

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: _____

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-_____

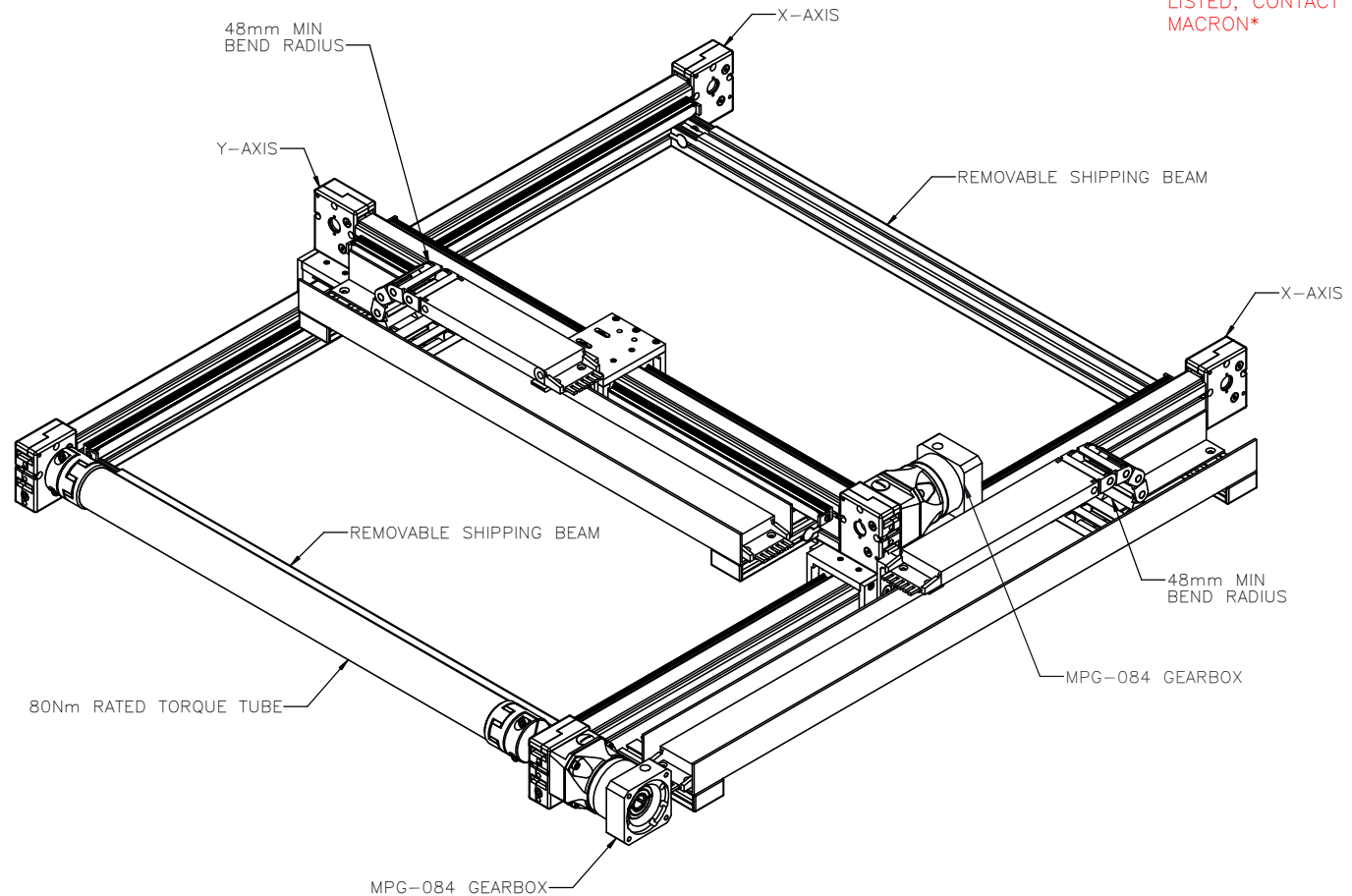
(SEE T-SLOT SENSOR KIT SHEET
 FOR PART NUMBER CONFIGURATION)

MGS-R6S- [] - [] -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*



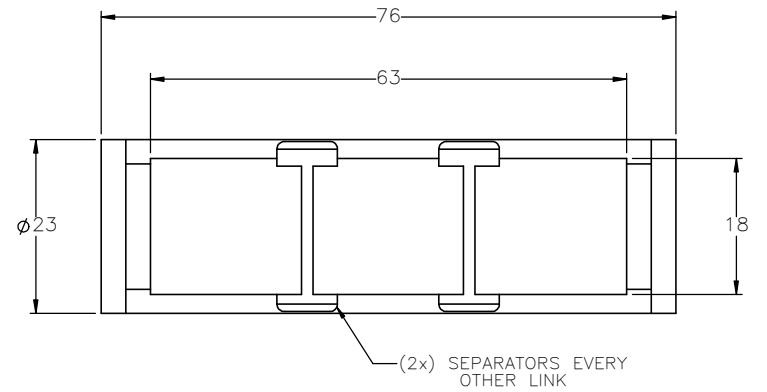
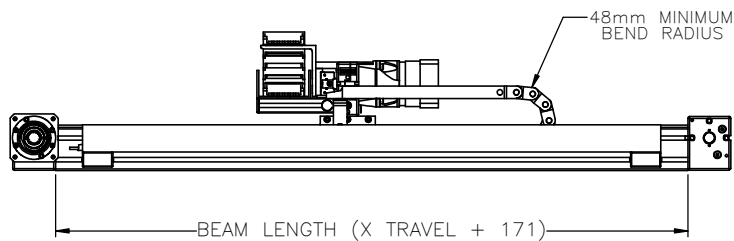
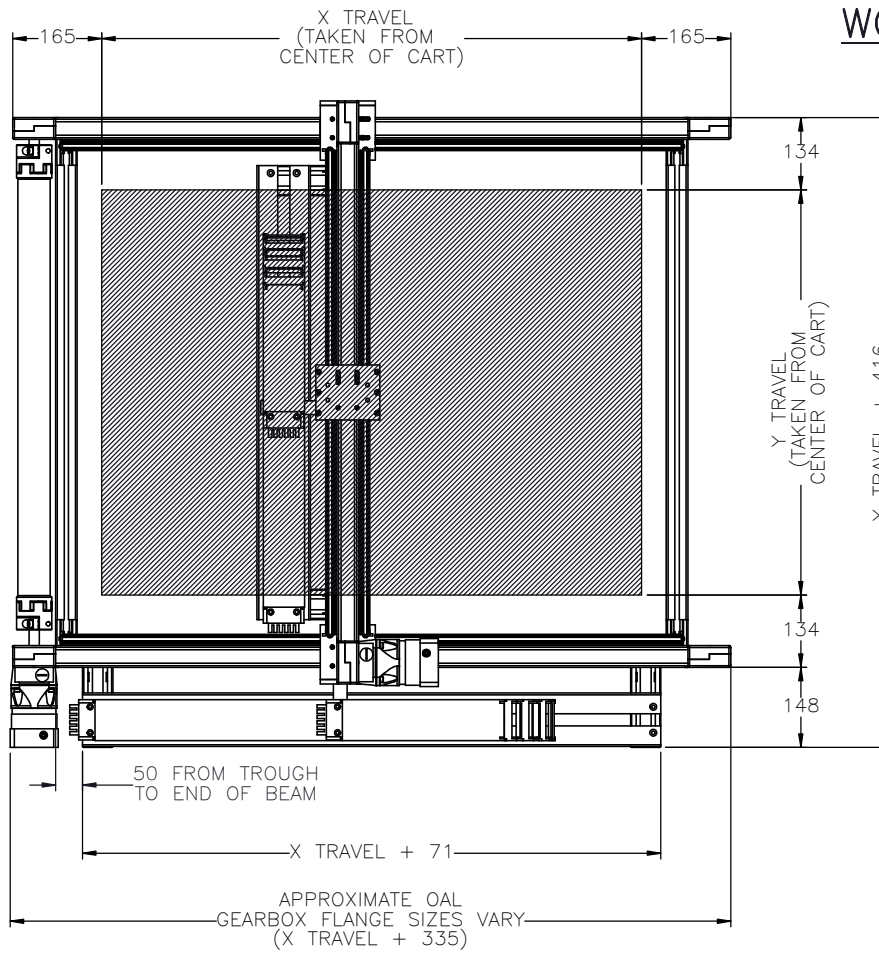
APPROVED: _____
 SIGN & PRINT

DATE: _____

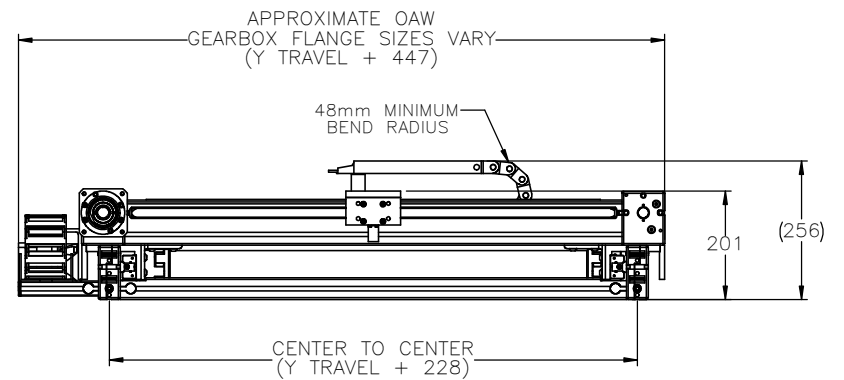
PO:REFERENCE#: _____


| | | | |
|--|---|--|-----------------------------------|
|  MACRON DYNAMICS INC | DRAWN BY: PHW DATE: 11/26/2017 | MATERIAL: | TITLE: MACRON R6S XY GANTRY |
| | CHECKED BY: --- DATE: DD/MM/YYYY | FINISH: | |
| | LAST SAVED BY: Tim DATE: 10/12/2020 | UNLESS OTHERWISE SPECIFIED, .XX ± .254 DIMENSIONS ARE IN MILLIMETERS. TOLERANCES UNLESS NOTED .XXX ± .127 OTHERWISE: ANG ± 0°30' | SCALE: 1:1 SHEET SIZE: C |
| | SURFACE FINISH: <input checked="" type="checkbox"/> | SHEET: 1 OF 6 PART NUMBER: MGS-R6S-XY | REV: C |
| <small>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.</small> | | | |

WORK ENVELOPE AND GANTRY FOOTPRINT

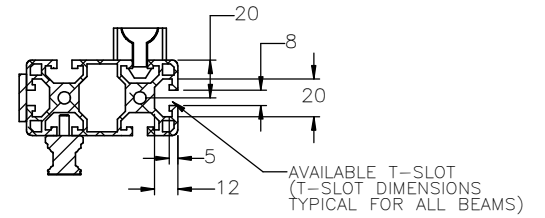
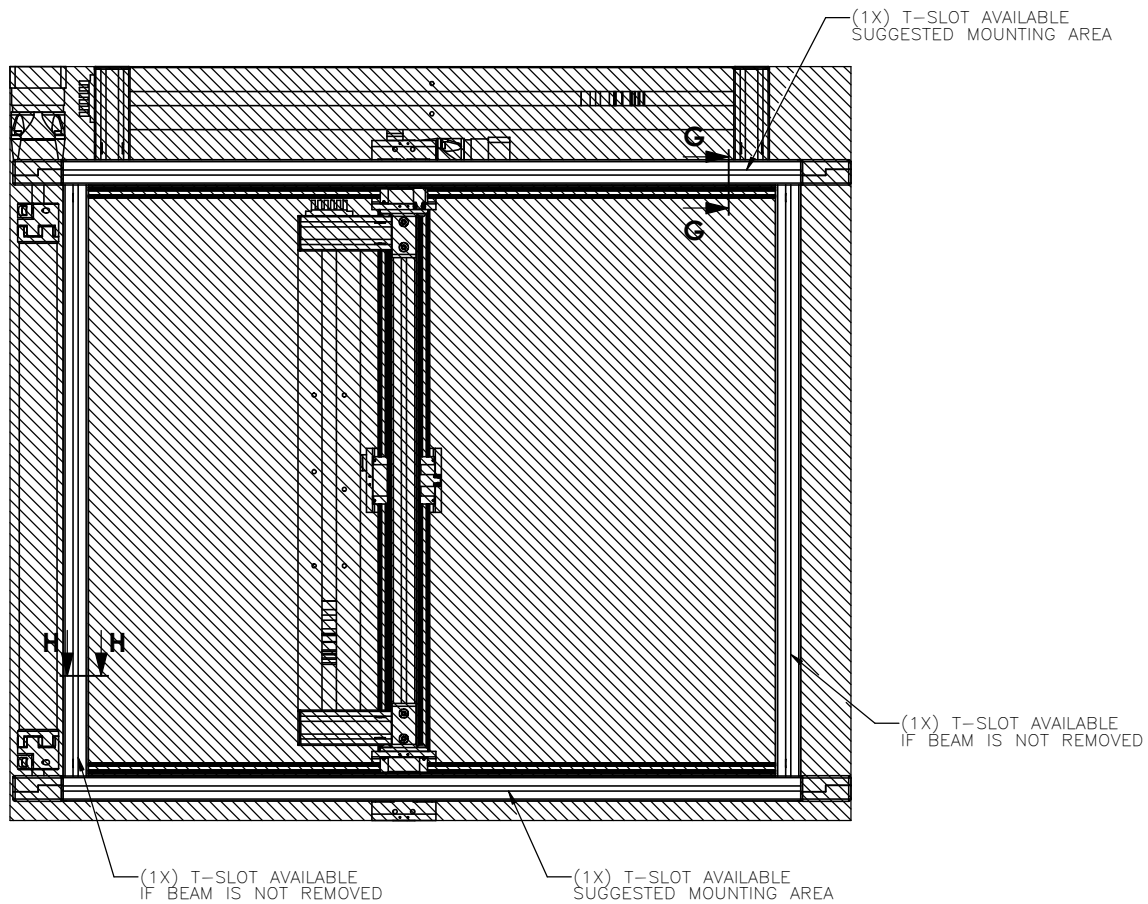


CABLE TRACK CROSS SECTION



| | | | | |
|---|--|--|--|--------------------------------|
|  MACRON DYNAMICS INC | DRAWN BY: PHW CHECKED BY: -- LAST SAVED BY: Tim | DATE: 11/26/2017 DATE: DD/MM/YYYY DATE: 10/12/2020 | MATERIAL: FINISH: | TITLE: MACRON R6S XY GANTRY |
| | UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES UNLESS NOTED OTHERWISE: | | .XX ± .03 .XX ± .010 .XXX ± .005 ANG ± .0°30' | SCALE: 1:1 SHEET SIZE: C |
| | SURFACE FINISH: 63 BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION | | SHEET: 2 OF 6 PART NUMBER: MGS-R6S-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. | | | |

GANTRY MOUNTING FEATURES




SECTION G-G

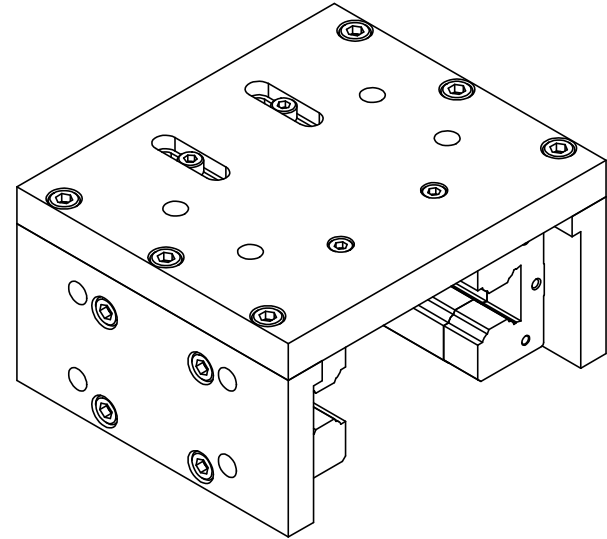
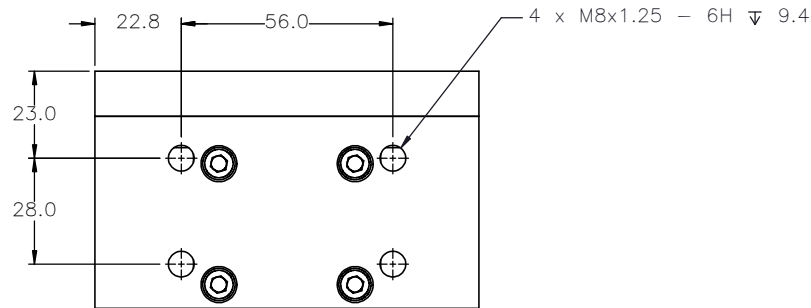
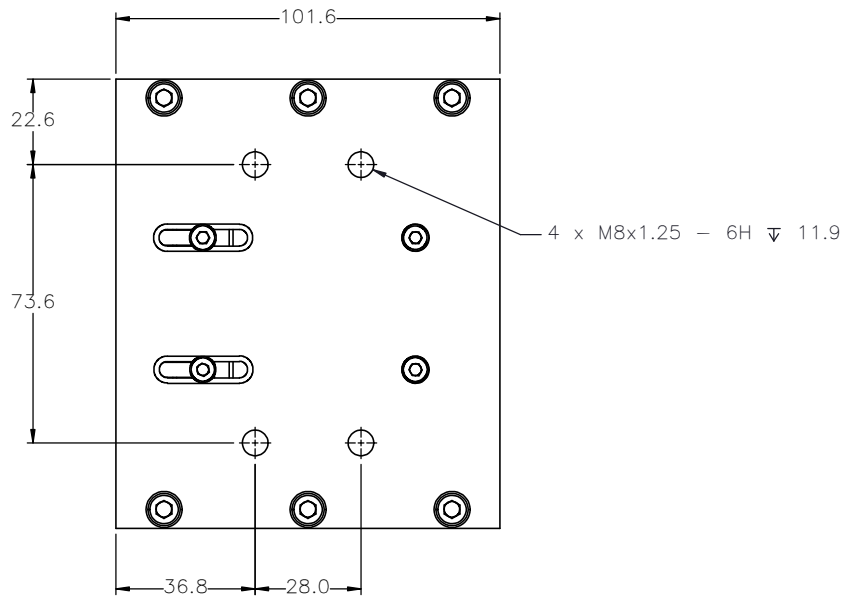
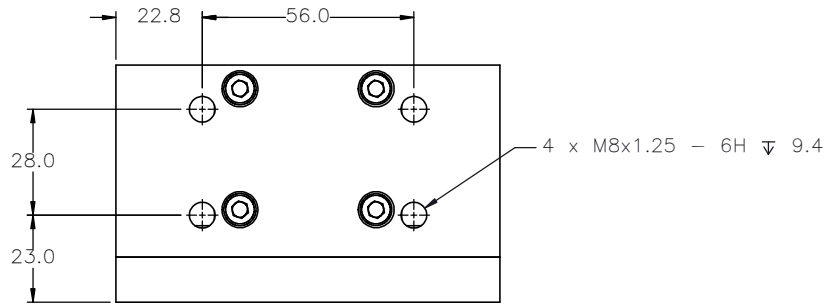



SECTION H-H (1X) T-SLOT AVAILABLE

BOTTOM VIEW

| | | | |
|---|---|---|---|
|  MACRON DYNAMICS INC | DRAWN BY: PHW DATE: 11/26/2017 | MATERIAL: | TITLE: MACRON R6S XY GANTRY |
| | CHECKED BY: -- DATE: DD/MM/YYYY | FINISH: | |
| | LAST SAVED BY: Tim DATE: 10/12/2020 | UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES: .X ± .762 .XX ± .254 .XXX ± .127 OTHERWISE: ANG ± 0°30' | SCALE: 1:1 SHEET SIZE: C |
| | SURFACE FINISH: 63 BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION | SHEET: 3 OF 6 PART NUMBER: MGS-R6S-XY | REV: |

CART MOUNTING FEATURES

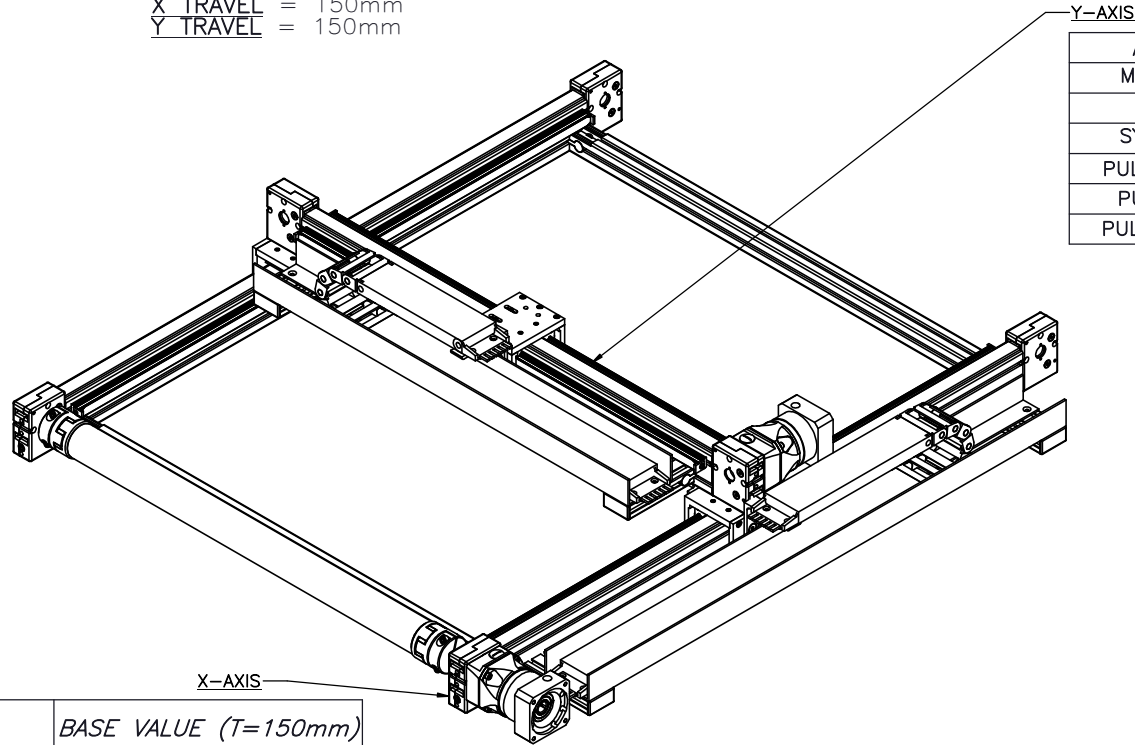


| | | | | |
|---|---|---|---|---------------|
|  MACRON DYNAMICS INC | DRAWN BY: PHW DATE: 11/26/2017 | MATERIAL: | TITLE: R6D CART ASSEMBLY | |
| | CHECKED BY: -- DATE: DD/MM/YYYY | FINISH: | | |
| | LAST SAVED BY: Tim DATE: 10/12/2020 | UNLESS OTHERWISE SPECIFIED, .XX ± .254 DIMENSIONS ARE IN INCHES. .XXX ± .127 TOLERANCES UNLESS NOTED OTHERWISE: ANG ± 0°30' | 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: 4 OF 6 PART NUMBER: CSA-R6D | REV: C |

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 | 1.702kg(+0.022kg/25mm) |
| BELT MASS | 0.109(+0.006kg/25mm) |
| SYSTEM MASS | 6.031kg(+0.156kg/25mm) |
| PULLEY PITCH ϕ | 47.75mm (1.88") |
| PULLEY WIDTH | 28.9mm (1.14") |
| PULLEY MATERIAL | STEEL |

| PROPERTY | BASE VALUE (T=150mm) |
|-----------------------|--|
| **MOVING MASS | 2.861(+0.028kg/25mm) |
| BELT MASS | 0.218(0.012kg/25mm) |
| PULLEY PITCH ϕ | 47.75mm (1.88") |
| PULLEY WIDTH | 28.9mm (1.14") |
| PULLEY MATERIAL | STEEL |
| ***TORQUE TUBE LENGTH | 299mm |
| TORQUE TUBE ϕ | 60mm |
| ***TORQUE TUBE MASS | 1.311(+0.036kg/25mm) |
| TORQUE TUBE MATERIAL | ANODIZED ALUMINUM ELASTOMER STYLE COUPLINGS WITH HUB |
| TRAVEL PER REV | 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 | $(X \text{ TRAVEL} \times .0085) + (Y \text{ TRAVEL} \times .0093) + 15.26 = \text{kg}$ | | |
|  MACRON DYNAMICS INC | DRAWN BY: PHW CHECKED BY: -- LAST SAVED BY: JA | DATE: 11/26/2017 DATE: DD/MM/YYYY DATE: 10/12/2020 | MATERIAL: FINISH: SCALE: 1:1 SHEET SIZE: C |
| | UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETER TOLERANCES UNLESS NOTED OTHERWISE: .X ± .762 .XX ± .254 .XXX ± .127 ANG ± 0°30' | SURFACE FINISH \checkmark BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION | SHEET: 5 OF 6 PART NUMBER: MGS-R6S-XY |

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

***BASE VALUE AT Y TRAVEL = 150mm

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SPECIFICATIONS

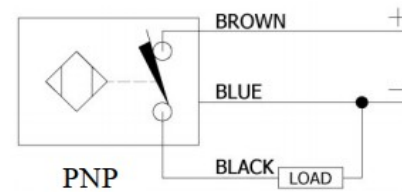
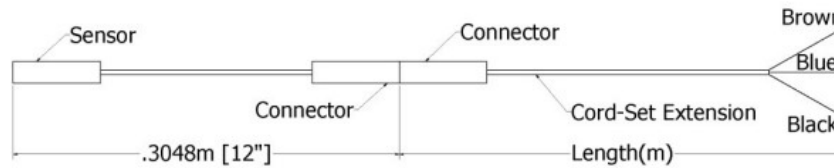
| | |
|---------------------------------------|---------------------------|
| Sensor Type | Inductive |
| Sensor Size | Fits all 8mm wide T-Slots |
| Operating Voltage | 10-30 VDC |
| Voltage Drop Across Conducting Sensor | ≤1.8 V at 100 mA |
| Number of Conductors (AWG) | 3x26 AWG |
| Temperature Range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

Part Number Configuration
244- - - - -

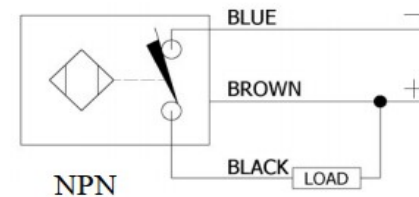
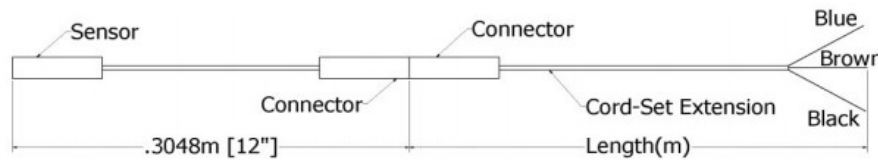
| | | | |
|------------|----------|----|--------|
| PNP or NPN | NC or NO | 02 | Meters |
| PNP or NPN | NC or NO | 06 | Meters |
| PNP or NPN | NC or NO | 12 | Meters |

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

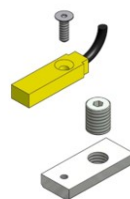
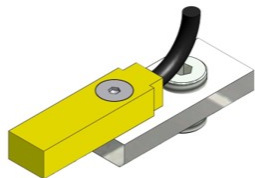
PNP Diagrams



NPN Diagrams



KIT INCLUDES – SENSOR, CORDSET EXTENSION, AND MOUNTING HARDWARE



| | | | | |
|--|--|-------------------------|-------------------|---------------|
| | DRAWN BY: PHW DATE: 11/26/2017 CHECKED BY: -- DATE: DD/MM/YYYY LAST SAVED BY: Paul DATE: 10/12/2020 | MATERIAL: | TITLE: | |
| | UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. TOLERANCES UNLESS NOTED OTHERWISE: .X ± .762 .XX ± .254 .XXX ± .127 ANG ± 0°30' | FINISH: | T-SLOT SENSOR KIT | |
| | SURFACE FINISH: <input checked="" type="checkbox"/> BREAK ALL SHARP EDGES | SHEET: 6 OF 6 | SCALE: 1:1 | SHEET SIZE: C |
| | DIMENSIONAL LIMITS APPLY AFTER FINISHING | PART NUMBER: MGS-R6S-XY | REV: C | |