

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

MGS-UC1 - -X-

ENTER Z-AXIS TRAVEL
 TRAVEL IN INCREMENTS OF 250mm
 TRAVEL LIMITS: 150mm-1000mm

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

ENTER X-AXIS TRAVEL
 TRAVEL IN INCREMENTS OF 500mm
 TRAVEL LIMITS: 150mm-5250mm

IF TRAVEL IS OUTSIDE LIMITS LISTED, CONTACT MACRON

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

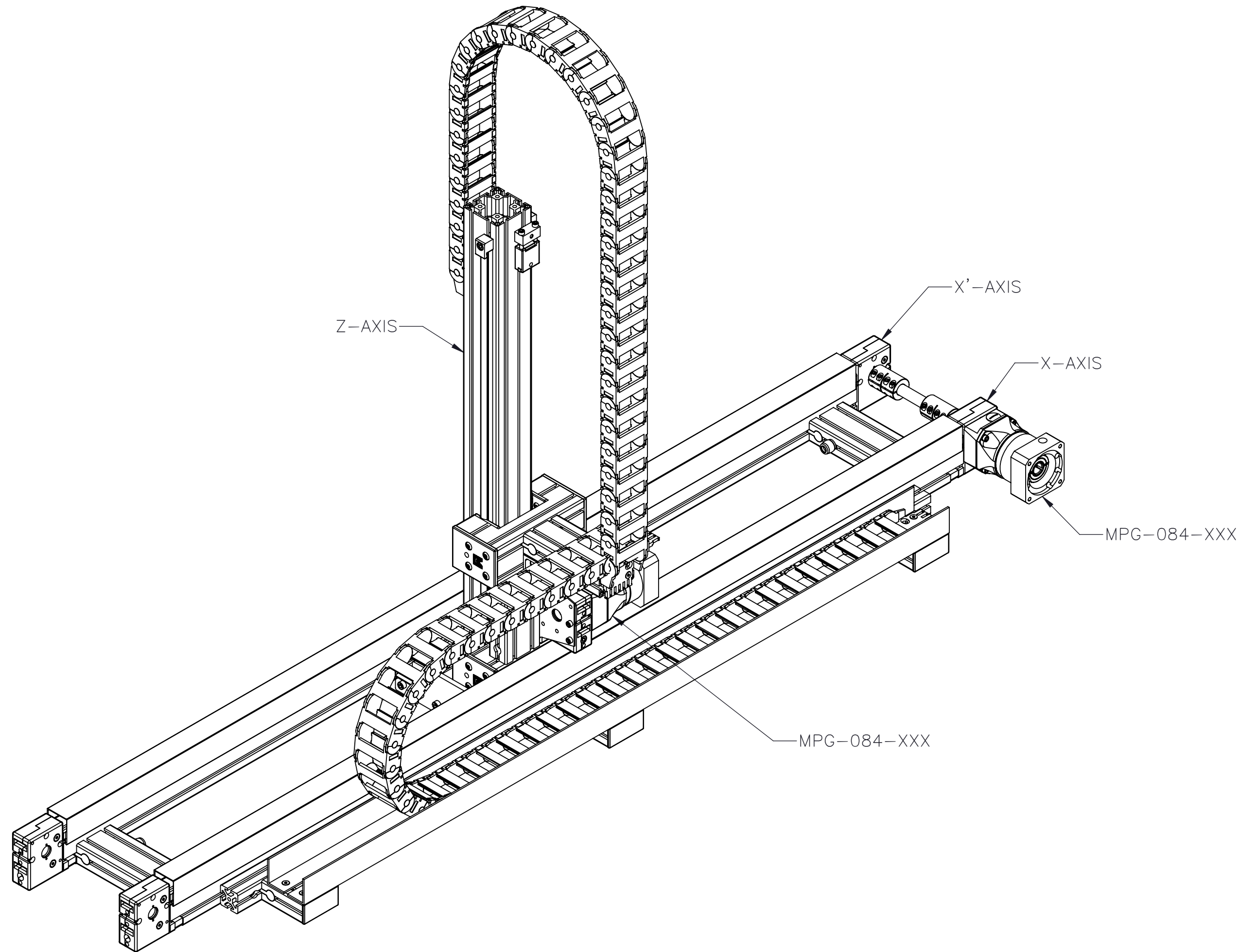
MOTOR INFORMATION (X AXIS)
 MANUFACTURER:_____
 MODEL:_____

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

SENSOR INFORMATION X-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)



