

MGS-TBG-12- -X-

GEARBOX MODEL
 MPG-062____
 MRG-062____
 RATIO: _____

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

ENTER X-AXIS TRAVEL
 TRAVEL IN INCREMENTS OF 250mm
 TRAVEL LIMITS: 250mm-2000mm

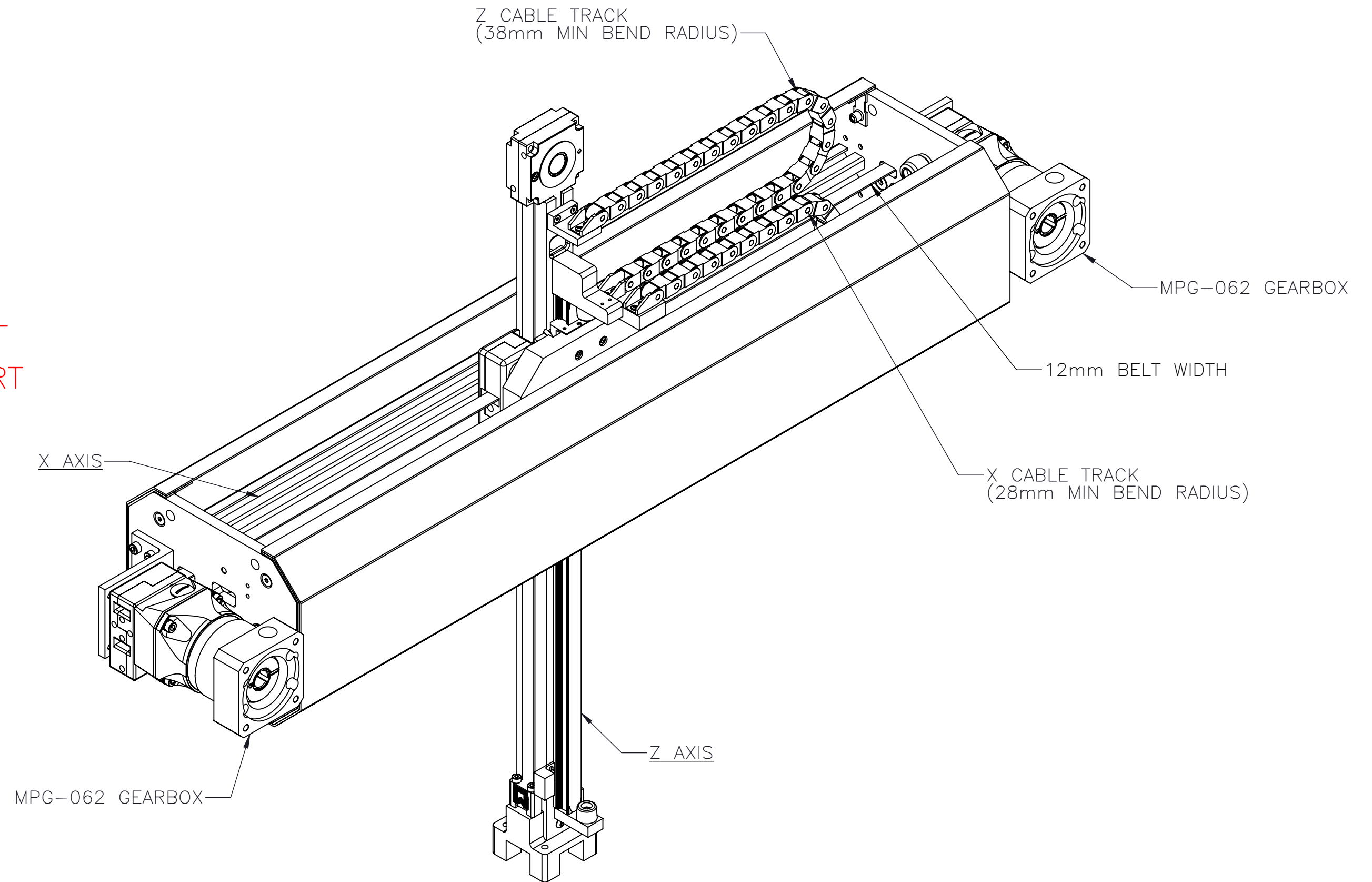
IF TRAVEL IS OUTSIDE LIMITS LISTED, CONTACT MACRON

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

MOTOR INFORMATION
 MANUFACTURER: _____
 MODEL: _____

SENSOR INFORMATION X-AXIS:
 HOME-QTY ____ 244-____-____-____
 EOT-QTY ____ 244-____-____-____
 SENSOR INFORMATION Z-AXIS:
 EOT-QTY (2 MAX) ____ 244-____-____-____


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



APPROVED: _____
SIGN & PRINT

