

MCS-UC1 - - -

GEARBOX MODEL (X AXIS)
 VC-T-090 (CENTER DRIVE) _____
 MPG-084 (INLINE) _____
 MRG-084 (INLINE) _____
 RATIO: _____

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

GEARBOX MODEL (Z AXIS)
 MPG-084 _____
 MRG-084 _____

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

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

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

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

SENSOR INFORMATION X-AXIS:
 HOME-QTY _____ 244- _____
 EOT-QTY _____ 244- _____

SENSOR INFORMATION Y-AXIS:
 HOME-QTY _____ 244- _____
 EOT-QTY _____ 244- _____

SENSOR INFORMATION Z-AXIS:
 HOME-QTY _____ 244- _____
 EOT-QTY _____ 244- _____

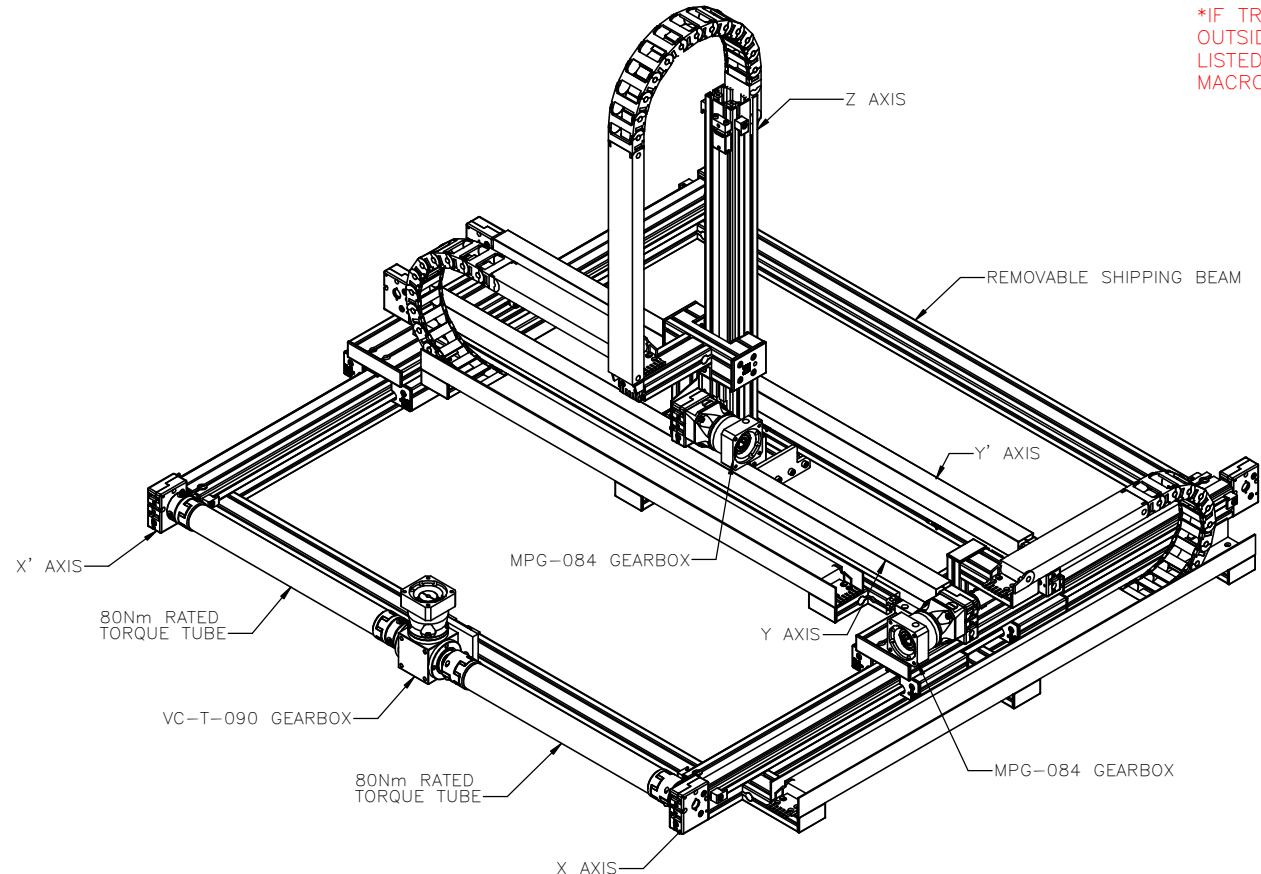
(SEE T-SLOT SENSOR KIT SHEET
 FOR PART NUMBER CONFIGURATION)

