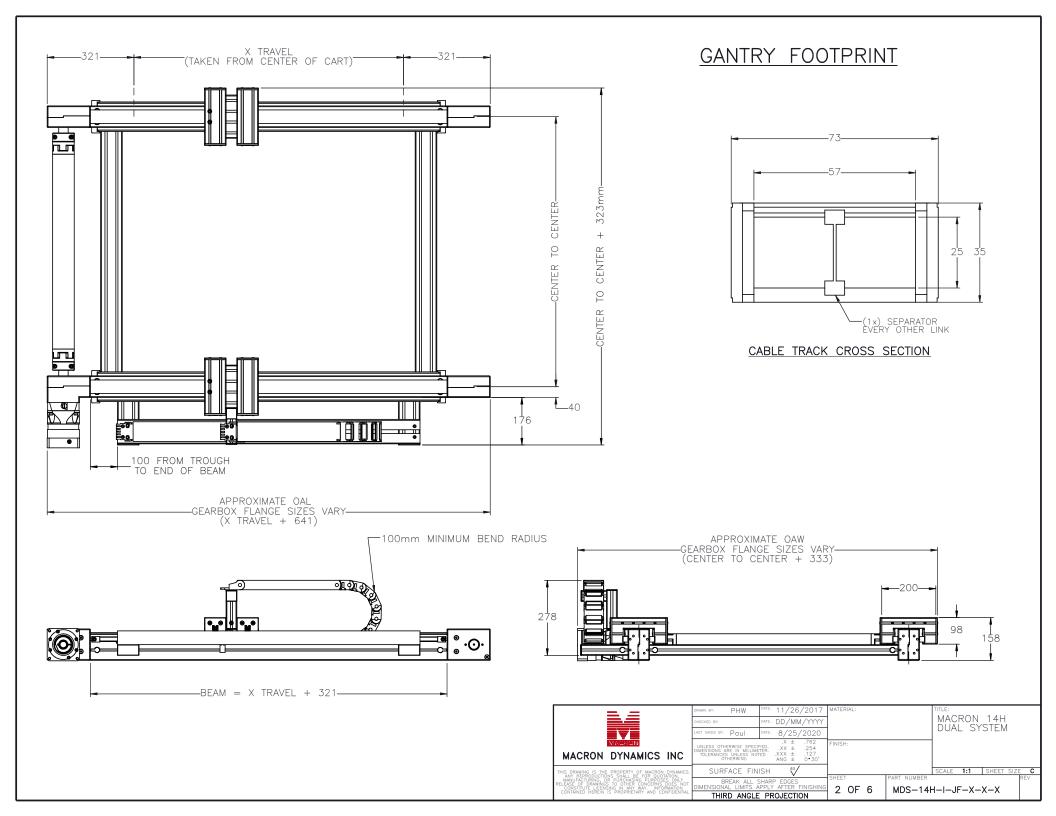
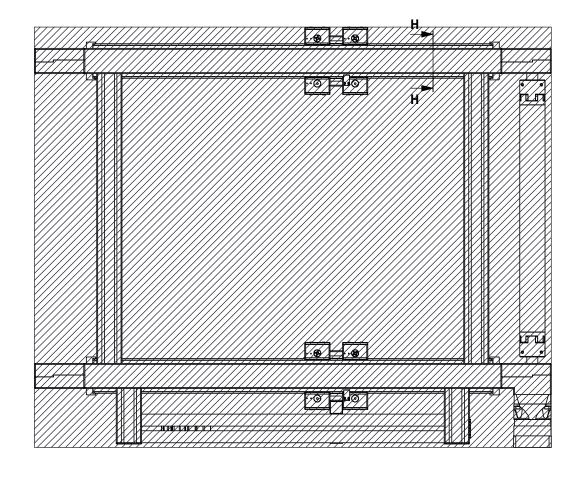
| MDS-14H-I-JF-  | — — — — X  |
|--|--|
| GEARBOX MODEL  MPG-088MPG-118  MRG-088MRG-118  RATIO:                                | CENTER TO CENTER DISTANCE (mm) CENTER TO CENTER IN INCREMENTS OF 25mm LIMITS: 500mm-2950mm   |
| FOR DIRECT DRIVE OPTION WITH MMK (NO GEARBOX) CHECK HERE:                            | *IF TRAVEL IS OUTSIDE LIMITS LISTED, CONTACT MACRON*   |
| MOTOR INFORMATION  MANUFACTURER:  MODEL:  SENSOR INFORMATION X AXIS:                 | <u>X'-AXIS</u>   |
| SENSOR INFORMATION X-AXIS: HOME-QTY 244 EOT-QTY 244                                  | 0.0  |
| (SEE T-SLOT SENSOR KIT SHEET FOR PART NUMBER CONFIGURATION)  110Nm RATED TORQUE TUBE | REMOVABLE BEAM   |
|  | MPG-118 GEARBOX    CRAME ST.   PHW   DATE   11/26/2017   MATERIAL:   TITLE:  |
| APPROVED:  DATE:   | CHECKED BY: OATE DD/MM/YYYY  JAST SANED BY: Paul DATE 8/25/2020  UNLESS OTHERWISE SPECIFIED, 27 4 762  UNLES |
| PO:REFERENCE#:   | MACRON DYNAMICS INC  THIS DRAWING IS THE PROPERTY OF MACRON DYNAMICS. ANY REPRODUCTIONS SHALL BE FOR QUIDATION, REMARK BENEAUR OF PROPERTY OF MACRON DYNAMICS. ANY REPRODUCTIONS SHALL BE FOR QUIDATION, REMARK BENEAUR OF PROPERTY OF MACRON DYNAMICS. BEREAK ALL SHARP EDGES BIREAK ALL SHARP EDGES BIRE |