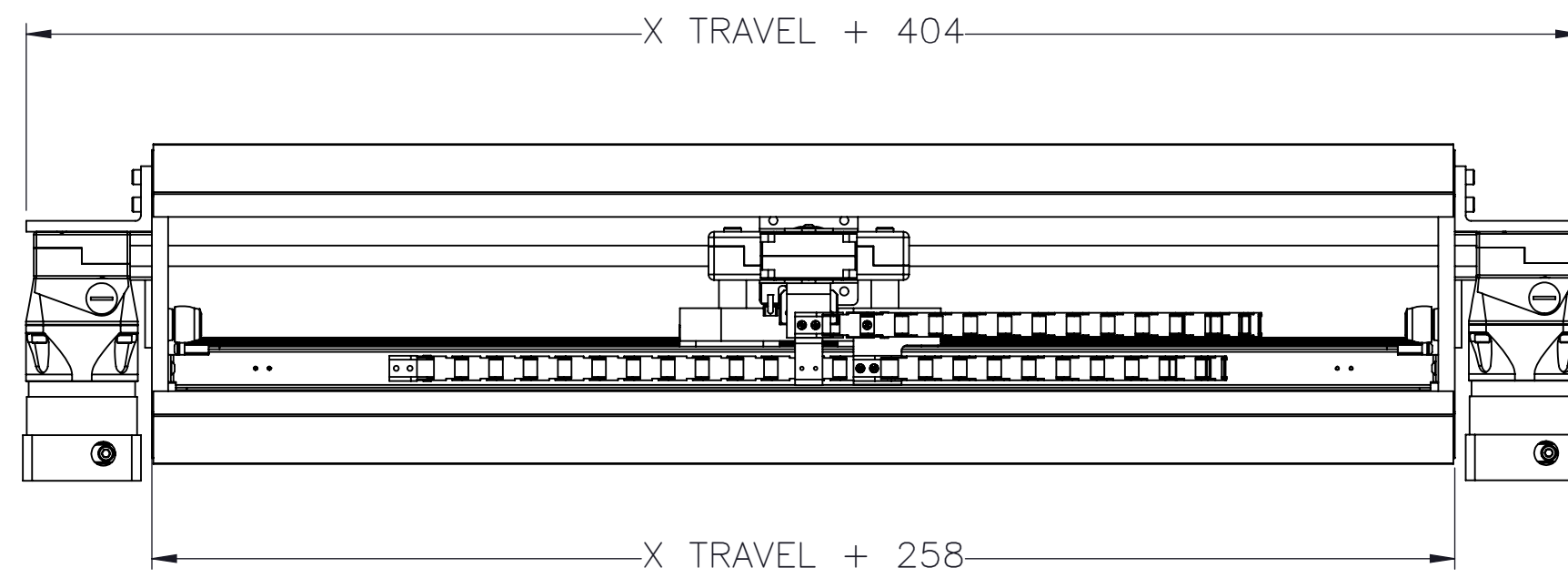
DATE: _____

PO:REFERENCE#: _____

 MACRON DYNAMICS INC	<small>DRAWN BY:</small> JA <small>DATE:</small> 4/24/2019	<small>MATERIAL:</small>	<small>TITLE:</small> MACRON T-BOT 12 GANTRY	
	<small>CHECKED BY:</small> TH <small>DATE:</small> DD/MM/YYYY			<small>FINISH:</small>
	<small>LAST SAVED BY:</small> TH <small>DATE:</small> 10/12/2022	<small>UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETER. TOLERANCES UNLESS NOTED OTHERWISE:</small>		<small>SCALE:</small> 1:1 <small>SHEET SIZE:</small> C
	<small>SURFACE FINISH</small> 63/	<small>SHEET</small> 1 OF 6 <small>PART NUMBER</small> MGS-TBG-12-X-X-X		<small>REV</small> 00