ENTER Z-AXIS TRAVEL
 TRAVEL IN INCREMENTS OF 25mm
 TRAVEL LIMITS: 150mm-1000mm

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

ENTER X-AXIS TRAVEL
 TRAVEL IN INCREMENTS OF 25mm
 TRAVEL LIMITS: 150mm-5250mm

*IF TRAVEL IS
 OUTSIDE LIMITS
 LISTED, CONTACT
 MACRON*



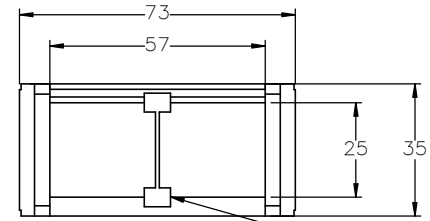
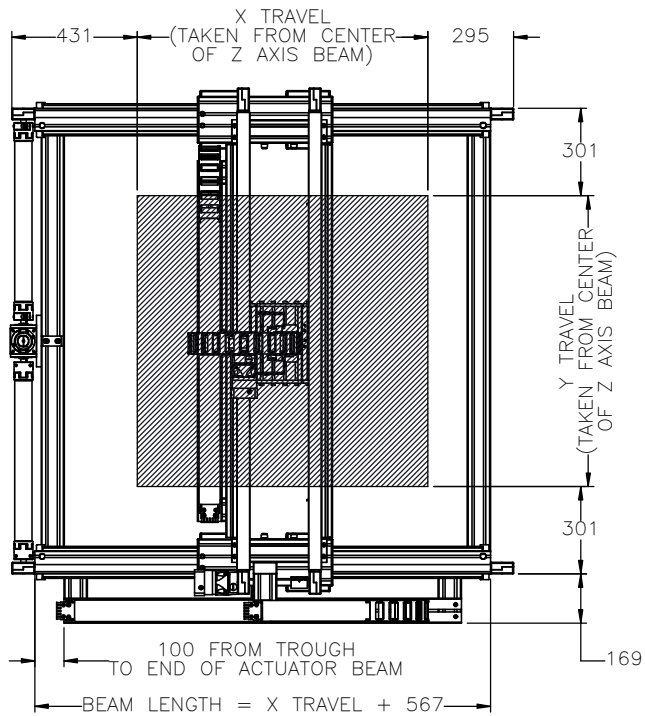
APPROVED: _____
SIGN & PRINT

