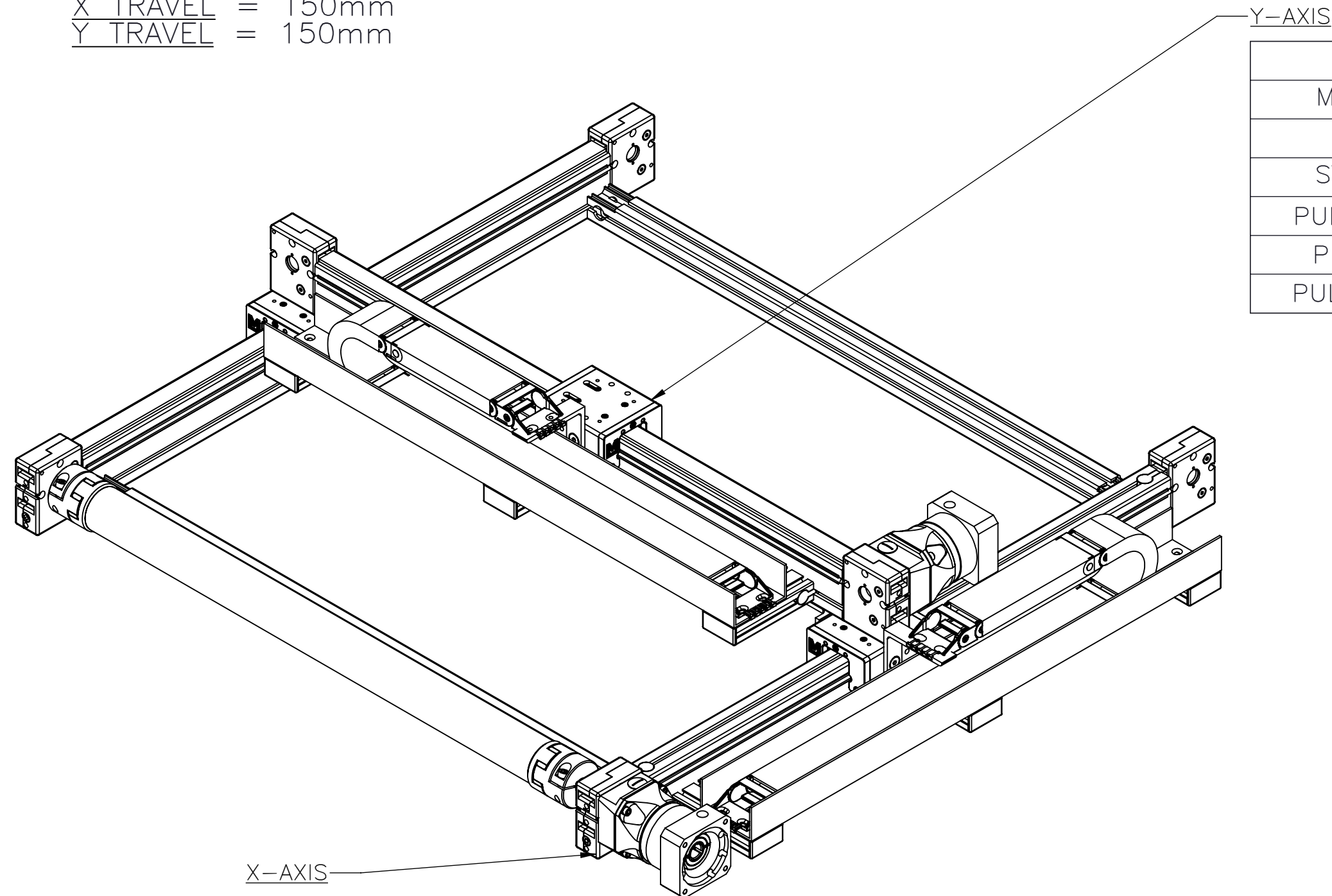
HOLE PATTERN IS THE SAME ON BOTH SIDES OF CART