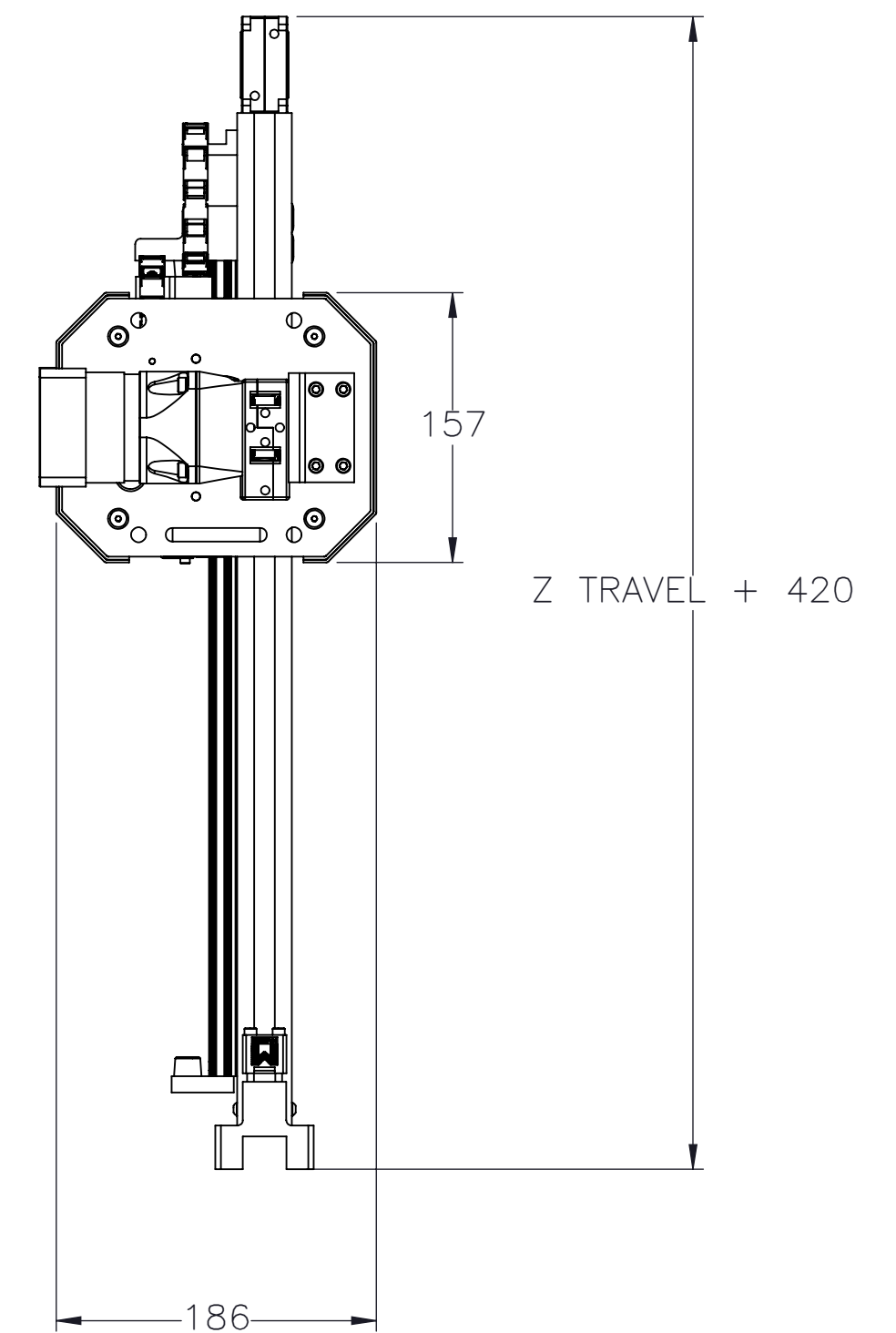
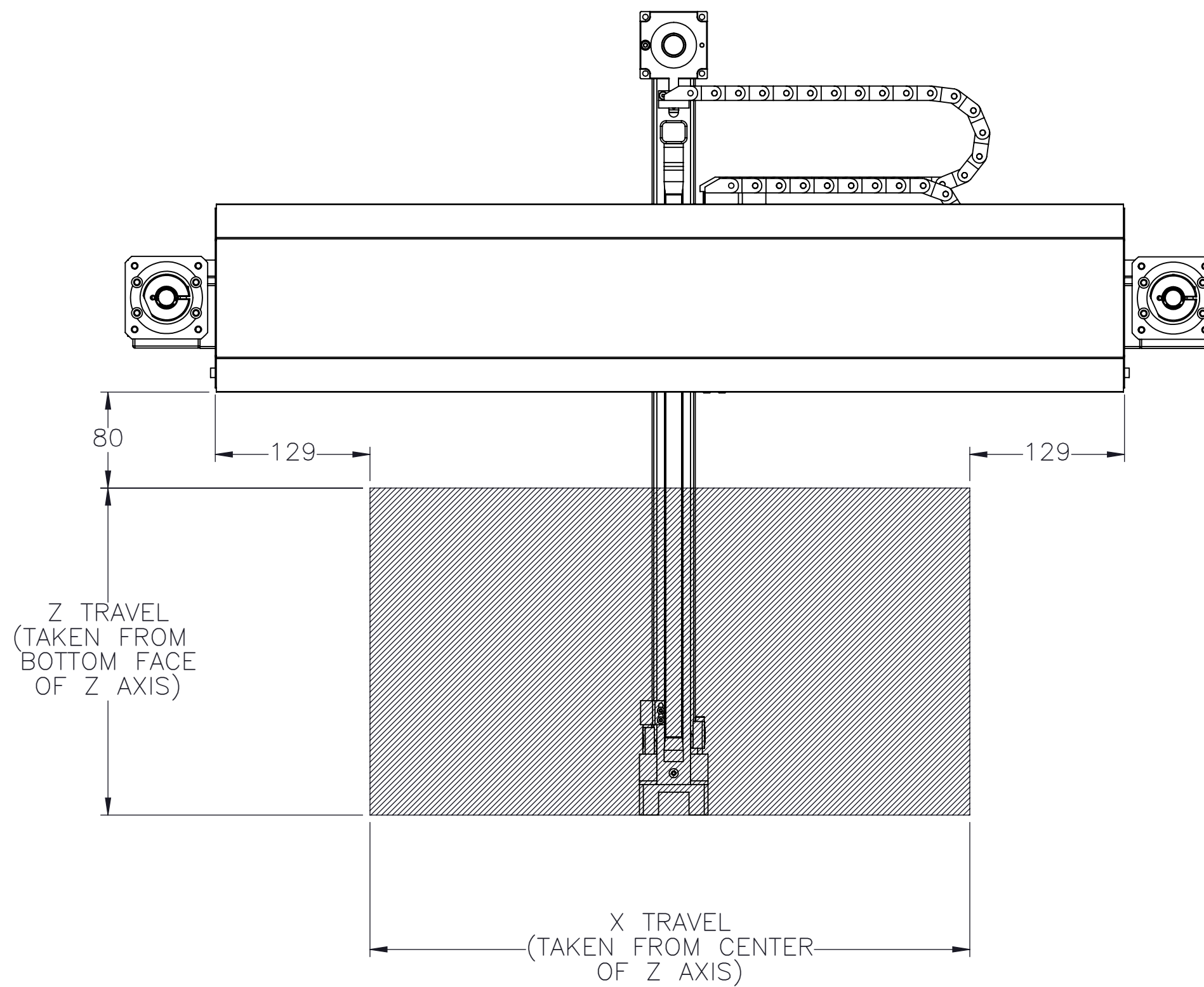
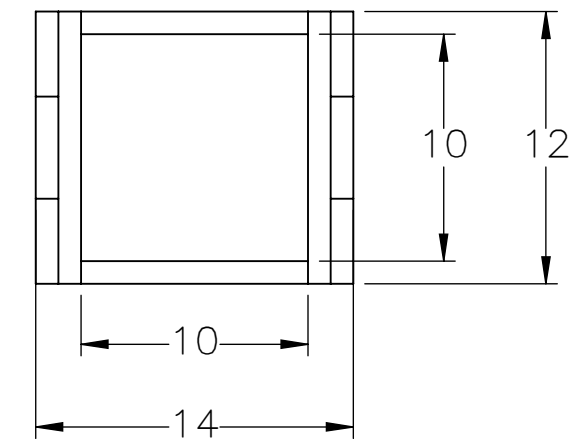
THIS DRAWING IS THE PROPERTY OF MACRON DYNAMICS. ANY REPRODUCTIONS SHALL BE FOR QUOTATION, MANUFACTURING, OR PURCHASING PURPOSES ONLY. RELEASE OF DRAWINGS TO OTHER CONCERNS DOES NOT CONSTITUTE LICENSING IN ANY WAY. INFORMATION CONTAINED HEREIN IS PROPRIETARY AND CONFIDENTIAL.