## **GANTRY MOUNTING FEATURES**



20.0

8.0

4.5

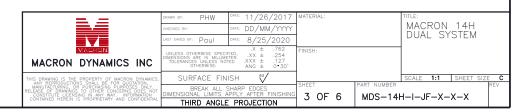
12.3

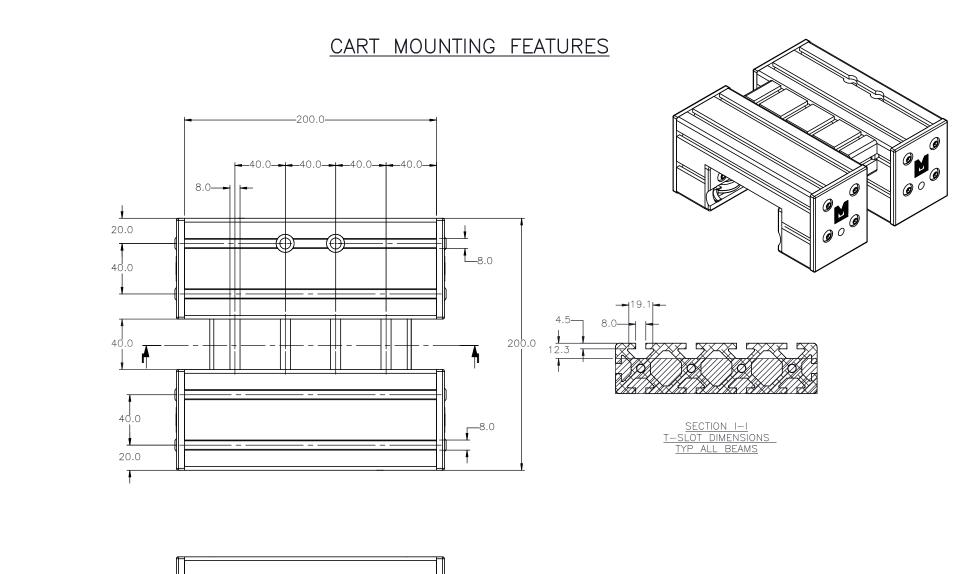
AVAILABLE T-SLOTS
TYPICAL BOTH ACUATOR BEAMS