| | | | | | |
|---|--|---|---|---|---------|
|  MACRON DYNAMICS INC | DRAWN BY: PHW CHECKED BY: -- LAST SAVED BY: Tim | DATE: 11/26/2017 DATE: DD/MM/YYYY DATE: 9/15/2023 | MATERIAL: | TITLE: MACRON 6 CART ASSEMBLY | |
| | UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES TOLERANCES UNLESS NOTED OTHERWISE: | | FINISH: | SCALE 1:1 SHEET SIZE C | |
| | SURFACE FINISH 63 | | SHEET | PART NUMBER | REV |
| | THIS DRAWING IS THE PROPERTY OF MACRON DYNAMICS. ANY REPRODUCTIONS SHALL BE FOR QUOTATION, MANUFACTURING, OR PURCHASING PURPOSES ONLY. RELEASE OF DRAWINGS TO OTHER CONCERNS DOES NOT CONSTITUTE LICENSING IN ANY WAY. INFORMATION CONTAINED HEREIN IS PROPRIETARY AND CONFIDENTIAL. | | BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION | 4 OF 6 | CSA-M6S |

MOTOR SIZING WORKSHEET

(INCREMENTAL ADDERS REFER TO MASS PER TRAVEL LENGTH)

BASE TRAVELS USED:
 X TRAVEL = 150mm
 Y TRAVEL = 150mm



| PROPERTY | BASE VALUE (T=150mm) |
|---------------------|------------------------|
| MOVING MASS | 1.205kg(+0.022kg/25mm) |
| BELT MASS | 0.113(+0.006kg/25mm) |
| SYSTEM MASS | 4.858kg(+0.110kg/25mm) |
| PULLEY PITCH ϕ | 47.75mm (1.88") |
| PULLEY WIDTH | 28.9mm (1.14") |
| PULLEY MATERIAL | STEEL |

| PROPERTY | BASE VALUE (T=150mm) |
|-----------------------|--|
| **MOVING MASS | 2.038(+0.028kg/25mm) |
| BELT MASS | 0.226(0.012kg/25mm) |
| PULLEY PITCH ϕ | 47.75mm (1.88") |
| PULLEY WIDTH | 28.9mm (1.14") |
| PULLEY MATERIAL | STEEL |
| ***TORQUE TUBE LENGTH | 301mm |
| TORQUE TUBE ϕ | 60mm |
| ***TORQUE TUBE MASS | 1.314(+0.036kg/25mm) |
| TORQUE TUBE MATERIAL | ANODIZED ALUMINUM ELASTOMER STYLE COUPLINGS WITH HUB |
| TRAVEL PER REV | 150mm |

**SYSTEM MASS OF Y-AXIS NEEDS TO BE ADDED TO THIS


***BASE VALUE AT Y TRAVEL = 150mm

X TRAVEL = _____ mm
 Y TRAVEL = _____ mm

NOTE: ALL SUPPLIED MASSES DO NOT INCLUDE CUSTOMER COMPONENTS (MOTORS, CABLES, ETC)

| GEARBOX MASS (ADD TO SYSTEM MASSES) | MPG-064 | 1.0kg |
|-------------------------------------|---------|-------|
| | MPG-084 | 2.3kg |
| | MRG-064 | 3.0kg |
| | MRG-084 | 5.6kg |

| | | |
|-------------------|---|--|
| TOTAL SYSTEM MASS | $(X \text{ TRAVEL} \times .0083) + (Y \text{ TRAVEL} \times .0088) + 13.98 = \text{kg}$ | |
|-------------------|---|--|

| | | | | |
|--|---|---|--------------------------|-----------------------------------|
|  MACRON DYNAMICS INC | DRAWN BY: PHW CHECKED BY: -- LAST SAVED BY: JA | DATE: 11/26/2017 DATE: DD/MM/YYYY DATE: 9/15/2023 | MATERIAL: FINISH: | TITLE: MACRON M6S XY GANTRY |
| | UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETER. TOLERANCES UNLESS NOTED OTHERWISE: .X \pm .762 .XX \pm .254 .XXX \pm .127 ANG \pm 0°30' | | | SCALE 1:1 SHEET SIZE C |
| | SURFACE FINISH $\sqrt{63}$ BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION | SHEET 5 OF 6 | PART NUMBER MGS-M6S-XY | REV |

THIS DRAWING IS THE PROPERTY OF MACRON DYNAMICS. ANY REPRODUCTIONS SHALL BE FOR QUOTATION, MANUFACTURING, OR PURCHASING PURPOSES ONLY. RELEASE OF DRAWINGS TO OTHER CONCERNS DOES NOT CONSTITUTE LICENSING IN ANY WAY. INFORMATION CONTAINED HEREIN IS PROPRIETARY AND CONFIDENTIAL.