BREAK ALL SHARP EDGES
 DIMENSIONAL LIMITS APPLY AFTER FINISHING
 THIRD ANGLE PROJECTION



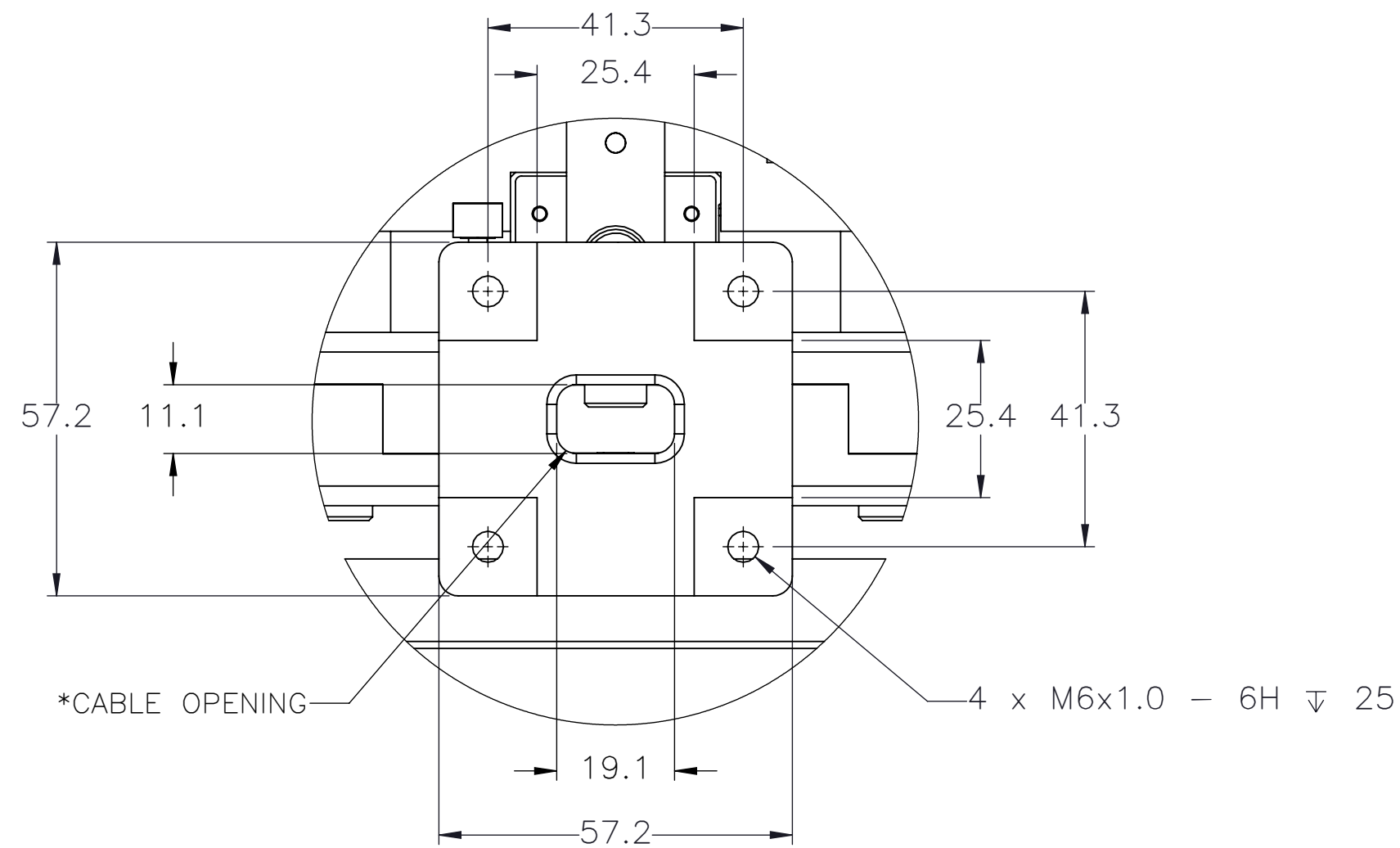
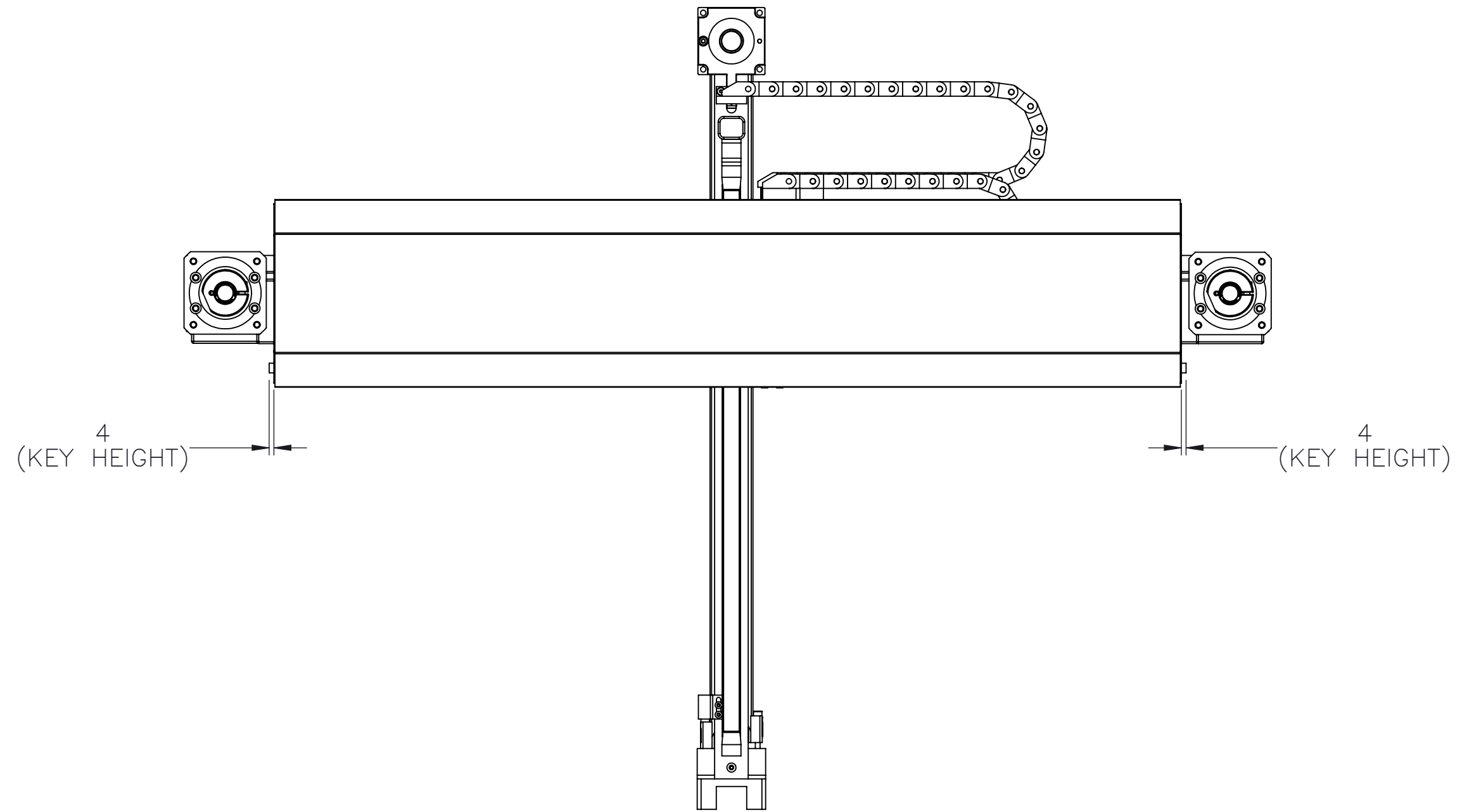