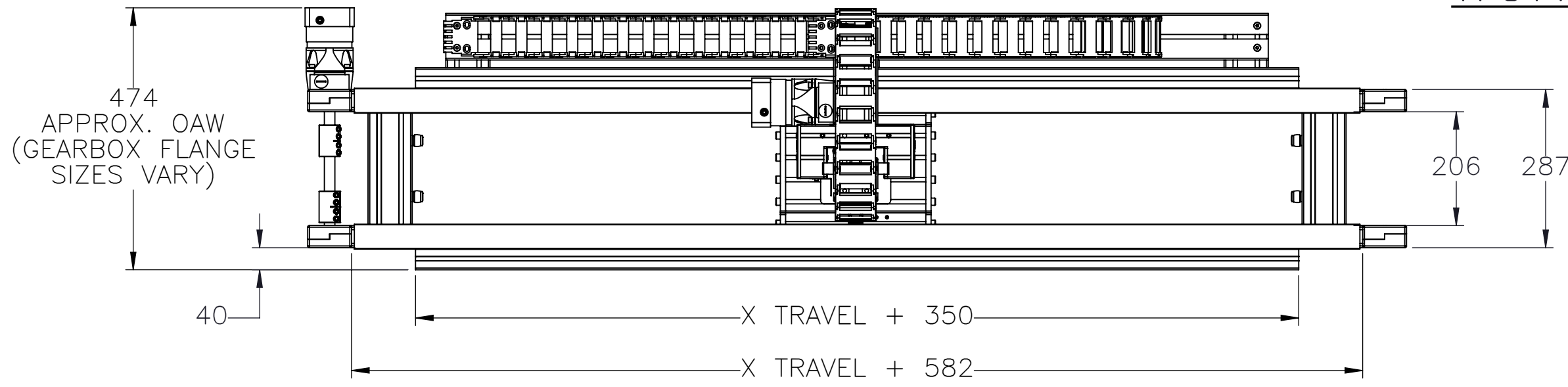
APPROVED: _____
 SIGN & PRINT

DATE: _____

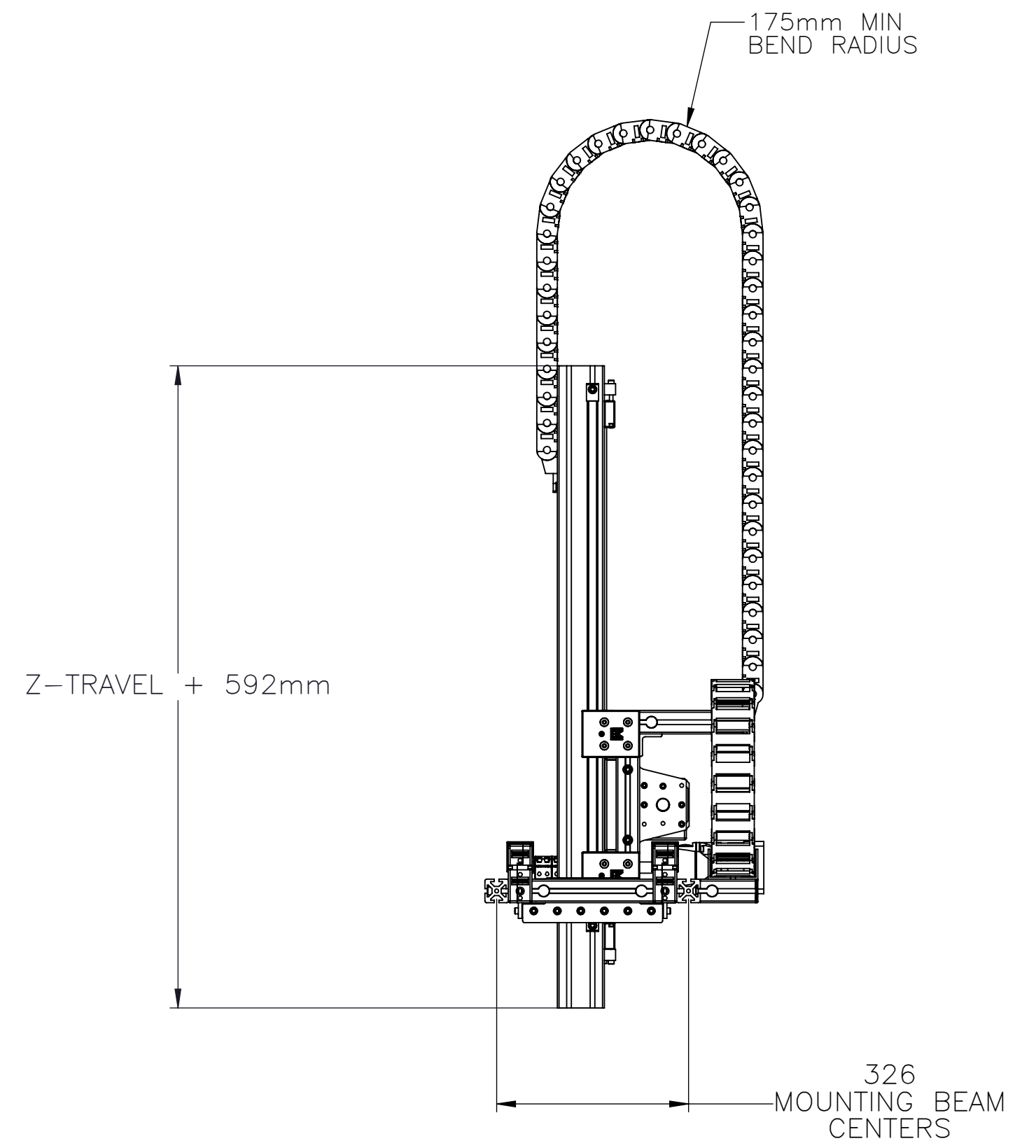