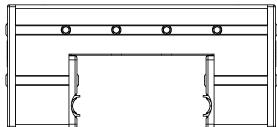
98.0

SECTION H-H

**BOTTOM VIEW** 



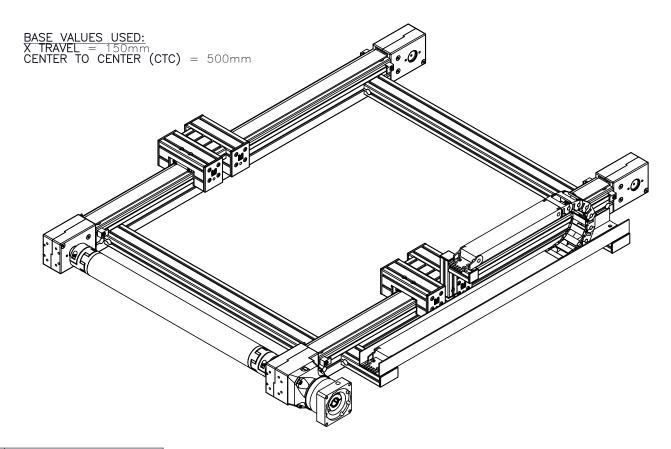




|   | DRAWN BY: PHW   | DATE: 11/26/2017                     | MATERIAL:                        | TITLE:                 |
|---|---|--------------------------------------|----------------------------------|------------------------|
|   | CHECKED BY:   | DATE: DD/MM/YYYY                     |                                  | CSA-14H                |
|   | LAST SAVED BY: Paul   | DATE: 8/25/2020                      |                                  |                        |
| MACRON  | UNLESS OTHERWISE SPECI  |                                      | FINISH:                          |                        |
| MACRON DYNAMICS INC   | DIMENSIONS ARE IN MILLIME<br>TOLERANCES UNLESS NO<br>OTHERWISE: |                                      |                                  |                        |
| THIS DRAWING IS THE PROPERTY OF MACRON DYNAMICS<br>ANY REPRODUCTIONS SHALL BE FOR QUOTATION,  | . SURFACE FIN   | ISH 63                               |                                  | SCALE 1:1 SHEET SIZE C |
| MANUFACTURING, OR PURCHASING PURPOSES ONLY. RELEASE OF DRAWINGS TO OTHER CONCERNS DOES NOT CONSTITUTE LICENSING IN ANY WAY. INFORMATION |   | SHARP EDGES<br>APPLY AFTER FINISHING | SHEET PART NUMBER  4 OF 6 MDS-14 | H-I-JF-X-X-X           |
| CONTAINED HEREIN IS PROPRIETARY AND CONFIDENTIAL  | THIRD ANGLE   | PROJECTION                           | 1 4 OF 0   MDS-141               | n-i-ur-x-x             |

# MOTOR SIZING WORKSHEET

(INCREMENTAL ADDERS REFER TO MASS PER TRAVEL LENGTH)



| PROPERTY             | BASE VALUE (T=150mm,<br>CTC=500mm)                         |  |  |
|----------------------|--|--|--|
| MOVING MASS          | 13.019kg(+0.057kg/25mm)                                    |  |  |
| BELT MASS            | 1.088kg(+0.034kg/25mm)                                     |  |  |
| PULLEY PITCH Ø       | 89.13mm (3.509")   |  |  |
| PULLEY WIDTH         | 55mm (2.160")  |  |  |
| PULLEY MATERIAL      | STEEL  |  |  |
| TORQUE TUBE LENGTH   | 380mm  |  |  |
| TORQUE TUBE $\phi$   | 80mm   |  |  |
| TORQUE TUBE MASS     | 2.426kg(+0.057kg/25mm)                                     |  |  |
| TORQUE TUBE MATERIAL | ANODIZED ALUMINUM<br>ELASTOMER STYLE COUPLINGS<br>WITH HUB |  |  |
| TRAVEL PER REV       | 280mm  |  |  |

