

# MGS-R6Y- -

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-\_\_\_\_-\_\_\_\_-\_\_\_\_

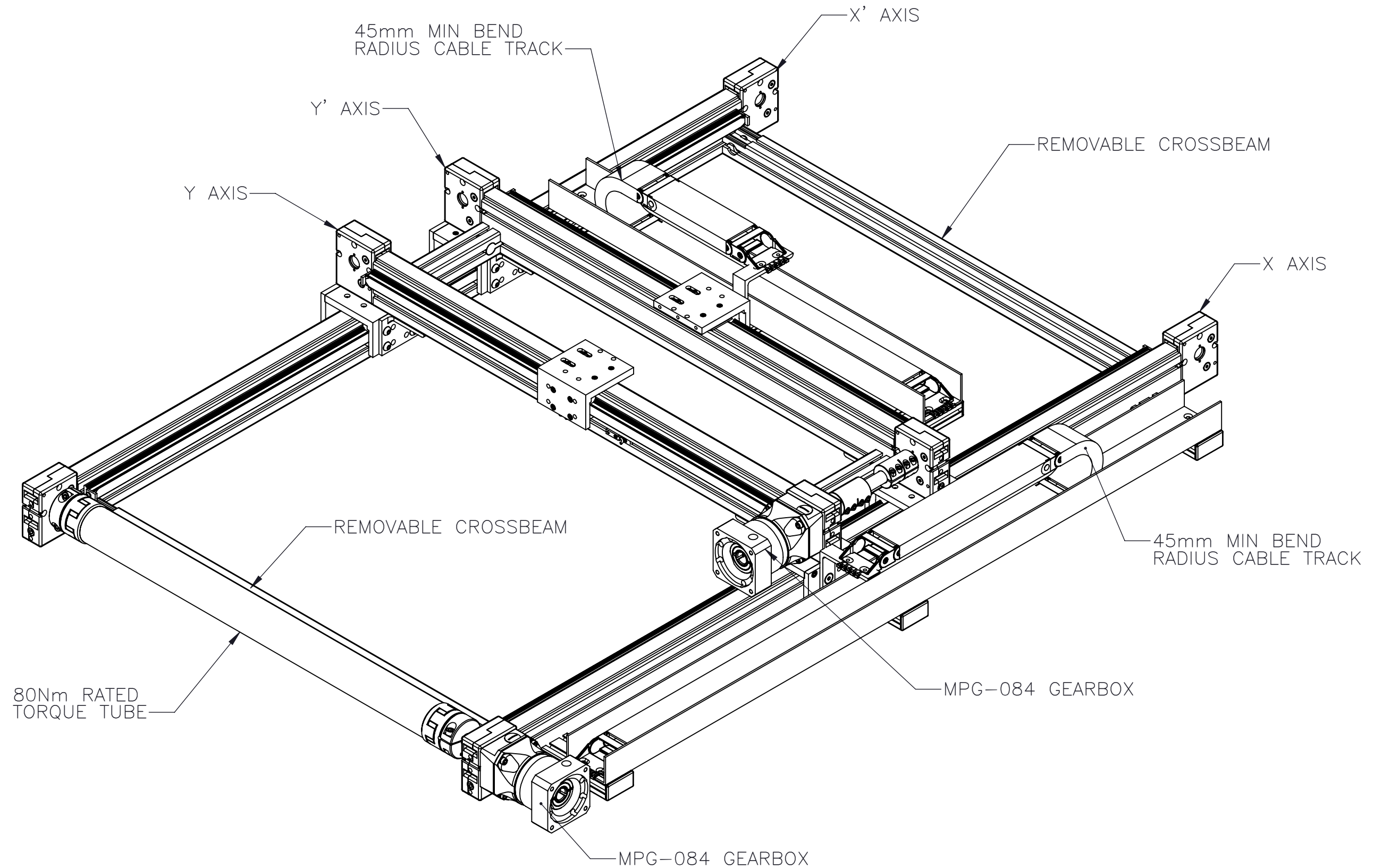
SENSOR INFORMATION Y-AXIS:  
 HOME-QTY \_\_\_ 244-\_\_\_\_-\_\_\_\_-\_\_\_\_  
 EOT-QTY \_\_\_ 244-\_\_\_\_-\_\_\_\_-\_\_\_\_