DATE: _____

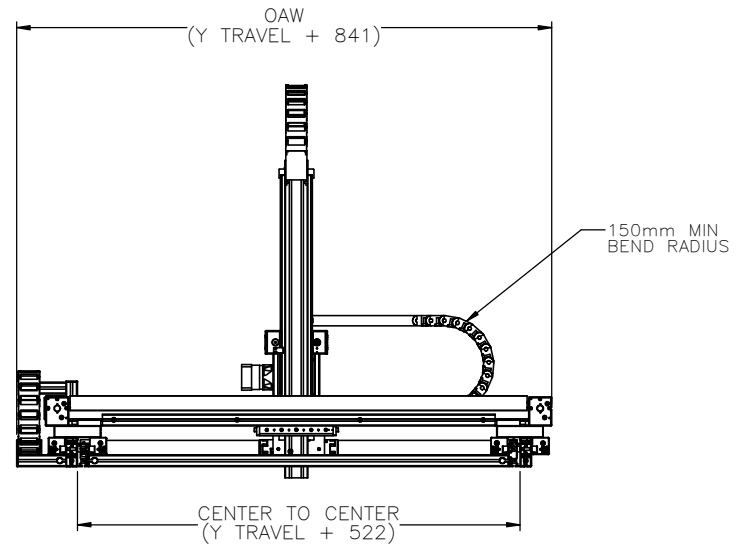
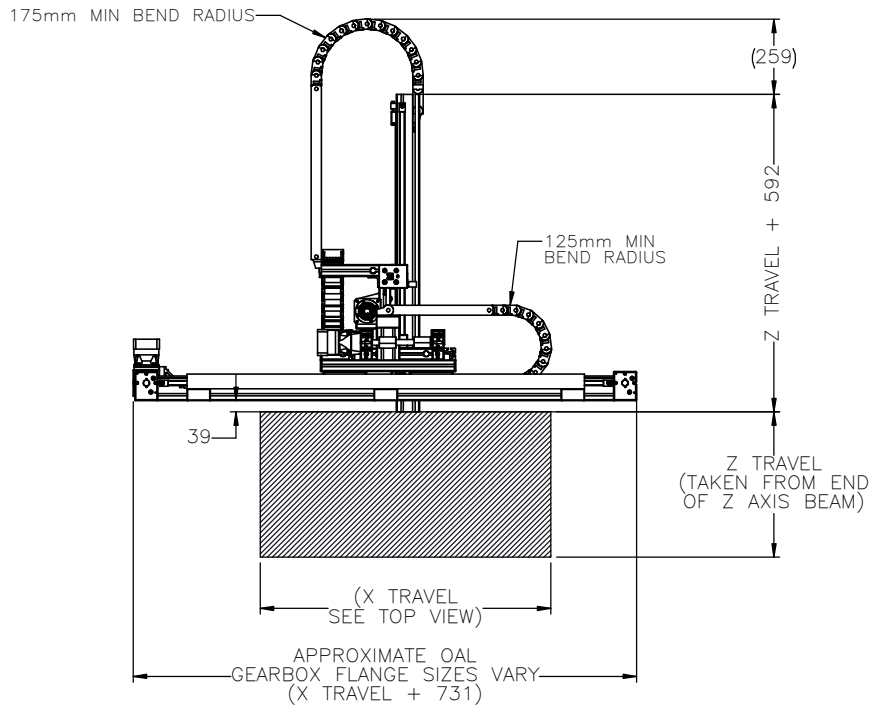
PO:REFERENCE#: _____

 MACRON DYNAMICS INC	DRAWN BY: PHW DATE: 11/26/2017 CHECKED BY: --- DATE: DD/MM/YYYY LAST SAVED BY: Tim DATE: 9/22/2020	MATERIAL:	TITLE:
	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS TOLERANCES UNLESS NOTED: .XX ± .254 .XXX ± .127 OTHERWISE: ANG ± 0°30'	FINISH:	MACRON UC1 XYZ GANTRY
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: 1 OF 6 PART NUMBER: MCS-UC1-X-X-X	SCALE: 1:1 SHEET SIZE: C