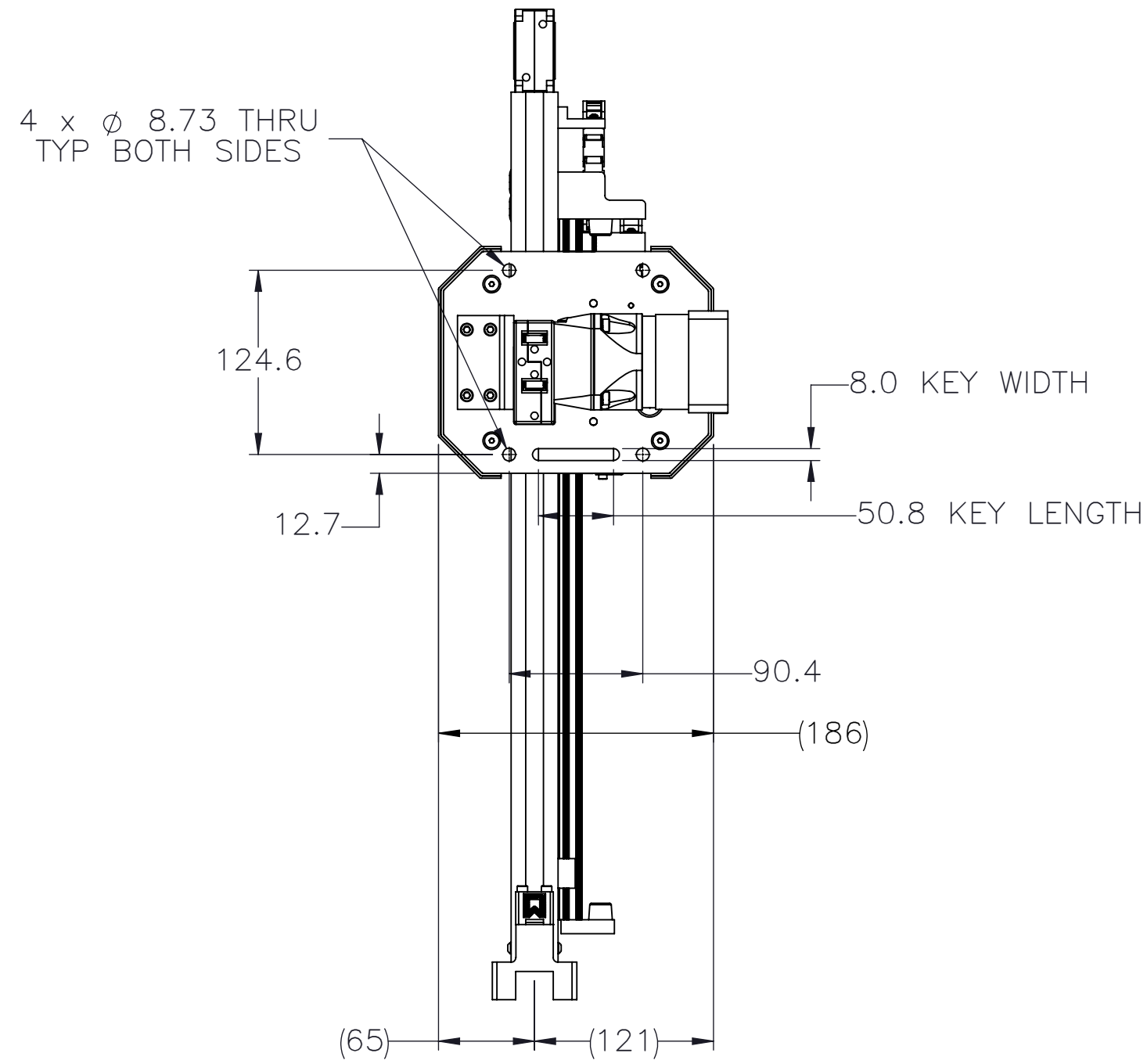
GANTRY FOOTPRINT