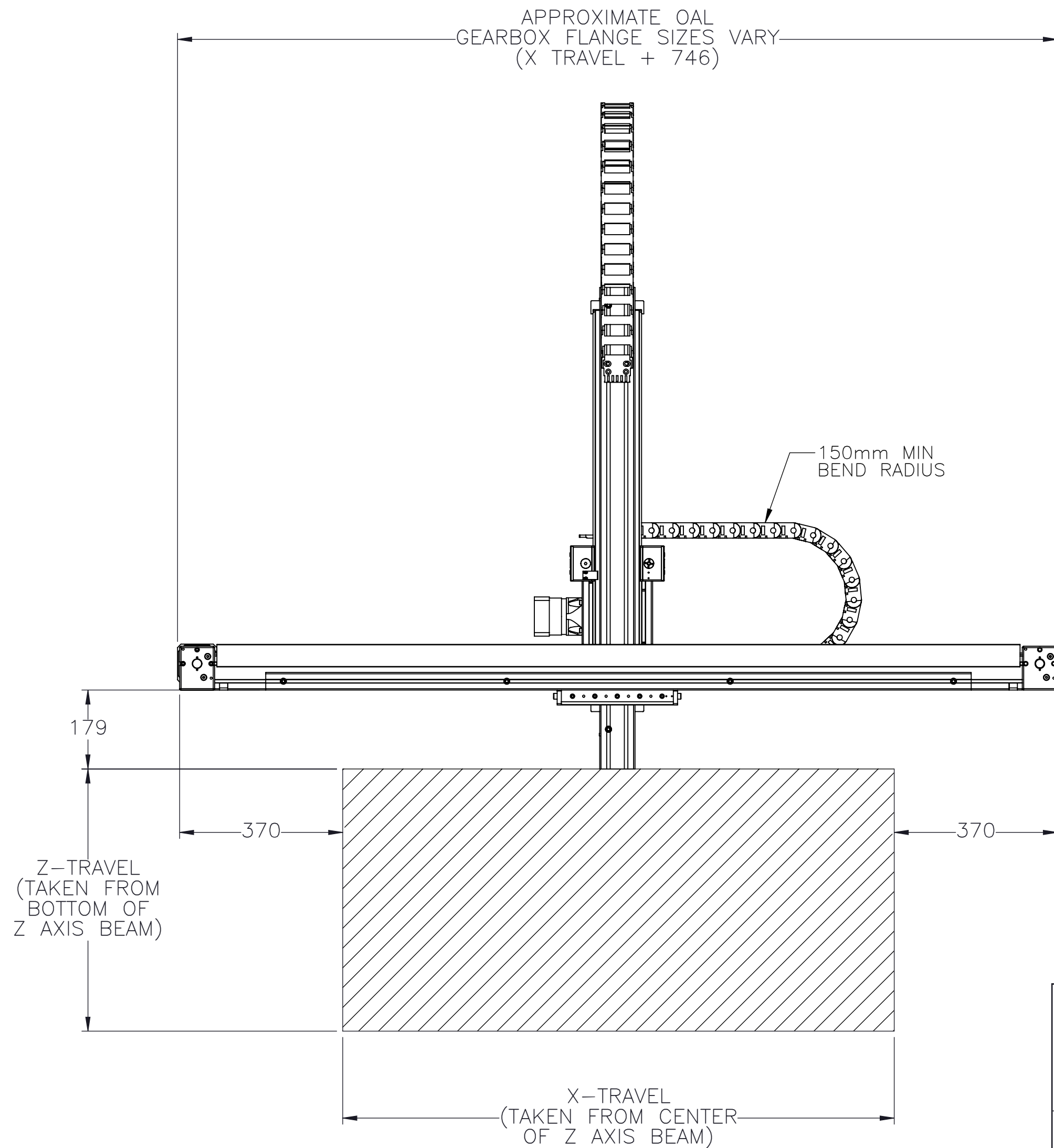
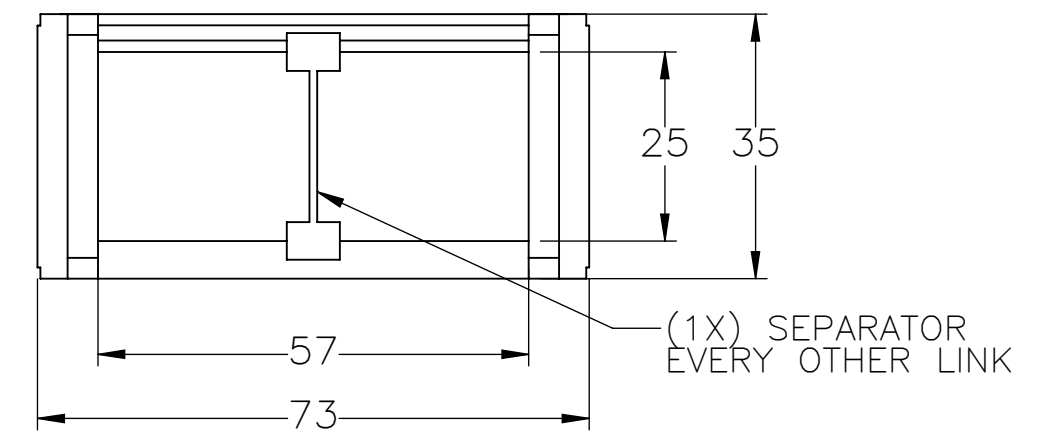
PO:REFERENCE#: _____