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

ENTER Y-AXIS TRAVEL  
 CENTER TO CENTER IN INCREMENTS OF 25mm  
 LIMITS: 150mm-1500mm

ENTER X-AXIS TRAVEL  
 TRAVEL IN INCREMENTS OF 25mm  
 TRAVEL LIMITS: 150mm-5775mm

\*IF TRAVELS ARE OUTSIDE LIMITS LISTED, CONTACT MACRON\*




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

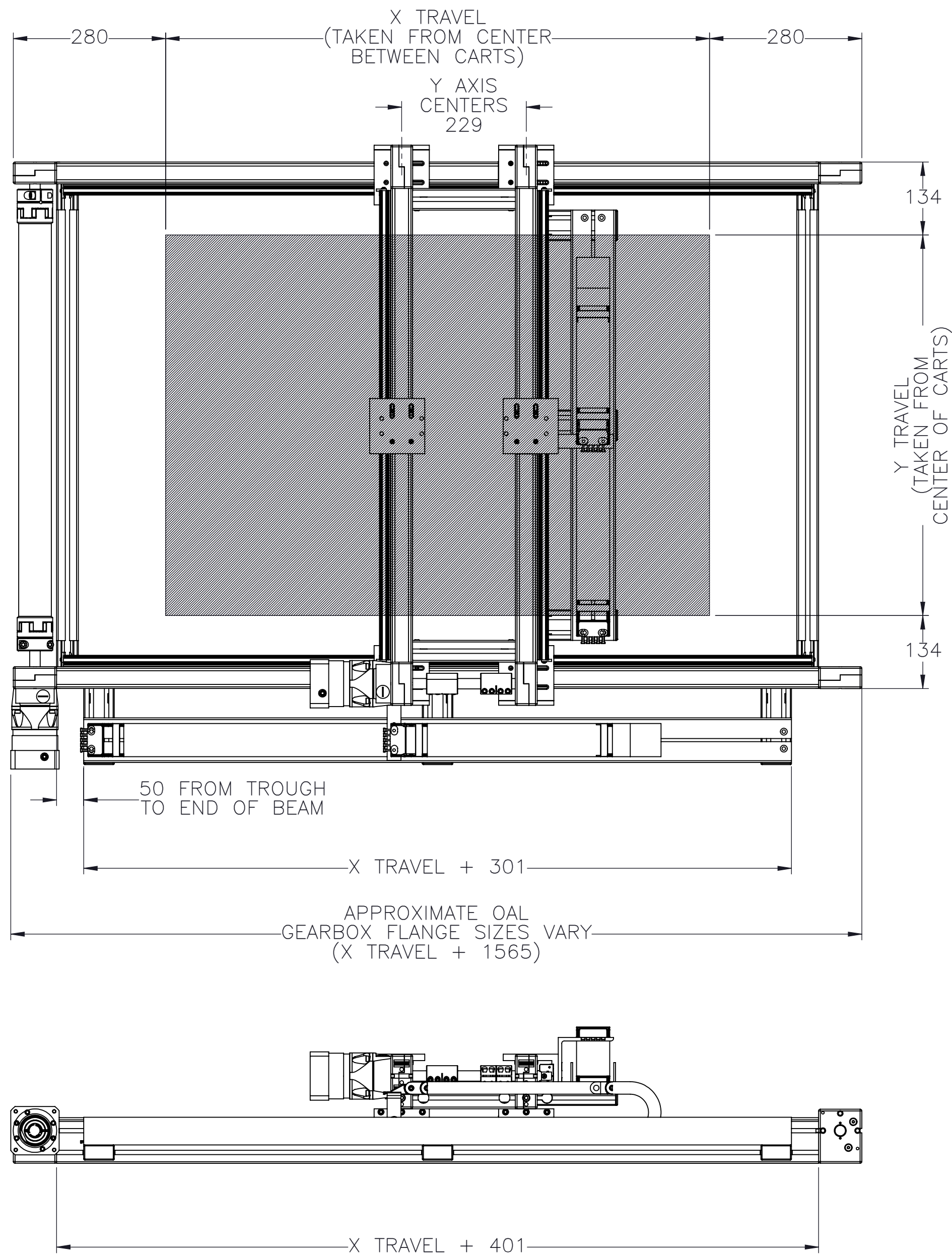
SIGN & PRINT

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

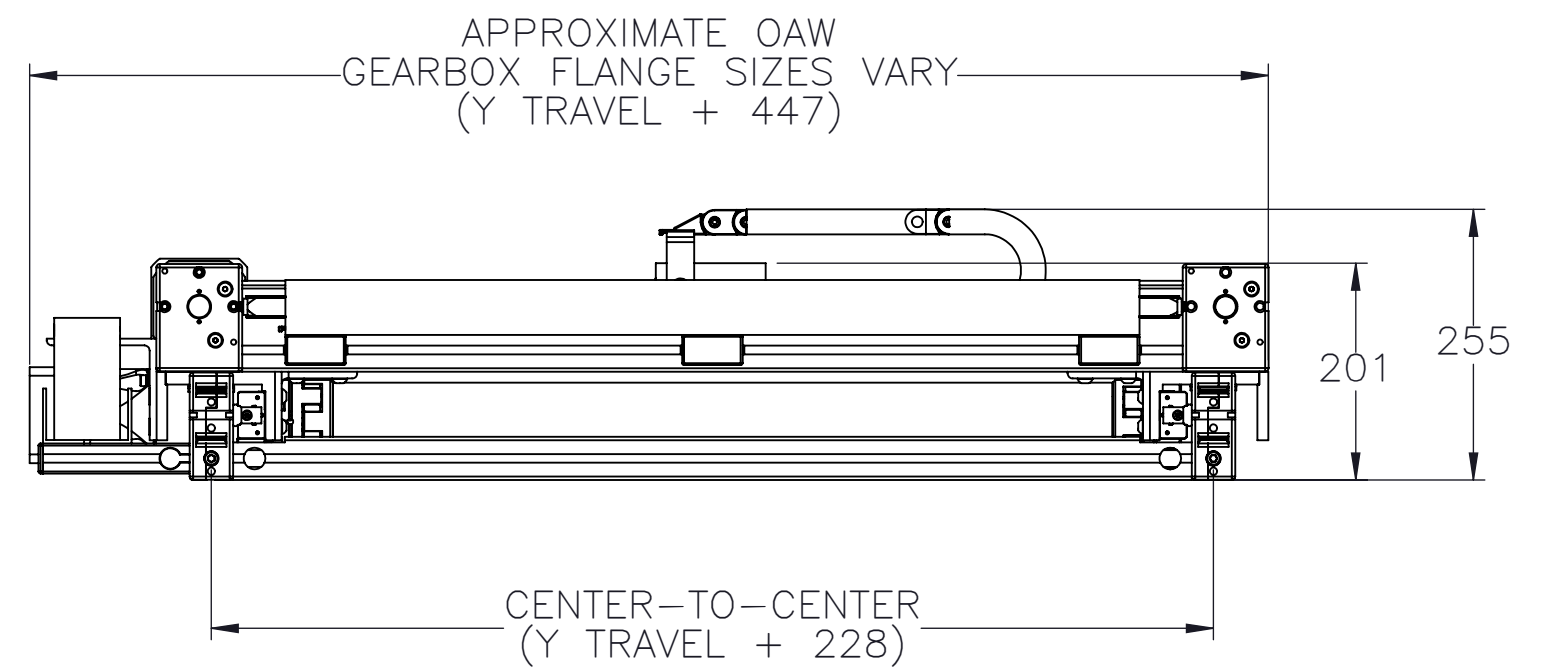
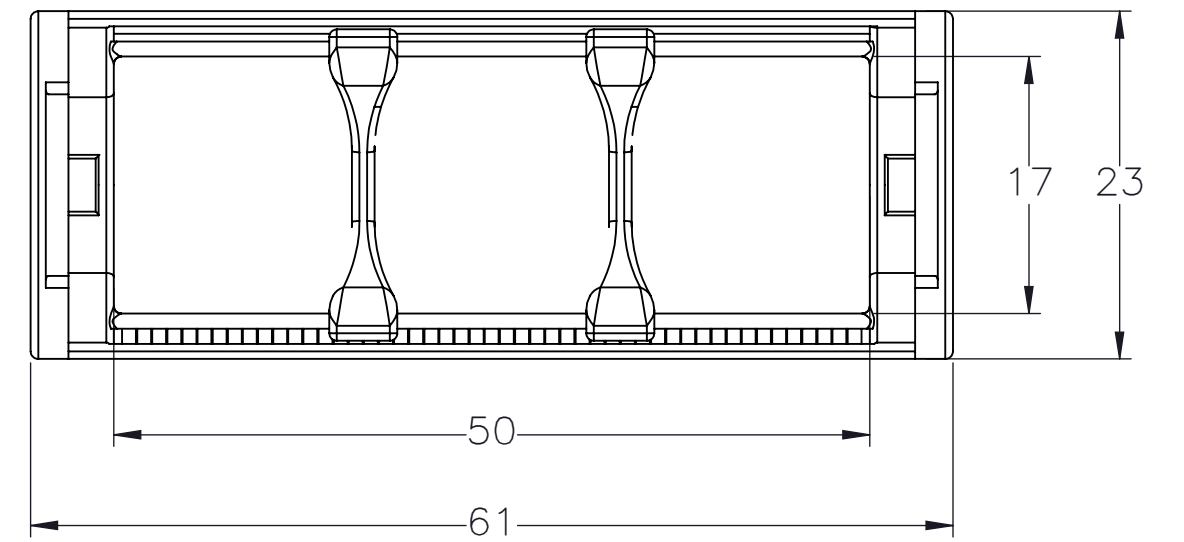
PO:REFERENCE#: \_\_\_\_\_