SPECIFICATIONS

| | |
|---------------------------------------|---------------------------|
| Sensor Type | Inductive |
| Sensor Size | Fits all 8mm wide T-Slots |
| Operating Voltage | 10–30 VDC |
| Voltage Drop Across Conducting Sensor | ≤1.8 V at 100 mA |
| Number of Conductors (AWG) | 3x26 AWG |
| Temperature Range | -40°C to 105°C |

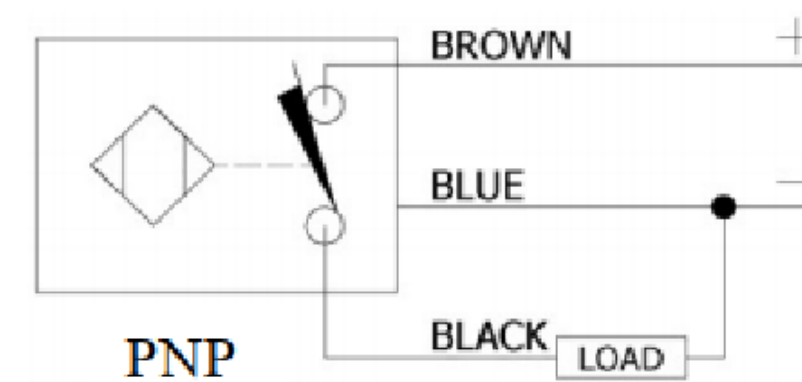
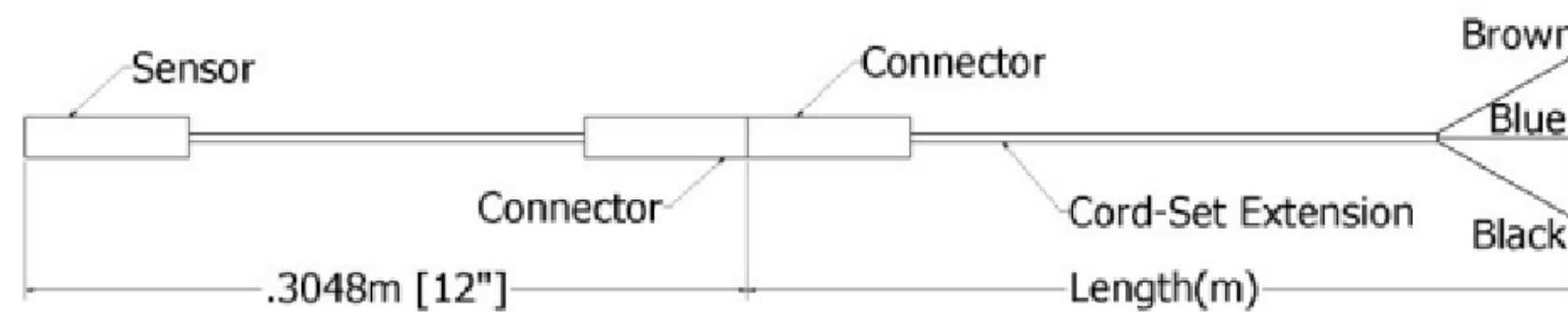
Part Number Configuration