 MACRON DYNAMICS INC	DRAWN BY: JA CHECKED BY: LAST SAVED BY: TH	DATE: 4/24/2019 DATE: DD/MM/YYYY DATE: 3/18/2021	MATERIAL: FINISH:	TITLE: UNIFIED CART GANTRY	
	<small>UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETER. TOLERANCES UNLESS NOTED OTHERWISE:</small>		.X ± .762 .XX ± .254 .XXX ± .127 ANG ± 0°30'	SCALE 1:1 SHEET SIZE C	
	SURFACE FINISH 63/		SHEET 1 OF 6	PART NUMBER MGS-UC1-X-X-X	REV
	<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>		BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION		

WORK ENVELOPE AND GANTRY FOOTPRINT

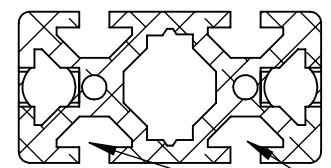
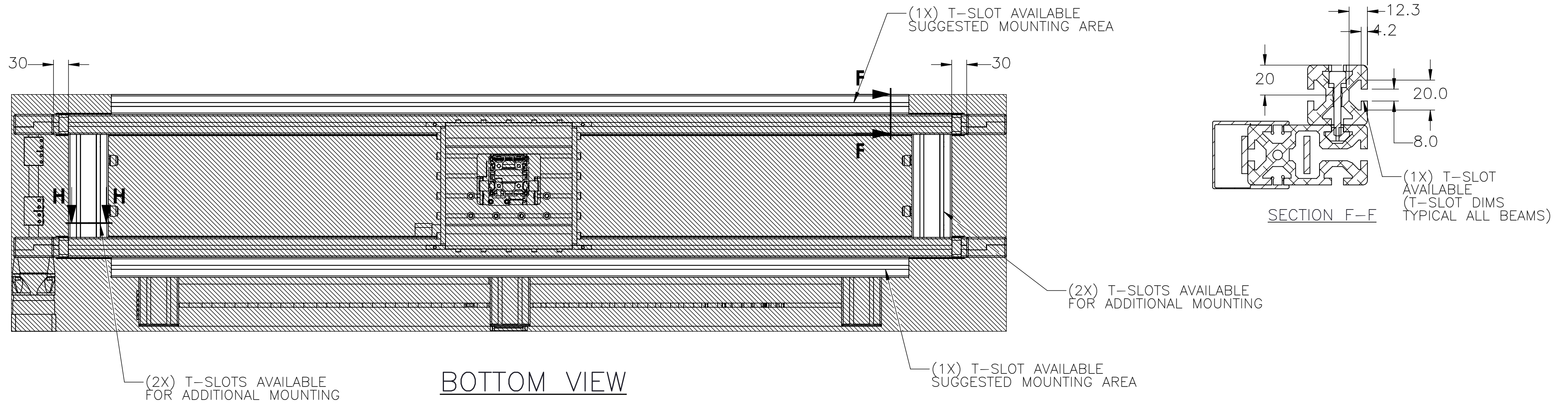


CABLE TRACK CROSS SECTION
(SAME FOR ALL AXES)




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	LAST SAVED BY: TH DATE: 3/18/2021	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES: TOLERANCES UNLESS NOTED OTHERWISE:	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-UC1-X-X-X REV

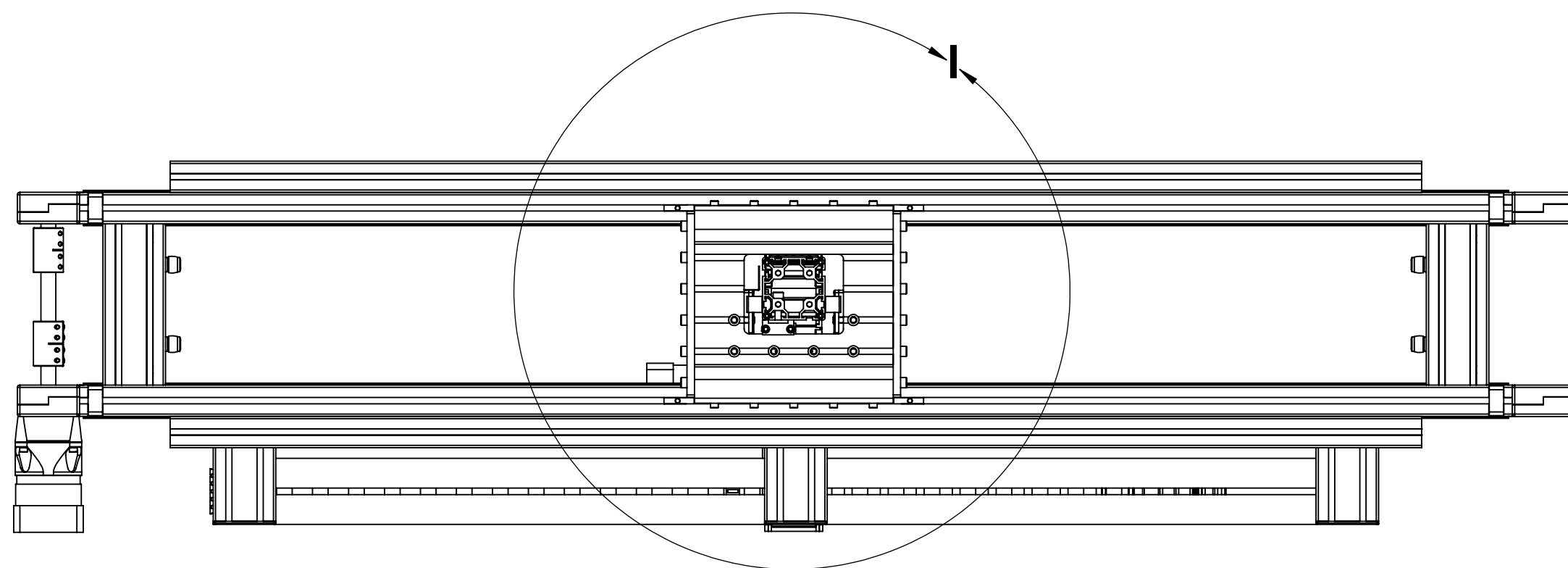
GANTRY MOUNTING FEATURES



SECTION H-H (2X) T-SLOTS AVAILABLE

 MACRON DYNAMICS INC	DRAWN BY: JA DATE: 4/24/2019	MATERIAL:	TITLE: UNIFIED CART GANTRY
	CHECKED BY: DATE: DD/MM/YYYY	FINISH:	
	LAST SAVED BY: TH DATE: 3/18/2021		
	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS: TOLERANCES UNLESS NOTED OTHERWISE:	.X ± .762 .XX ± .254 .XXX ± .127 ANG ± 0°30'	
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CART MOUNTING FEATURES