WORK ENVELOPE AND GANTRY FOOTPRINT

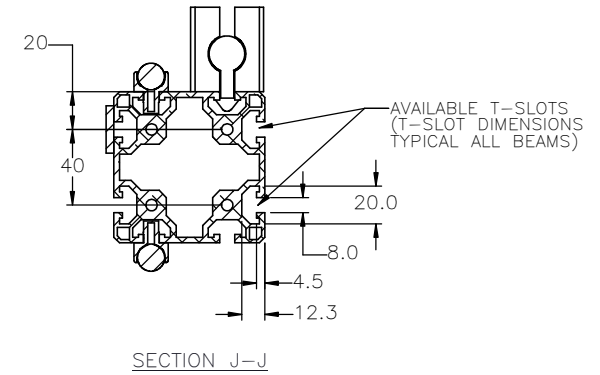
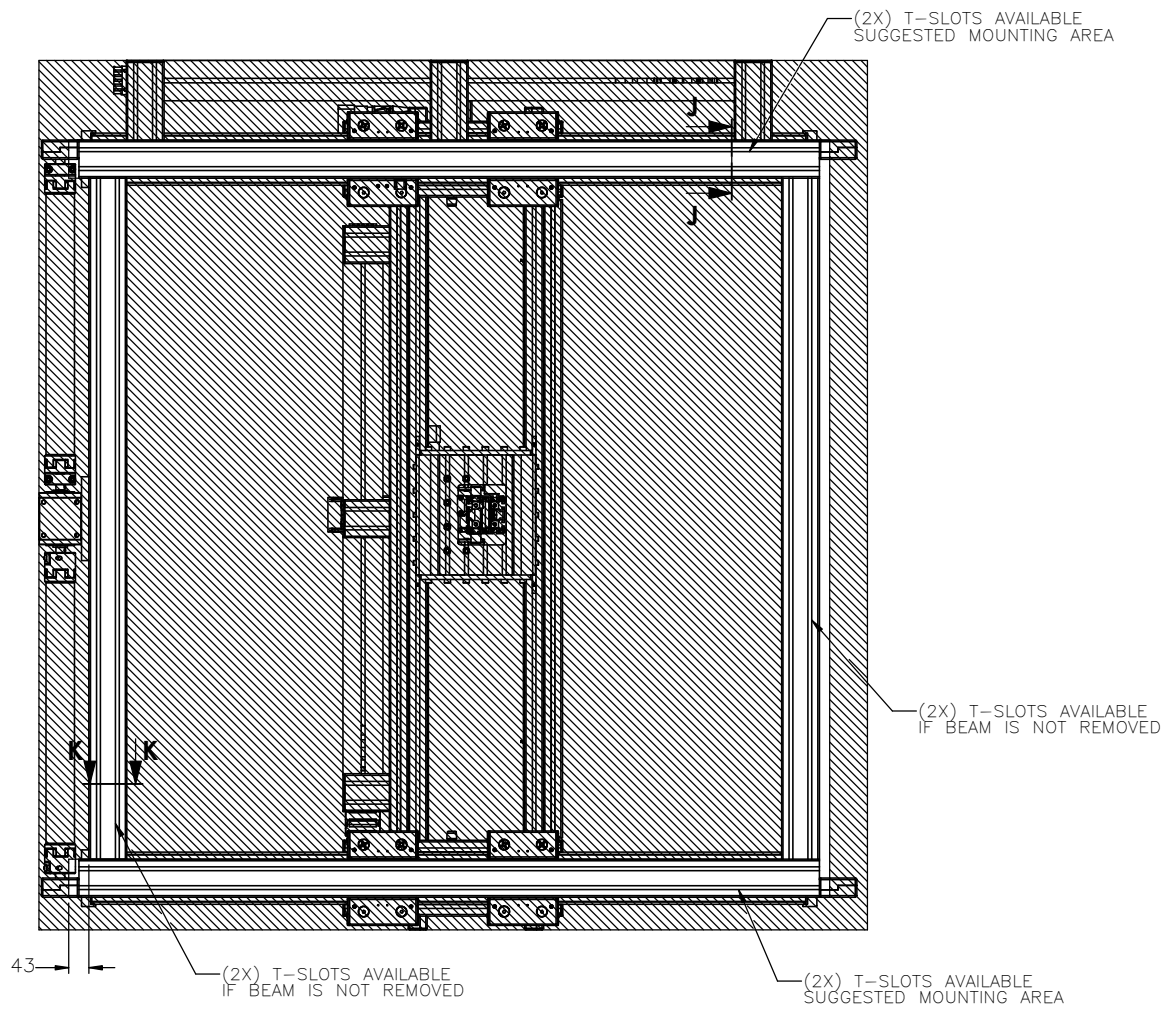


(1X) SEPARATOR EVERY OTHER LINK
 CABLE TRACK CROSS SECTION (SAME FOR ALL AXES)

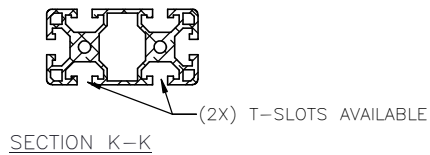



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	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES UNLESS NOTED OTHERWISE:		.X ± .03 .XX ± .010 .XXX ± .005 ANG ± 0°30'	SCALE: 1:1 SHEET SIZE: C	
	SURFACE FINISH: 63 BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION			SHEET: 2 OF 6 PART NUMBER: MCS-UC1-X-X-X	REV: C