 <b>MACRON DYNAMICS INC</b>	DRAWN BY: AW      DATE: 9/6/2023	MATERIAL:	TITLE: <b>MACRON R6Y XY GANTRY</b>
	CHECKED BY: --      DATE: DD/MM/YYYY	FINISH:	
	LAST SAVED BY: Tim      DATE: 10/9/2023	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. TOLERANCES UNLESS NOTED OTHERWISE: .X ± .762 .XX ± .254 .XXX ± .127 ANG ± 0°30'	
	SURFACE FINISH $\sqrt{63}$		
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 5    PART NUMBER MGS-R6Y-X-X    REV

# WORK ENVELOPE AND GANTRY FOOTPRINT

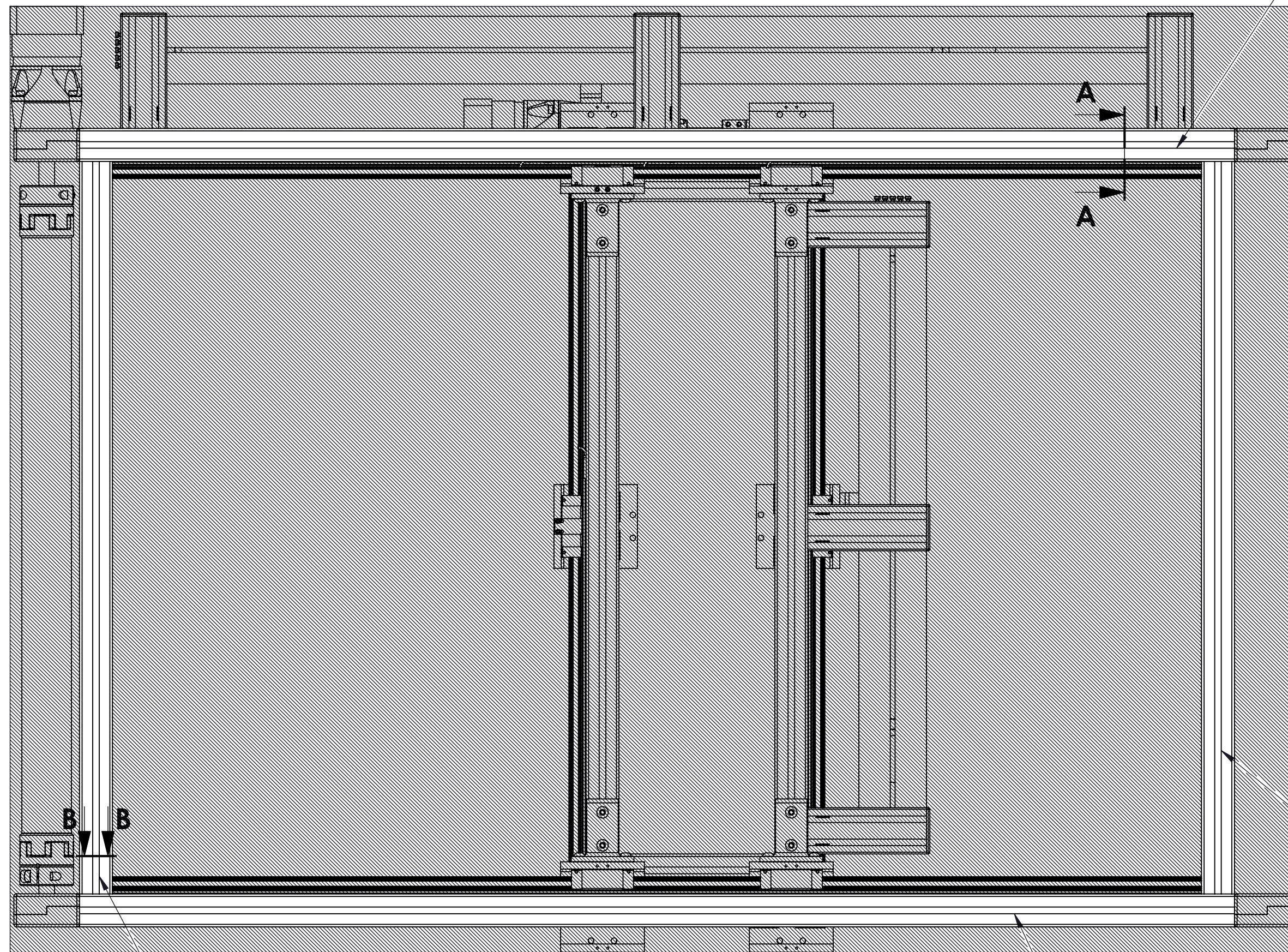


CABLE TRACK CROSS SECTION