BOTTOM VIEW

4 x ϕ 7 ∇ 19
M8x1.25 - 6H ∇ 19

40


40

Y AXIS CENTERLINE

163
(FROM CENTER OF Y ACTUATOR)

163

DETAIL 1
SCALE 1 : 3

 MACRON DYNAMICS INC	DRAWN BY: JA DATE: 4/24/2019	MATERIAL:	TITLE: UNIFIED CART GANTRY
	CHECKED BY: DATE: DD/MM/YYYY	FINISH:	
	LAST SAVED BY: TH DATE: 3/18/2021		SCALE 1:1 SHEET SIZE C
	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. TOLERANCES UNLESS NOTED OTHERWISE:	SURFACE FINISH ∇ ⁶³ BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION	SHEET 4 OF 6

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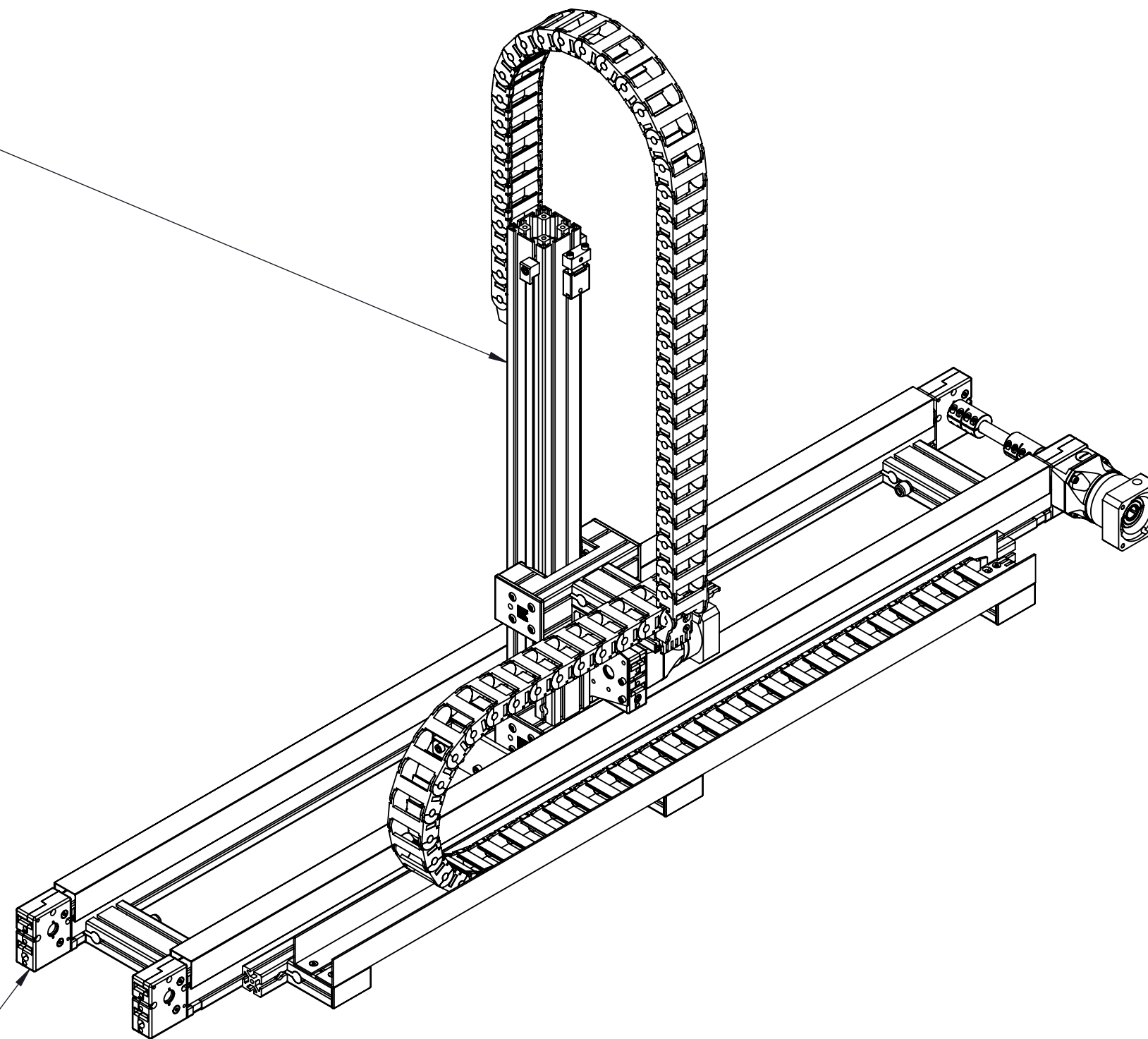
MOTOR SIZING WORKSHEET