244-_-_-_-_-

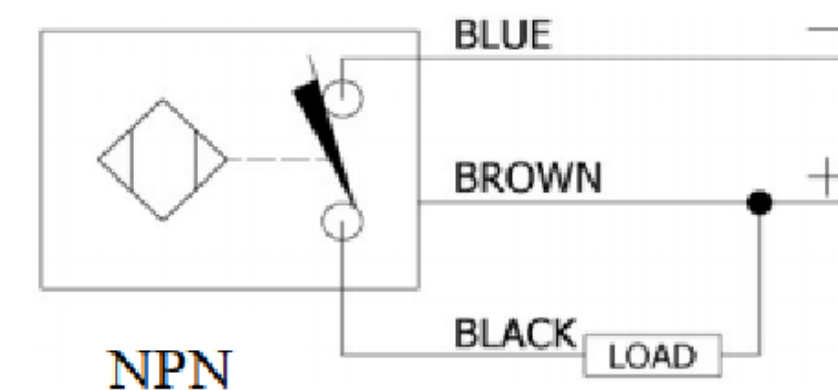
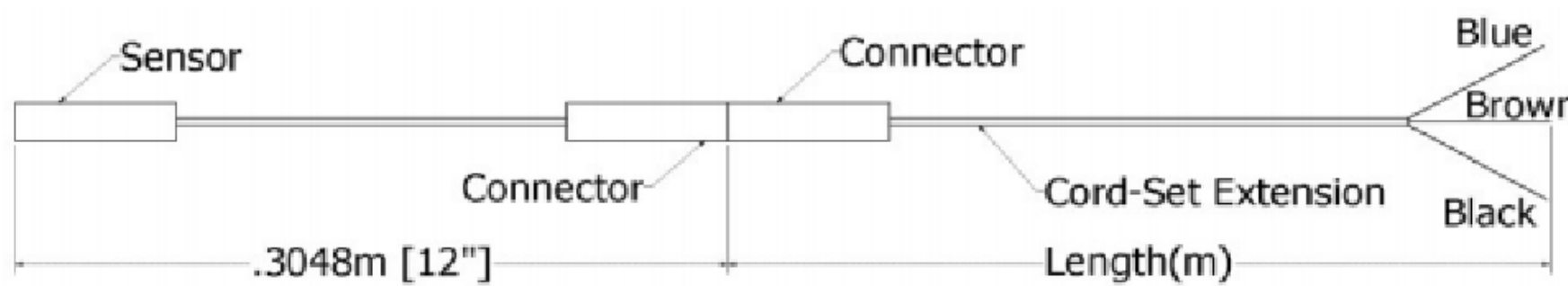
| | | | |
|------------|----------|----|--------|
| PNP or NPN | NC or NO | 02 | Meters |
| PNP or NPN | NC or NO | 06 | Meters |
| PNP or NPN | NC or NO | 12 | Meters |

Example: PNP, normally closed, cord-set extension length 6 meters = 244-PNP-NC-06

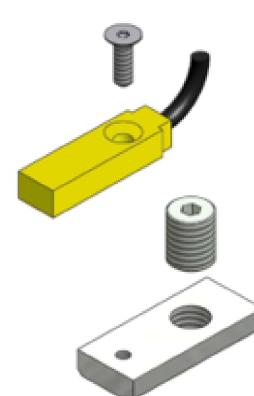
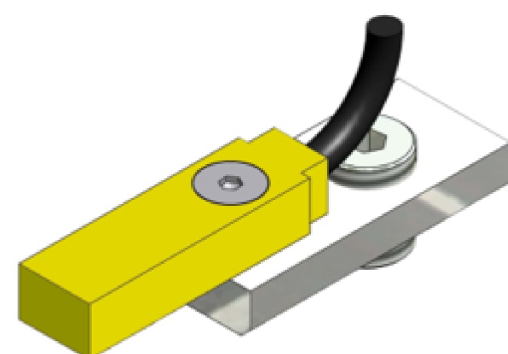
PNP Diagrams



NPN Diagrams



KIT INCLUDES – SENSOR, CORDSET EXTENSION, AND MOUNTING HARDWARE



| | | | | |
|--|--|---|---------------------------|---|
| | DRAWN BY: PHW CHECKED BY: -- LAST SAVED BY: Paul | DATE: 11/26/2017 DATE: DD/MM/YYYY DATE: 9/15/2023 | MATERIAL: FINISH: | TITLE: T-SLOT SENSOR KIT |
| | UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. TOLERANCES UNLESS NOTED OTHERWISE: .X ± .762 .XX ± .254 .XXX ± .127 ANG ± 0°30' | | SCALE 1:1 SHEET SIZE C | SHEET 6 OF 6 PART NUMBER MGS-M6S-XY REV |
| THIS DRAWING IS THE PROPERTY OF MACRON DYNAMICS. ANY REPRODUCTIONS SHALL BE FOR QUOTATION, MANUFACTURING, OR PURCHASING PURPOSES ONLY. RELEASE OF DRAWINGS TO OTHER CONCERNS DOES NOT CONSTITUTE LICENSING IN ANY WAY. INFORMATION CONTAINED HEREIN IS PROPRIETARY AND CONFIDENTIAL. | SURFACE FINISH ✓ | BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION | | |