

GEARBOX MODEL (X AXIS)

MPG-062 \_\_\_\_\_  
 MRG-062 \_\_\_\_\_  
 RATIO: \_\_\_\_\_

MGS-R15-  -  - X

**ENTER Y-AXIS TRAVEL**  
 TRAVEL IN INCREMENTS OF 150mm  
 TRAVEL LIMITS: 500mm-1000mm

GEARBOX MODEL (Y AXIS)

MPG-062 \_\_\_\_\_  
 MRG-062 \_\_\_\_\_  
 RATIO: \_\_\_\_\_

**ENTER X-AXIS TRAVEL**  
 TRAVEL IN INCREMENTS OF 25mm  
 TRAVEL LIMITS: 150mm-3850mm

\*IF TRAVEL IS OUTSIDE LIMITS LISTED, CONTACT MACRON\*

FOR DIRECT-DRIVE OPTION WITH MMKs (NO GEARBOXES) CHECK HERE: \_\_\_\_\_

MOTOR INFORMATION (X AXIS)

MANUFACTURER: \_\_\_\_\_  
 MODEL: \_\_\_\_\_

MOTOR INFORMATION (Y AXIS)

MANUFACTURER: \_\_\_\_\_  
 MODEL: \_\_\_\_\_

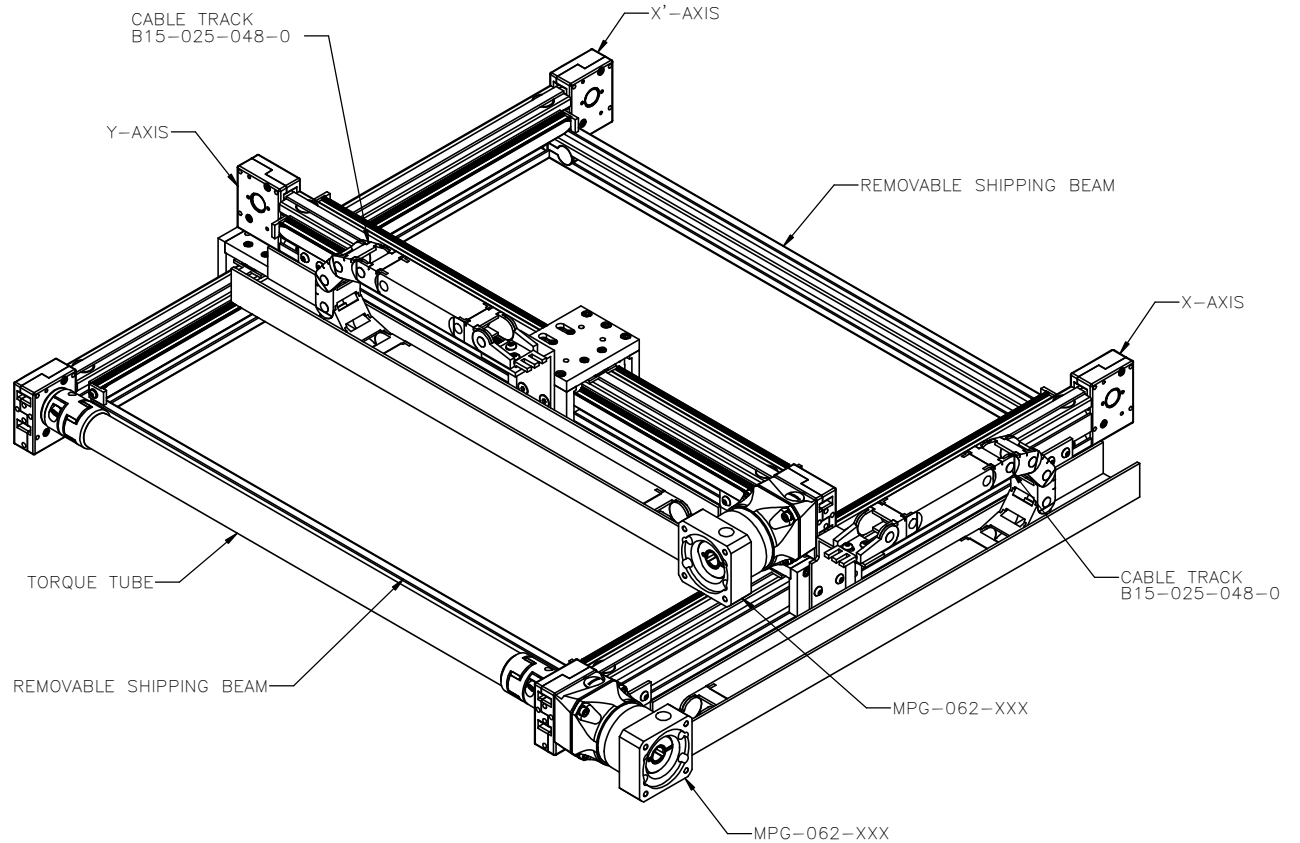
SENSOR INFORMATION X-AXIS:

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)



APPROVED: \_\_\_\_\_

SIGN & PRINT

DATE: \_\_\_\_\_

PO:REFERENCE#: \_\_\_\_\_

Sold & Serviced By:



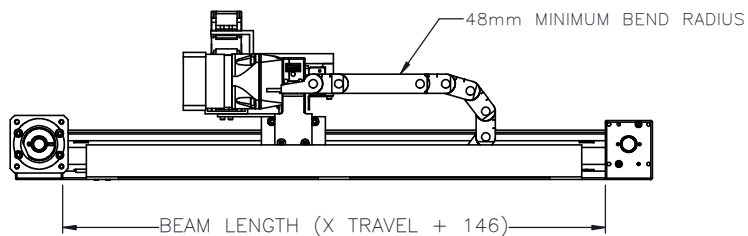
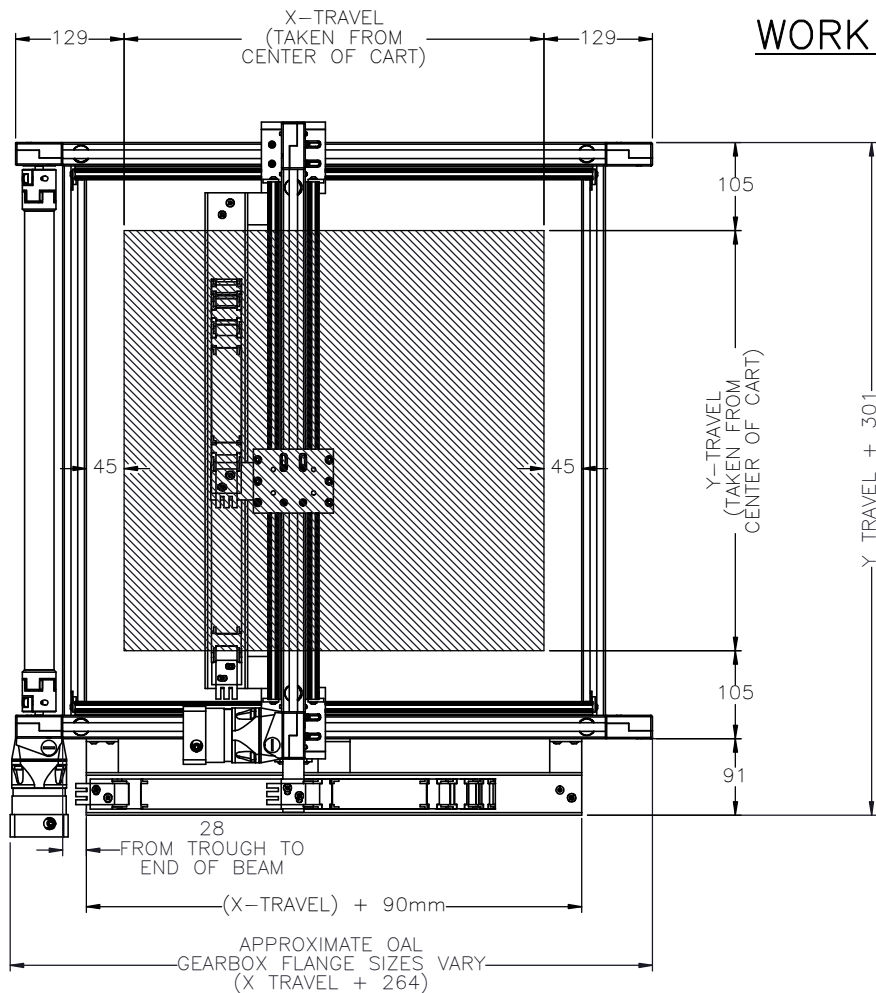
Toll Free Phone (877) SERV098

www.electromate.com

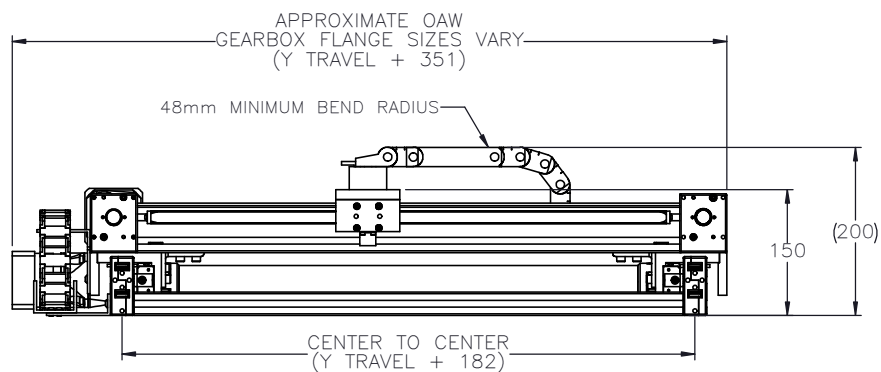
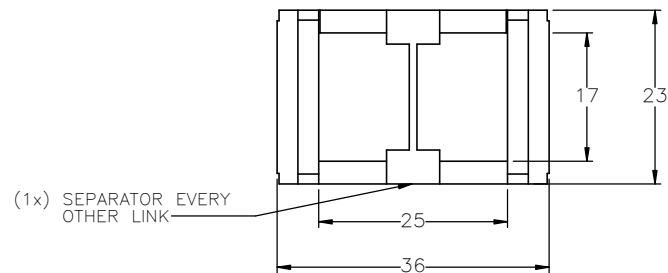
sales@electromate.com

DRAWN BY: JA CHECKED BY: LAST SAVED BY: JA DATE: 10/30/2018 DATE: DD/MM/YYYY DATE: 10/9/2020	MATERIAL:  FINISH: UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS: TOLERANCES UNLESS NOTED: OTHERWISE:	TITLE: MACRON XY RAIL GANTRY	
		SURFACE FINISH: <input checked="" type="checkbox"/>	SCALE: 1:1
MACRON DYNAMICS INC 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	SHEET: 1 OF 6	PART NUMBER: MGS-R15-X-X-X

# WORK ENVELOPE AND GANTRY FOOTPRINT



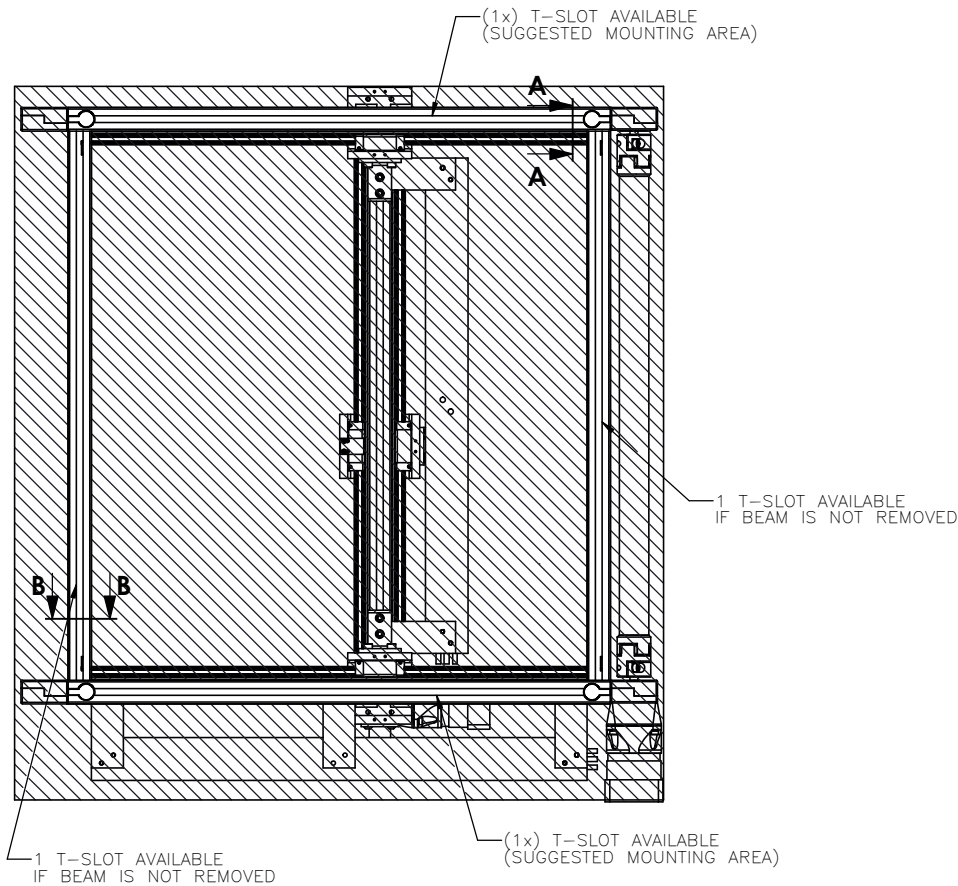
## CABLE TRACK CROSS SECTION



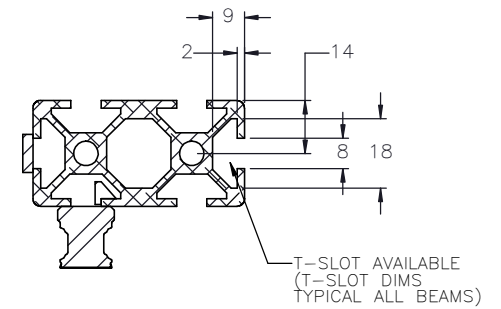
Sold & Serviced By:  
 **ELECTROMATE**  
 Toll Free Phone (877) SERV098  
[www.electromate.com](http://www.electromate.com)  
[sales@electromate.com](mailto:sales@electromate.com)

<b>MACRON DYNAMICS INC</b> <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>	DRAWN BY: JA CHECKED BY: LAST SAVED BY: JA	DATE: 10/30/2018 DATE: DD/MM/YYYY DATE: 10/9/2020	MATERIAL:  FINISH:	TITLE: <b>MACRON XY RAIL GANTRY</b>
	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. TOLERANCES UNLESS NOTED OTHERWISE: .X ± .762 .XX ± .254 .XXX ± .127 ANG ± 0°30'		SURFACE FINISH <input checked="" type="checkbox"/>	SCALE: 1:1 SHEET SIZE: C
	BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING <b>THIRD ANGLE PROJECTION</b>		SHEET: 2 OF 6 PART NUMBER: MGS-R15-X-X-X	REV:

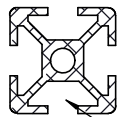
# GANTRY MOUNTING FEATURES



**BOTTOM VIEW**



SECTION A-A



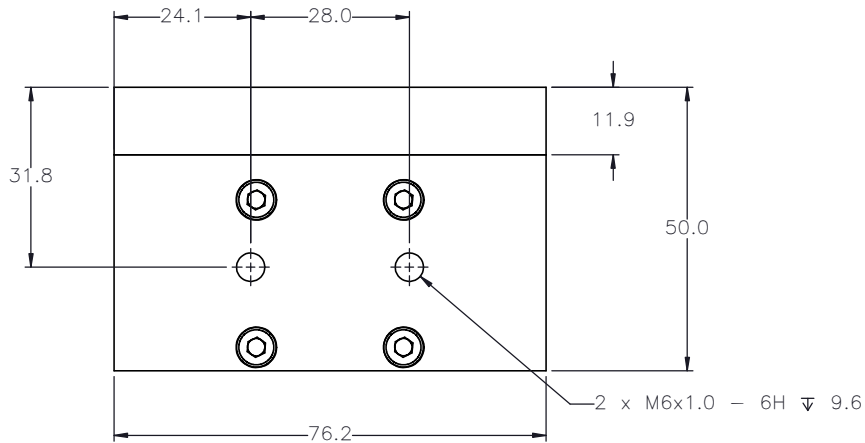
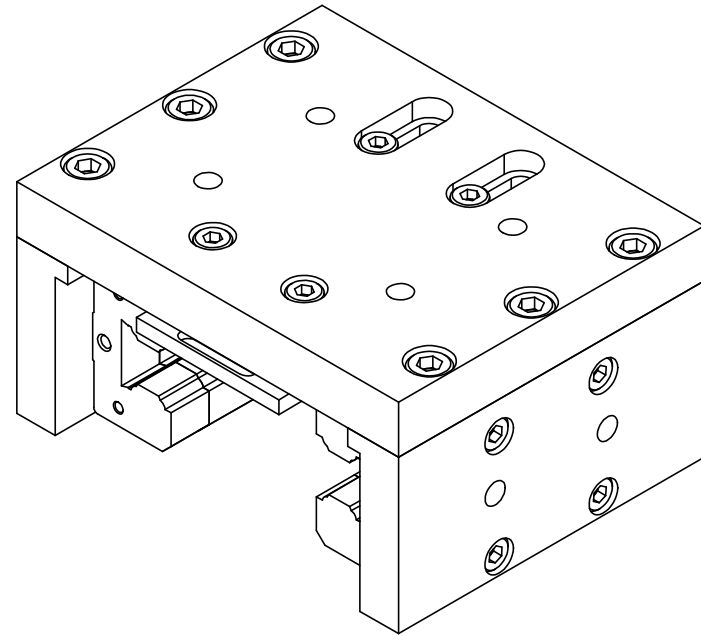
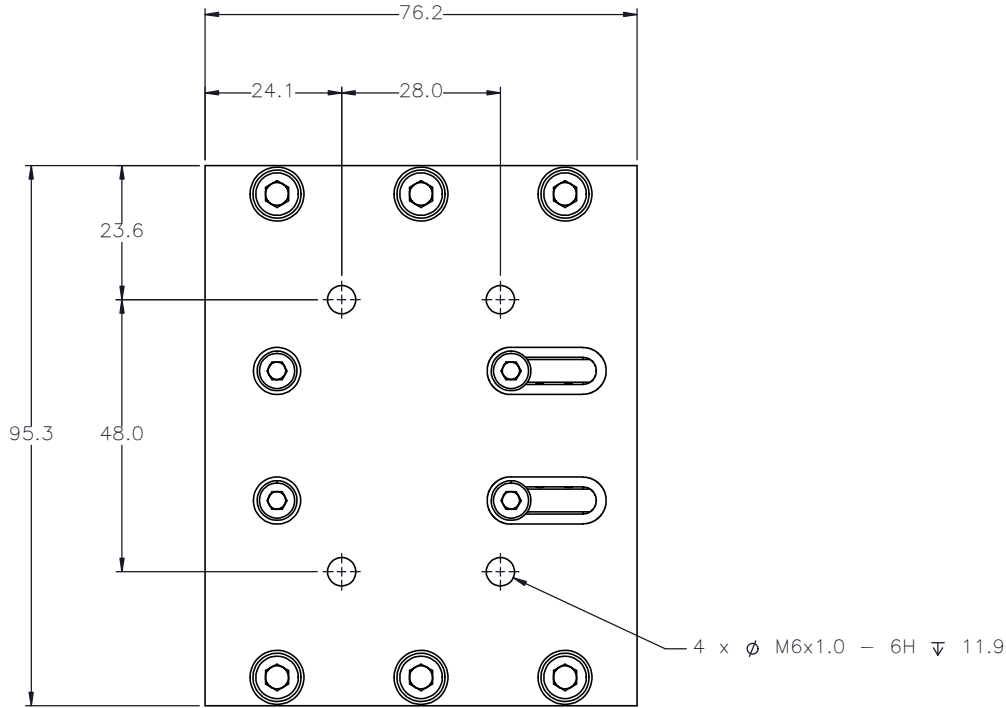
(1X) T-SLOT AVAILABLE

SECTION B-B

Sold & Serviced By:  
 **ELECTROMATE**  
 Toll Free Phone (877) SERV098  
[www.electromate.com](http://www.electromate.com)  
[sales@electromate.com](mailto:sales@electromate.com)

<b>MACRON DYNAMICS INC</b>	DRAWN BY: JA	DATE: 10/30/2018	MATERIAL:	TITLE: <b>MACRON XY RAIL GANTRY</b>
	CHECKED BY:	DATE: DD/MM/YYYY	FINISH:	
	LAST SAVED BY: JA	DATE: 10/9/2020		
<small>UNLESS OTHERWISE SPECIFIED:                  DIMENSIONS ARE IN MILLIMETERS                  TOLERANCES UNLESS NOTED:                  .XX ± .762                  .XX ± .254                  .XXX ± .127                  ANG ± 0°30'</small>				
SURFACE FINISH <input checked="" type="checkbox"/>			SCALE <b>1:1</b> SHEET SIZE <b>C</b>	
<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>			SHEET <b>3 OF 6</b> PART NUMBER <b>MGS-R15-X-X-X</b>	
BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING <b>THIRD ANGLE PROJECTION</b>				

# CART MOUNTING FEATURES



\*THIS CART FACE IS THE SAME ON BOTH SIDES

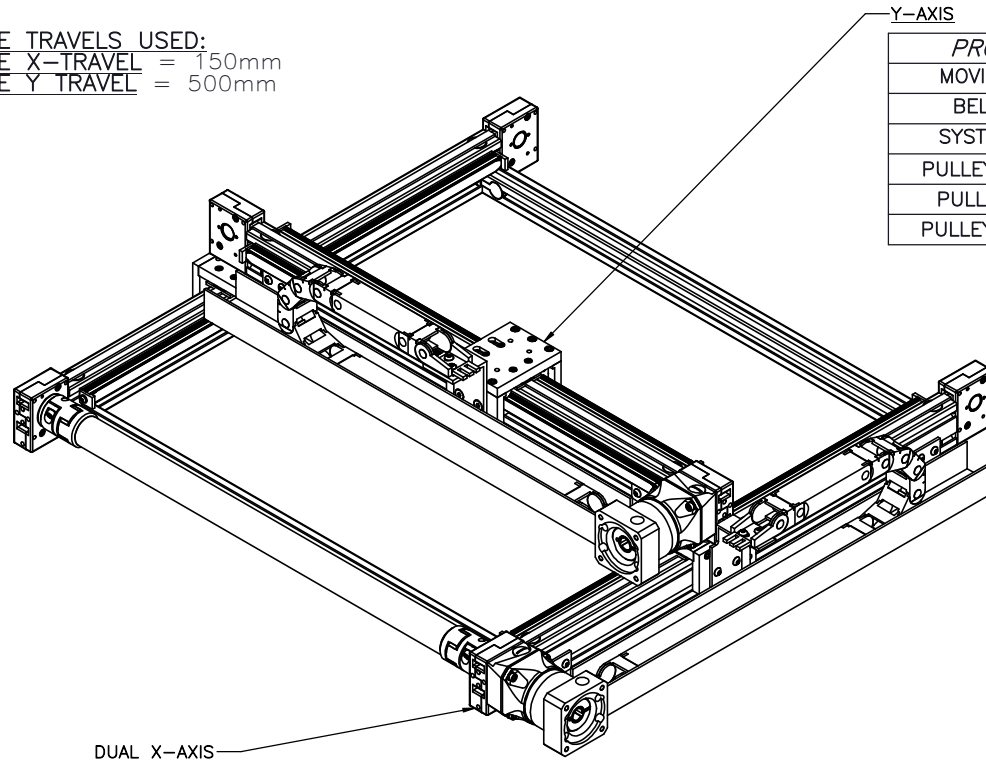
Sold & Serviced By:  
  
 Toll Free Phone (877) SERV098  
[www.electromate.com](http://www.electromate.com)  
[sales@electromate.com](mailto:sales@electromate.com)

<b>MACRON DYNAMICS INC</b>	DRAWN BY: PHW	DATE: 11/26/2017	MATERIAL:	TITLE:
	CHECKED BY:	DATE: DD/MM/YYYY		MACRON R15 CART
	LAST SAVED BY: Paul	DATE: 10/9/2020	FINISH:	
	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. TOLERANCES UNLESS NOTED OTHERWISE:		.X ± .762 .XX ± .254 .XXX ± .127 ANG ± 0°30'	
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 <input checked="" type="checkbox"/> BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING	
THIRD ANGLE PROJECTION		SHEET 4 OF 6	PART NUMBER MGS-R15-X-X-X	SCALE 1:1 SHEET SIZE C

# MOTOR SIZING WORKSHEET

(INCREMENTAL ADDERS REFER TO MASS PER TRAVEL LENGTH)

BASE TRAVELS USED:  
 BASE X-TRAVEL = 150mm  
 BASE Y-TRAVEL = 500mm



PROPERTY	BASE VALUE (T=500mm)
MOVING MASS	0.817kg(+0.01kg/25mm)
BELT MASS	0.06(+0.002kg/25mm)
SYSTEM MASS	7.0kg(+0.150kg/25mm)
PULLEY PITCH $\phi$	33.42mm (1.32")
PULLEY WIDTH	16.3mm (0.64")
PULLEY MATERIAL	STEEL

PROPERTY	BASE VALUE (T=150mm)
*MOVING MASS	1.433kg(+0.0139kg/25mm)
BELT MASS	0.064kg(+0.004kg/25mm)
PULLEY PITCH $\phi$	33.42mm (1.32")
PULLEY WIDTH	16.3mm (0.64")
PULLEY MATERIAL	STEEL
**TORQUE TUBE LENGTH	646mm
TORQUE TUBE $\phi$	35mm
**TORQUE TUBE MASS	0.568kg(+0.022kg/25mm)
TORQUE TUBE MATERIAL	ANODIZED ALUMINUM ELASTOMER STYLE COUPLINGS WITH HUB
TRAVEL PER REV	105mm

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

\*\*BASE VALUE AT Y TRAVEL = 500mm

X-TRAVEL = \_\_\_\_\_ mm  
 CENTER TO CENTER = \_\_\_\_\_ mm

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

GEARBOX MASS (ADD TO SYSTEM MASS)	MPG-062	1.0kg
	MRG-062	3.0kg

TOTAL SYSTEM MASS	(X TRAVEL x .0075) + (Y TRAVEL x .0081) + 6.81 = kg		
MACRON DYNAMICS INC	DRAWN BY: JA	DATE: 10/30/2018	MATERIAL:
	CHECKED BY:	DATE: DD/MM/YYYY	
	LAST SAVED BY: JA	DATE: 10/9/2020	
	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MILLIMETERS TOLERANCES UNLESS NOTED OTHERWISE:		FINISH:
SURFACE FINISH		✓	
BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING		THIRD ANGLE PROJECTION	
SHEET		PART NUMBER	SCALE 1:1 SHEET SIZE C
5 OF 6		MGS-R15-X-X-X	REV

Sold & Serviced By:  
 **ELECTROMATE**  
 Toll Free Phone (877) SERV098  
[www.electromate.com](http://www.electromate.com)  
[sales@electromate.com](mailto:sales@electromate.com)

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

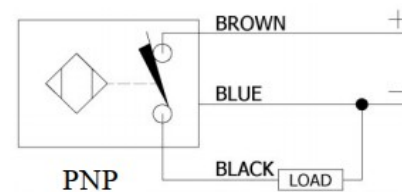
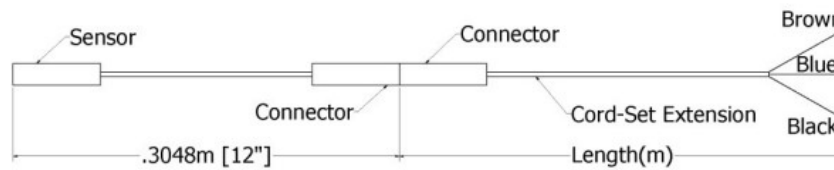
# Part Number Configuration

## 244- \_ \_ \_ - \_ \_ \_

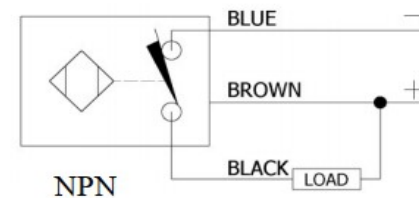
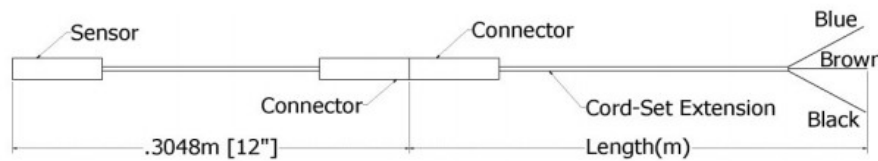
PNP or NPN	NC or NO	02	Meters
PNP or NPN	NC or NO	06	Meters
PNP or NPN	NC or NO	12	Meters

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

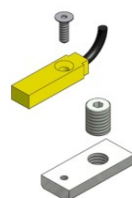
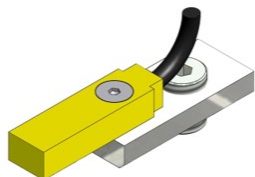
### PNP Diagrams



### NPN Diagrams



KIT INCLUDES – SENSOR, CORDSET EXTENSION, AND MOUNTING HARDWARE



	DRAWN BY: JA      DATE: 10/30/2018 CHECKED BY:      DATE: DD/MM/YYYY LAST SAVED BY: JA      DATE: 10/9/2020	MATERIAL:	TITLE:
	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. TOLERANCES UNLESS NOTED OTHERWISE: .XX ± .762 .XX ± .254 .XXX ± .127 ANG ± 0°30'	FINISH:	T-SLOT SENSOR KIT
SURFACE FINISH <input checked="" type="checkbox"/> BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION	SHEET: 6 OF 6 PART NUMBER: SENSOR CALL-OUT	SCALE: 1:1	SHEET SIZE: C