(INCREMENTAL ADDERS REFER TO MASS PER TRAVEL LENGTH)

BASE TRAVELS USED:
 X 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
TRAVEL PER REV	150mm

'Z' AXIS



'X' AXIS

PROPERTY	BASE VALUE (T=150mm)
*MOVING MASS	5.186(+0.035kg/25mm)
BELT MASS	0.266(+0.012kg/25mm)
PULLEY PITCH ϕ	47.75mm (1.88")
PULLEY WIDTH	28.9mm (1.14")
PULLEY MATERIAL	STEEL
CONN SHAFT LENGTH	118.18mm (4.65")
CONN SHAFT ϕ	19.05mm (.75")
CONN SHAFT MATERIAL	STEEL
TRAVEL PER REV	150mm

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


X-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
	MRG-084	5.6kg

TOTAL SYSTEM MASS	$(X \text{ TRAVEL} \times .0159) + (Z \text{ TRAVEL} \times .0088) + 35.84 = \text{kg}$
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 MACRON DYNAMICS INC	DRAWN BY: JA CHECKED BY: LAST SAVED BY: TH	DATE: 4/24/2019 DATE: DD/MM/YYYY DATE: 3/18/2021	MATERIAL: FINISH:	TITLE: UNIFIED CART 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'	SURFACE FINISH \checkmark	BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION	SCALE 1:1 SHEET SIZE C

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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

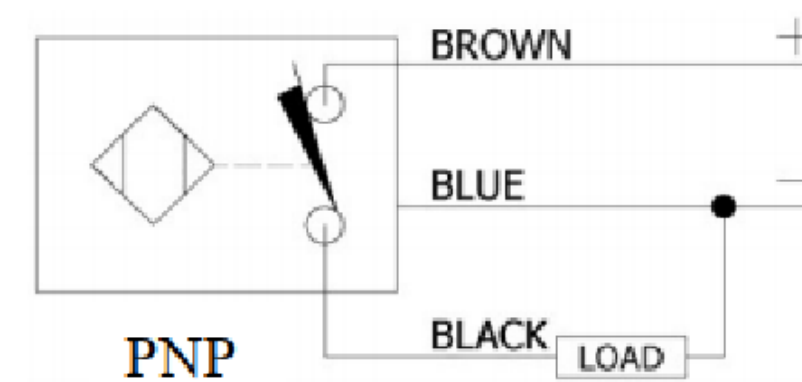
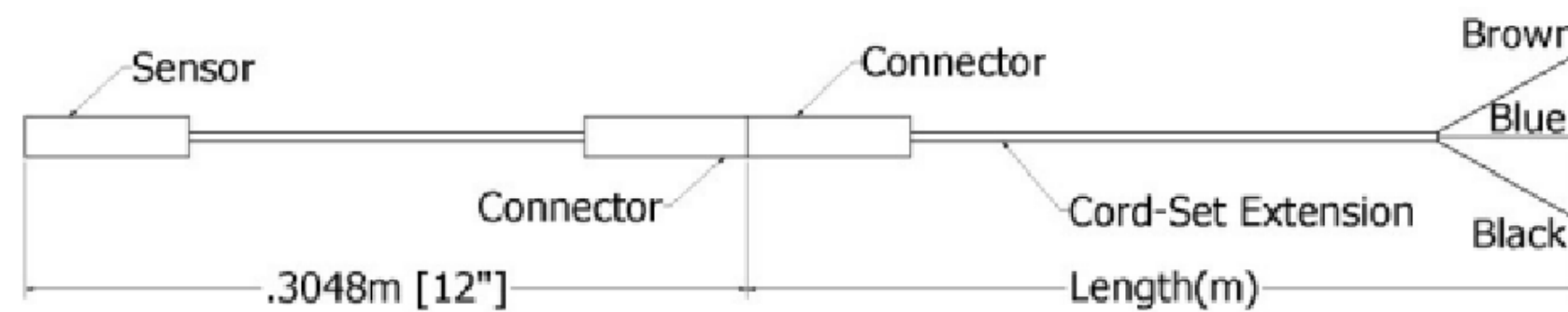
Part Number Configuration

244-_-_-_-_-_-

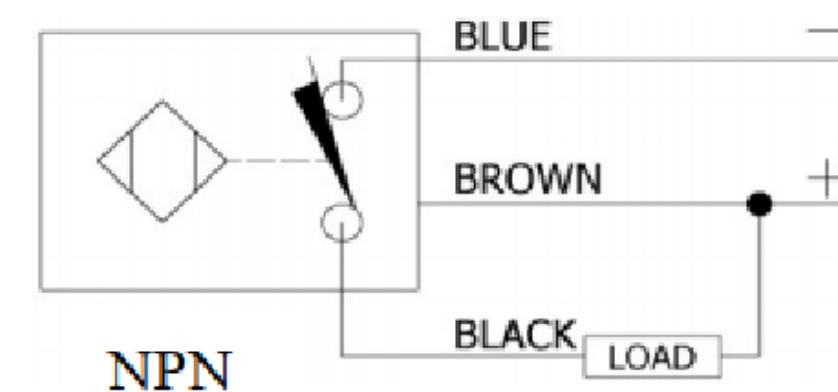
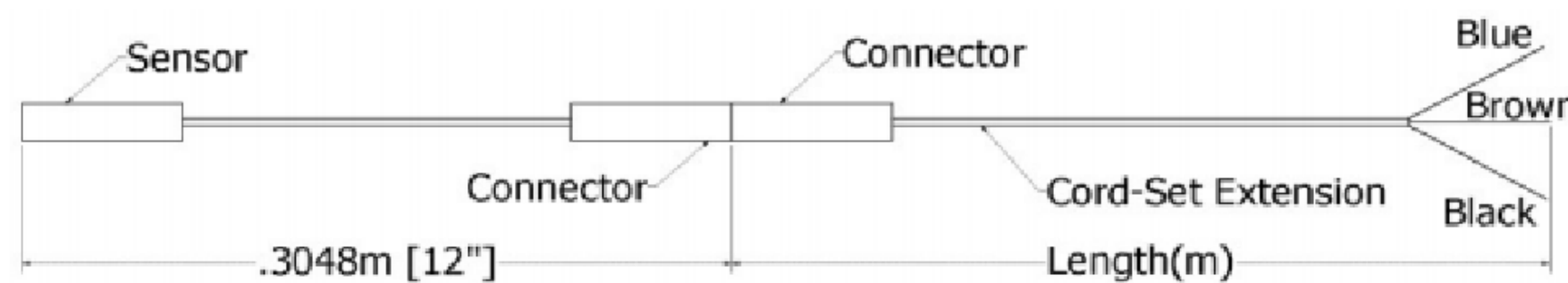
PNP or NPN	NC or NO	02	Meters
PNP or NPN	NC or NO	06	Meters
PNP or NPN	NC or NO	12	Meters

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

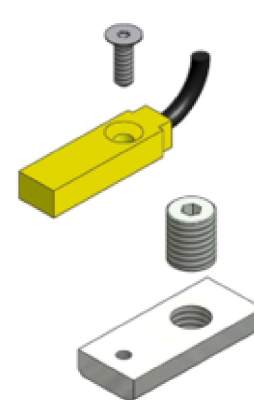
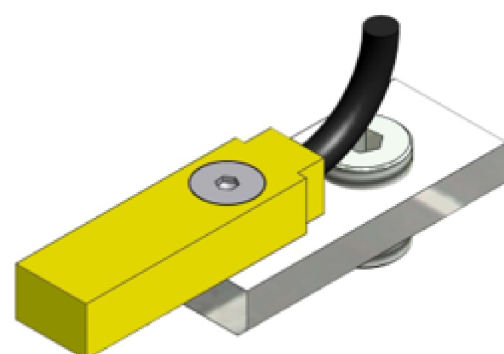
PNP Diagrams




NPN Diagrams



KIT INCLUDES – SENSOR, CORDSET EXTENSION, AND MOUNTING HARDWARE



 MACRON DYNAMICS INC	DRAWN BY: PHW CHECKED BY: LAST SAVED BY: Paul	DATE: 11/26/2017 DATE: DD/MM/YYYY DATE: 3/18/2021	MATERIAL: FINISH:	TITLE: T-SLOT SENSOR KIT
	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"/>	BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION	SCALE: 1:1 SHEET SIZE: C