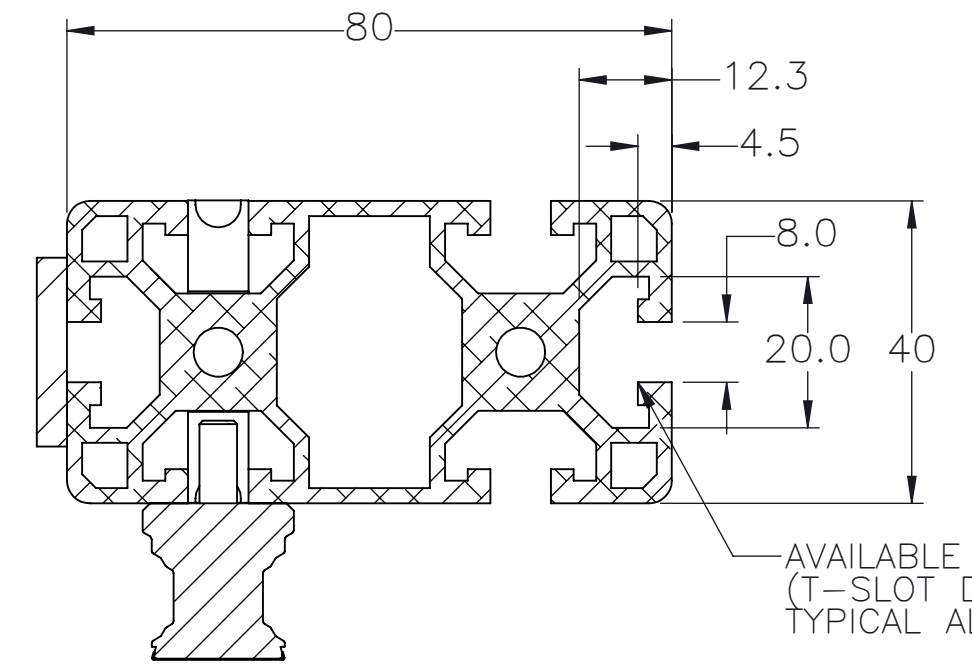


<p>MACRON DYNAMICS INC</p>	DRAWN BY: AW CHECKED BY: -- LAST SAVED BY: Tim	DATE: 10/4/2023 DATE: DD/MM/YYYY DATE: 10/9/2023	MATERIAL:	TITLE: MACRON R6Y XY GANTRY	
	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. TOLERANCES UNLESS NOTED OTHERWISE:		FINISH:	SCALE 1:1   SHEET SIZE C	
	SURFACE FINISH 63		SHEET 2 OF 5	PART NUMBER MGS-R6Y-X-X	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



T-SLOT AVAILABLE  
SUGGESTED MOUNTING AREA



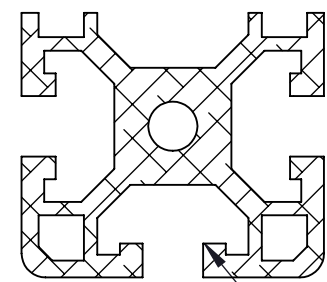
AVAILABLE T-SLOT  
(T-SLOT DIMENSIONS  
TYPICAL ALL BEAMS)