GANTRY MOUNTING FEATURES

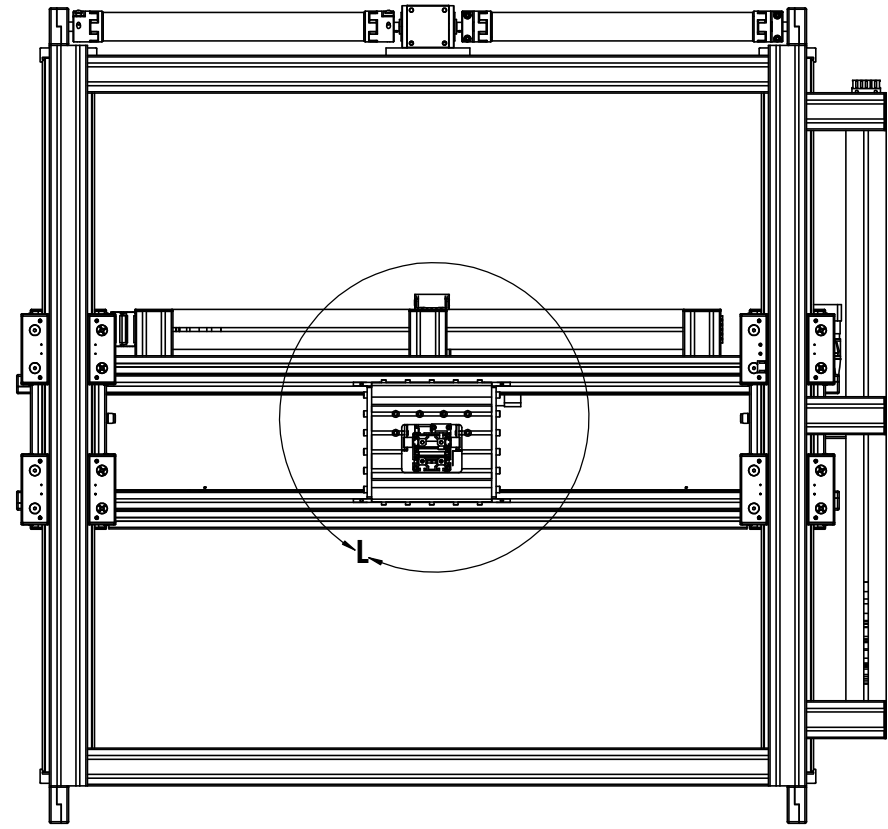
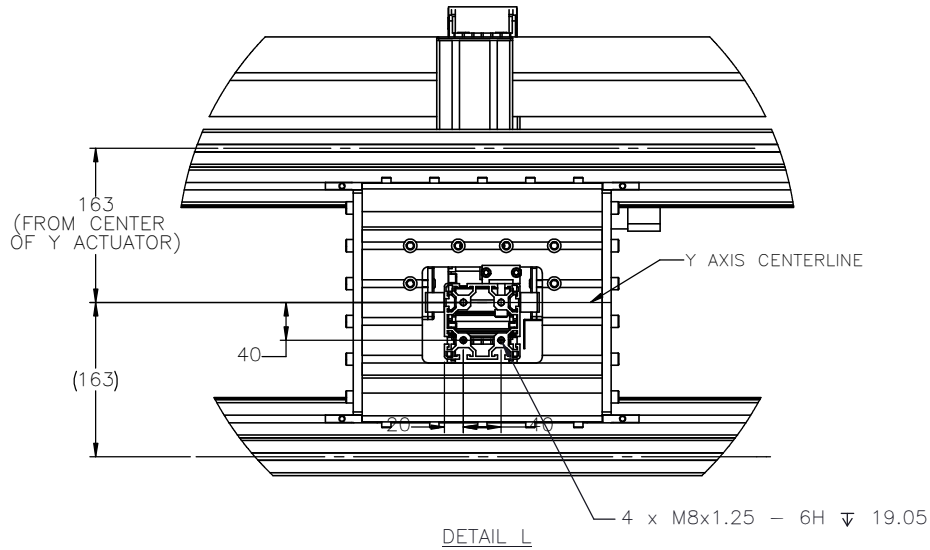


BOTTOM VIEW




 MACRON DYNAMICS INC	DRAWN BY: PHW DATE: 11/26/2017	MATERIAL:	TITLE:
	CHECKED BY: --- DATE: DD/MM/YYYY	FINISH:	MACRON UC1 XYZ GANTRY
	LAST SAVED BY: Tim DATE: 9/22/2020		
	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: TOLERANCES UNLESS NOTED: OTHERWISE:	.X ± .762 .XX ± .254 .XXX ± .127 ANG ± 0°30'	SCALE: 1:1
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CART MOUNTING FEATURES



BOTTOM VIEW

 MACRON DYNAMICS INC	DRAWN BY: PHW DATE: 11/26/2017	MATERIAL:	TITLE:
	CHECKED BY: -- DATE: DD/MM/YYYY		
	LAST SAVED BY: Tim DATE: 9/22/2020		
	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: .XX ± .254 TOLERANCES UNLESS NOTED: .XXX ± .127 OTHERWISE: ANG ± 0°30'	FINISH:	
SURFACE FINISH 63		BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING	
THIRD ANGLE PROJECTION		SHEET PART NUMBER	SCALE 1:1 SHEET SIZE C
4 OF 6		MCS-UC1-X-X-X	

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MOTOR SIZING WORKSHEET

(INCREMENTAL ADDERS REFER TO MASS PER TRAVEL LENGTH)

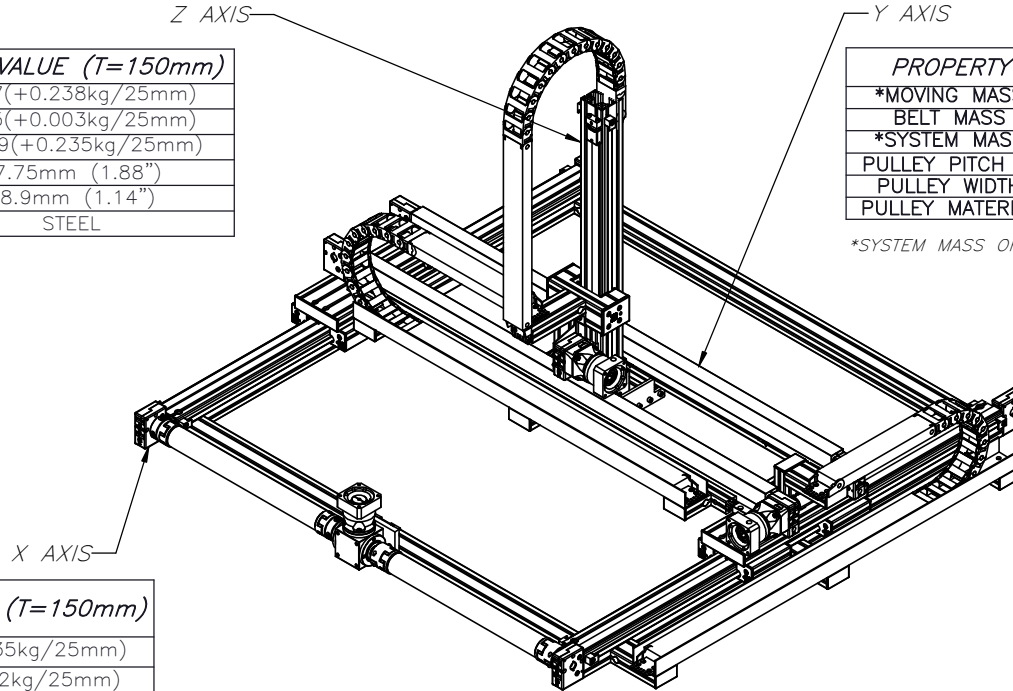
BASE TRAVELS USED:

X TRAVEL = 150mm
 Y TRAVEL = 150mm
 Z TRAVEL = 150mm

PROPERTY	BASE VALUE (T=150mm)
MOVING MASS	6.317(+0.238kg/25mm)
BELT MASS	0.095(+0.003kg/25mm)
SYSTEM MASS	15.009(+0.235kg/25mm)
PULLEY PITCH ϕ	47.75mm (1.88")
PULLEY WIDTH	28.9mm (1.14")
PULLEY MATERIAL	STEEL

PROPERTY	BASE VALUE (T=150mm)
*MOVING MASS	5.186(+0.035kg/25mm)
BELT MASS	0.266(+0.012kg/25mm)
*SYSTEM MASS	24.061(+0.386kg/25mm)
PULLEY PITCH ϕ	47.75mm (1.88")
PULLEY WIDTH	28.9mm (1.14")
PULLEY MATERIAL	STEEL

*SYSTEM MASS OF Z AXIS NEEDS TO BE ADDED TO THIS



PROPERTY	BASE VALUE (T=150mm)
**MOVING MASS	17.849(+0.035kg/25mm)
BELT MASS	0.415(+0.012kg/25mm)
PULLEY PITCH ϕ	47.75mm (1.88")
PULLEY WIDTH	28.9mm (1.14")
PULLEY MATERIAL	STEEL
***TORQUE TUBE LENGTH (EACH)	254mm
TORQUE TUBE ϕ	60mm
***TORQUE TUBE MASS (EACH)	1.246kg (+0.018kg/25mm)
TORQUE TUBE MATERIAL	ANODIZED ALUMINUM ELASTOMER STYLE COUPLINGS WITH HUB
TRAVEL PER REV	150mm

X TRAVEL = _____ mm
 Y TRAVEL = _____ mm
 Z TRAVEL = _____ mm

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

GEARBOX MASS (ADD TO SYSTEM MASSES)	MPG-084	2.3kg
	MRC-084	5.6kg

TOTAL SYSTEM MASS $(X \text{ TRAVEL} \times .0178) + (Y \text{ TRAVEL} \times .0219) + (Z \text{ TRAVEL} \times .0154) + 85.9$	DRAWN BY: PHW DATE: 11/26/2017 MATERIAL: _____ TITLE: _____ CHECKED BY: -- DATE: DD/MM/YYYY LAST SAVED BY: JA DATE: 9/22/2020	
	FINISH: _____ UNLESS OTHERWISE SPECIFIED: .XX \pm .254 DIMENSIONS ARE IN MILLIMETER .XXX \pm .127 TOLERANCES UNLESS NOTED OTHERWISE: ANG \pm 0°30'	
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**SYSTEM MASS OF Y-AXIS NEEDS TO BE ADDED TO THIS
 ***BASE VALUE WITH CENTER DRIVE AT Y TRAVEL = 150mm

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

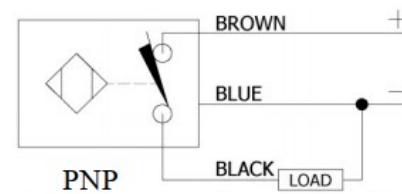
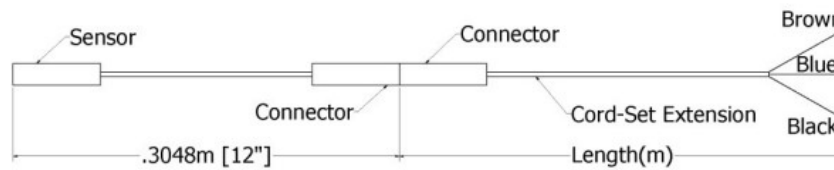
Part Number Configuration

244- _ _ - _ _ - _ _

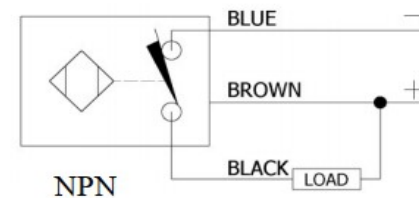
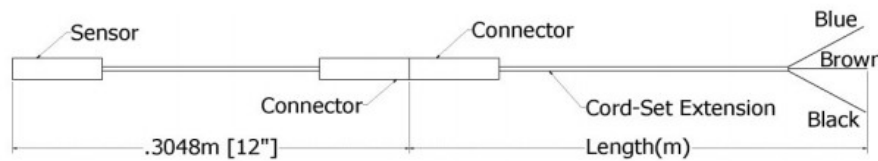
PNP or NPN	NC or NO	02	Meters
PNP or NPN	NC or NO	06	Meters
PNP or NPN	NC or NO	12	Meters

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

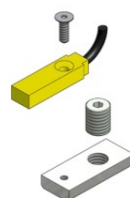
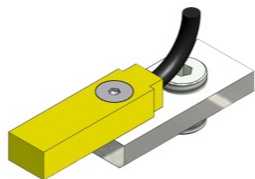
PNP Diagrams




NPN Diagrams



KIT INCLUDES – SENSOR, CORDSET EXTENSION, AND MOUNTING HARDWARE



 MACRON DYNAMICS INC	DRAWN BY: PHW DATE: 11/26/2017 CHECKED BY: -- DATE: DD/MM/YYYY LAST SAVED BY: Paul DATE: 9/22/2020	MATERIAL:	TITLE:	
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	SURFACE FINISH <input checked="" type="checkbox"/>	BREAK ALL SHARP EDGES	SHEET	SCALE 1:1
	DIMENSIONAL LIMITS APPLY AFTER FINISHING	THIRD ANGLE PROJECTION	6 OF 6	SHEET SIZE C