| X-TRAVEL = mm<br>CENTER TO CENTER (CTC) = mr                                      | <u>m</u> |
|---|----------|
| NOTE: ALL SUPPLIED MASSES DO NOT INCLUD<br>CUSTOMER COMPONENTS (MOTORS, CABLES, E |          |

| GEARBOX<br>MASS (ADD<br>TO SYSTEM<br>MASS) | MPG-088 | 2.3kg  |
|--|---------|--------|
|  | MPG-118 | 5.8kg  |
|  | MRG-088 | 5.6kg  |
|  | MRG-118 | 15.0kg |

| TOTAL SYSTEM MASS   | (X TRAVEL x .0268) +   | $(Y TRAVEL \times .0086) + 43.51 = kg$       |
|---|--|--|
| <b>=</b> =  |  | MATERIAL: TITLE:                             |
|   | CHECKED BY: DATE: DD/MM/YYYY   | MACRON 14H<br>DUAL SYSTEM                    |
|   | LAST SAVED BY: Paul DATE: 8/25/2020  | DUAL SISIEM                                  |
| MACRON DYNAMICS INC   | UNLESS OTHERWISE SPECIFIED, XX ± .762 DIMENSIONS ARE IN MILLIMETER. XXX ± .254 TOLERANCES UNLESS NOTED XXX ± .127 OTHERWISE: ANG ± 0 · 30' | FINISH:                                      |
| THIS DRAWING IS THE PROPERTY OF MACRON DYNAMICS   | SURFACE FINISH 53  | SCALE 1:1 SHEET SIZE C                       |
| 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 | BREAK ALL SHARP EDGES<br>DIMENSIONAL LIMITS APPLY AFTER FINISHING  | SHEET PART NUMBER  5 OF 6 MDS-14H-I-JF-X-X-X |
| CONTAINED HEREIN IS PROPRIETARY AND CONFIDENTIAL  | THIRD ANGLE PROJECTION   | S SI S IMBS TIII I SI X X X                  |

## **SPECIFICATIONS**

| Concor Type                           | Industive        |
|---------------------------------------|------------------|
| Sensor Type                           | Inductive        |
| Conser Sine                           | Fits all 8mm     |
| Sensor Size                           | 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   |

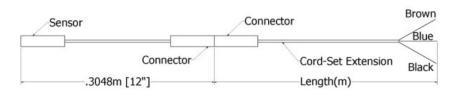
# Part Number Configuration

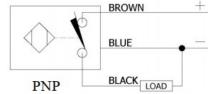
244- - -

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

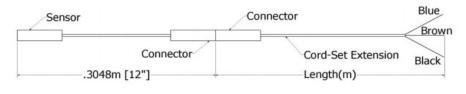
Example: PNP, normally closed, cord-set extension length 6 meters = 244-PNP-NC-06

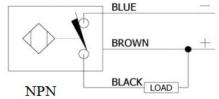
#### **PNP Diagrams**





### **NPN Diagrams**









KIT INCLUDES - SENSOR, CORDSET EXTENSION, AND MOUNTING HARDWARE

| <b>=</b> =   | DRAWN BY: PHW  | DATE: 11/26/2017  | MATERIAL: | TITLE:                 |
|--|--|---|-----------|------------------------|
|  | CHECKED BY:  | DATE: DD/MM/YYYY  |           | T-SLOT SENSOR          |
|  | LAST SAVED BY: Paul  | DATE: 8/25/2020   |           | KIT                    |
| MACRON DYNAMICS INC  | UNLESS OTHERWISE SPEC<br>DIMENSIONS ARE IN MILLIME<br>TOLERANCES UNLESS NO<br>OTHERWISE: | X ± .762<br>IFIED, XX ± .254<br>CTERS, XXX ± .127<br>ANG ± .0-30' | FINISH:   |                        |
| THIS DRAWING IS THE PROPERTY OF MACRON DYNAMICS.   | SURFACE FIN  | ISH €3  |           | SCALE 1:1 SHEET SIZE C |
| 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 | DIMENSIONAL LIMITS A   | SHARP EDGES PPLY AFTER FINISHING PROJECTION                       |           | MDS-14H-I-JF-X-X-X     |