SECTION A-A

T-SLOT AVAILABLE IF  
BEAM IS NOT REMOVED


T-SLOT AVAILABLE IF  
BEAM IS NOT REMOVED

T-SLOT AVAILABLE  
SUGGESTED MOUNTING AREA



AVAILABLE T-SLOT

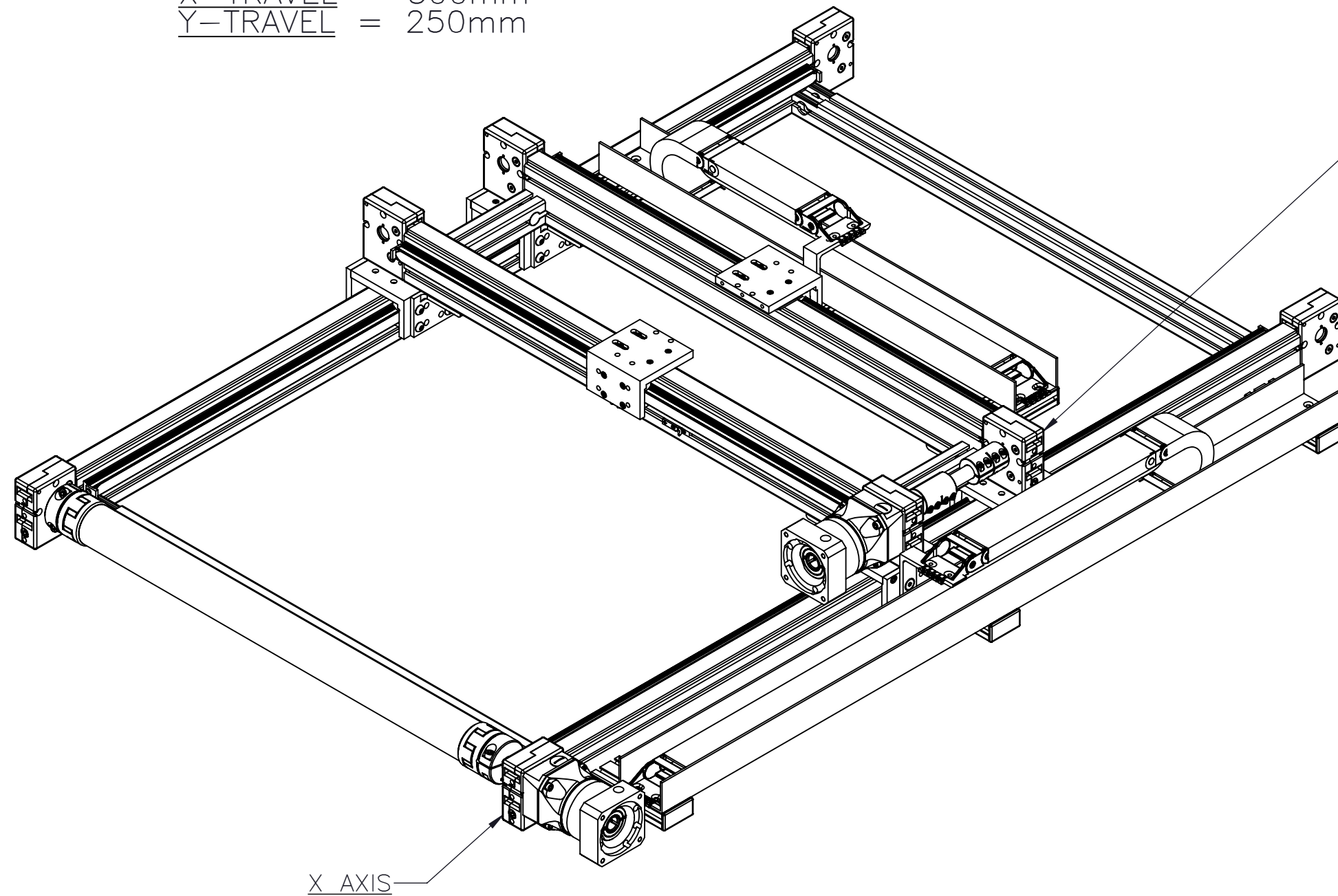
SECTION B-B

 <b>MACRON DYNAMICS INC</b>	DRAWN BY: AW      DATE: 10/4/2023	MATERIAL:	TITLE: <b>MACRON R6Y XY                  GANTRY</b>		
	CHECKED BY: --      DATE: DD/MM/YYYY	FINISH:			
	LAST SAVED BY: Tim      DATE: 10/9/2023	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS: TOLERANCES UNLESS NOTED: .X ± .762 .XX ± .254 .XXX ± .127 OTHERWISE: ANG ± 0°30'			
	SURFACE FINISH 63				
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.		SCALE 1:1    SHEET SIZE C	SHEET 3 OF 5	PART NUMBER MGS-R6Y-X-X	REV

# MOTOR SIZING WORKSHEET

(INCREMENTAL ADDERS REFER TO MASS PER TRAVEL LENGTH)

BASED TRAVELS USED:  
 X-TRAVEL = 500mm  
 Y-TRAVEL = 250mm



PROPERTY	BASE VALUE (T=250mm)
MOVING MASS	2.359g(+0.016kg/25mm)
BELT MASS	0.165kg(+0.003kg/25mm)
SYSTEM MASS	11.934kg(+0.350kg/25mm)
PULLEY PITCH $\phi$	47.75mm (1.88")
PULLEY WIDTH	28.9mm (1.14")
PULLEY MATERIAL	STEEL
TRAVEL PER REV	150mm

PROPERTY	BASE VALUE (T=500mm)
*MOVING MASS	5.726kg(+0.016kg/25mm)
BELT MASS	0.294kg(+0.003kg/25mm)
PULLEY PITCH $\phi$	47.75mm (1.88")
PULLEY WIDTH	28.9mm (1.14")
PULLEY MATERIAL	STEEL
CONN SHAFT LENGTH	95.25mm
CONN SHAFT $\phi$	19.05mm
CONN SHAFT MATERIAL	STEEL
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 MASS)	MPG-064	1.0kg
	MRG-064	3.0kg
	MPG-084	2.3kg
	MRG-084	5.6kg

TOTAL SYSTEM MASS (X-TRAVEL x .0090) + (Y-TRAVEL x .0140) + 27.002 = kg

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

<p>MACRON DYNAMICS INC</p>	DRAWN BY: AW CHECKED BY: -- LAST SAVED BY: Tim	DATE: 10/4/2023 DATE: DD/MM/YYYY DATE: 10/9/2023	MATERIAL:  FINISH:	TITLE: MACRON R6Y XY GANTRY
	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. 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 $\checkmark$ BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION		SHEET 4 OF 5 PART NUMBER MGS-R6Y-X-X	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

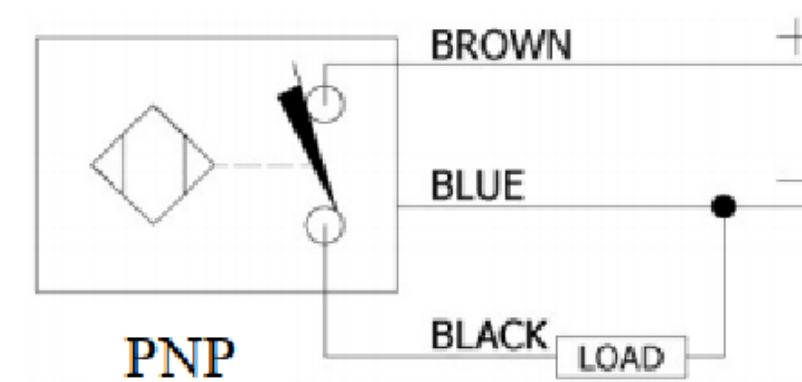
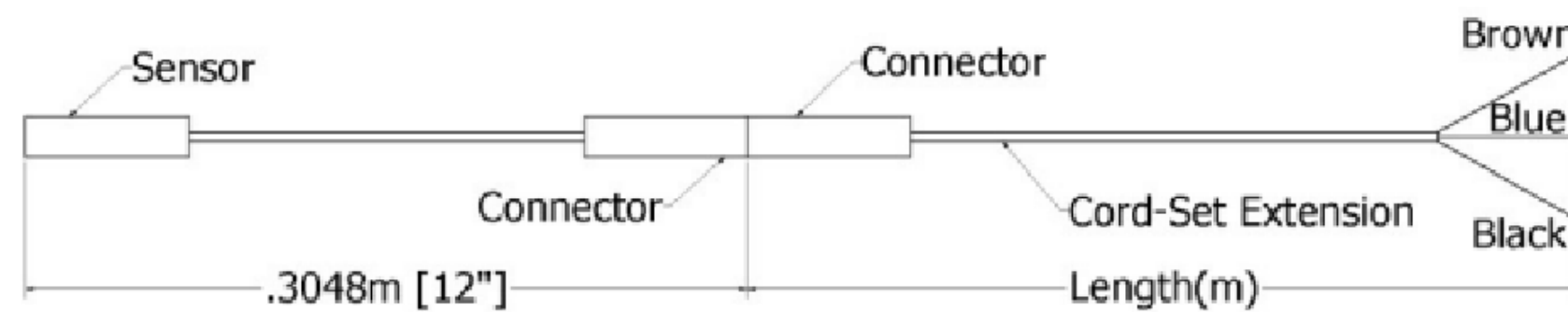
# Part Number Configuration

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

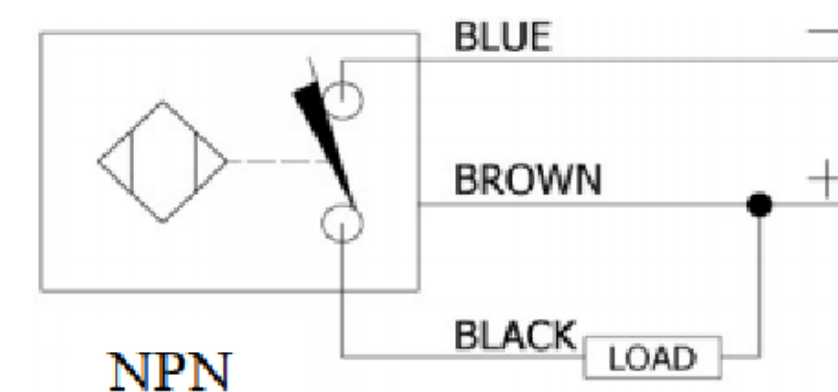
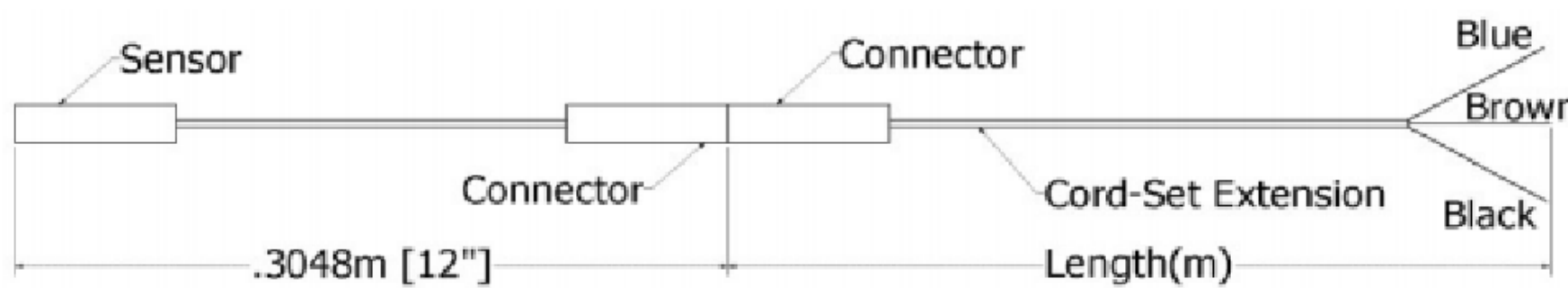
PNP or NPN	NC or NO	02	Meters
PNP or NPN	NC or NO	06	Meters
PNP or NPN	NC or NO	12	Meters

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

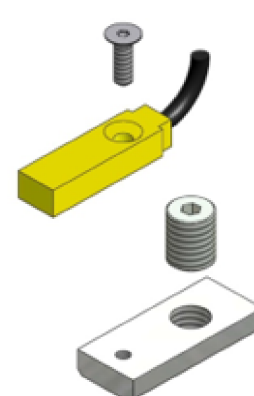
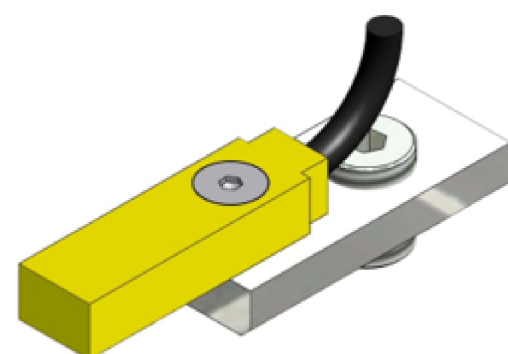
### PNP Diagrams



### NPN Diagrams



KIT INCLUDES – SENSOR, CORDSET EXTENSION, AND MOUNTING HARDWARE



	DRAWN BY: AW CHECKED BY: -- LAST SAVED BY: Tim	DATE: 10/4/2023 DATE: DD/MM/YYYY DATE: 10/9/2023	MATERIAL:	TITLE: T-SLOT SENSOR KIT
	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. TOLERANCES UNLESS NOTED OTHERWISE:		FINISH:	SCALE 1:1   SHEET SIZE C
	SURFACE FINISH $\checkmark$		SHEET 5 OF 5	PART NUMBER MGS-R6Y-X-X
	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	REV