CABLE TRACK CROSS SECTION
(SAME FOR BOTH AXES)

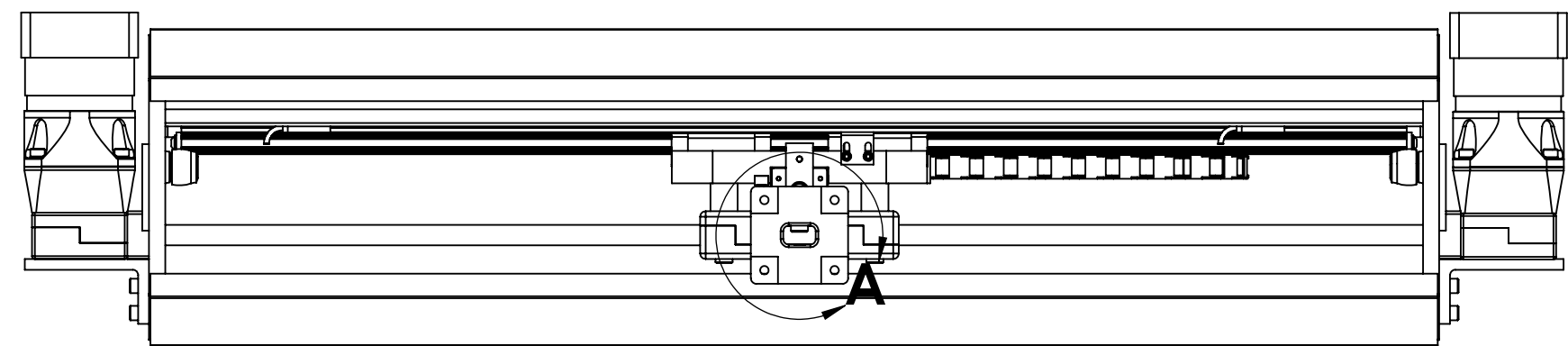



 MACRON DYNAMICS INC	DRAWN BY: JA DATE: 4/24/2019	MATERIAL:	TITLE: MACRON T-BOT 12 GANTRY
	CHECKED BY: DATE: DD/MM/YYYY	FINISH:	
	LAST SAVED BY: TH DATE: 10/12/2022	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES: TOLERANCES UNLESS NOTED OTHERWISE: .X ± .03 .XX ± .010 .XXX ± .005 ANG ± 0°30'	
	SURFACE 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.		BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING	SCALE 1:1 SHEET SIZE C
THIRD ANGLE PROJECTION		SHEET 2 OF 6	PART NUMBER MGS-TBG-12-X-X-X REV 00

GANTRY MOUNTING FEATURES

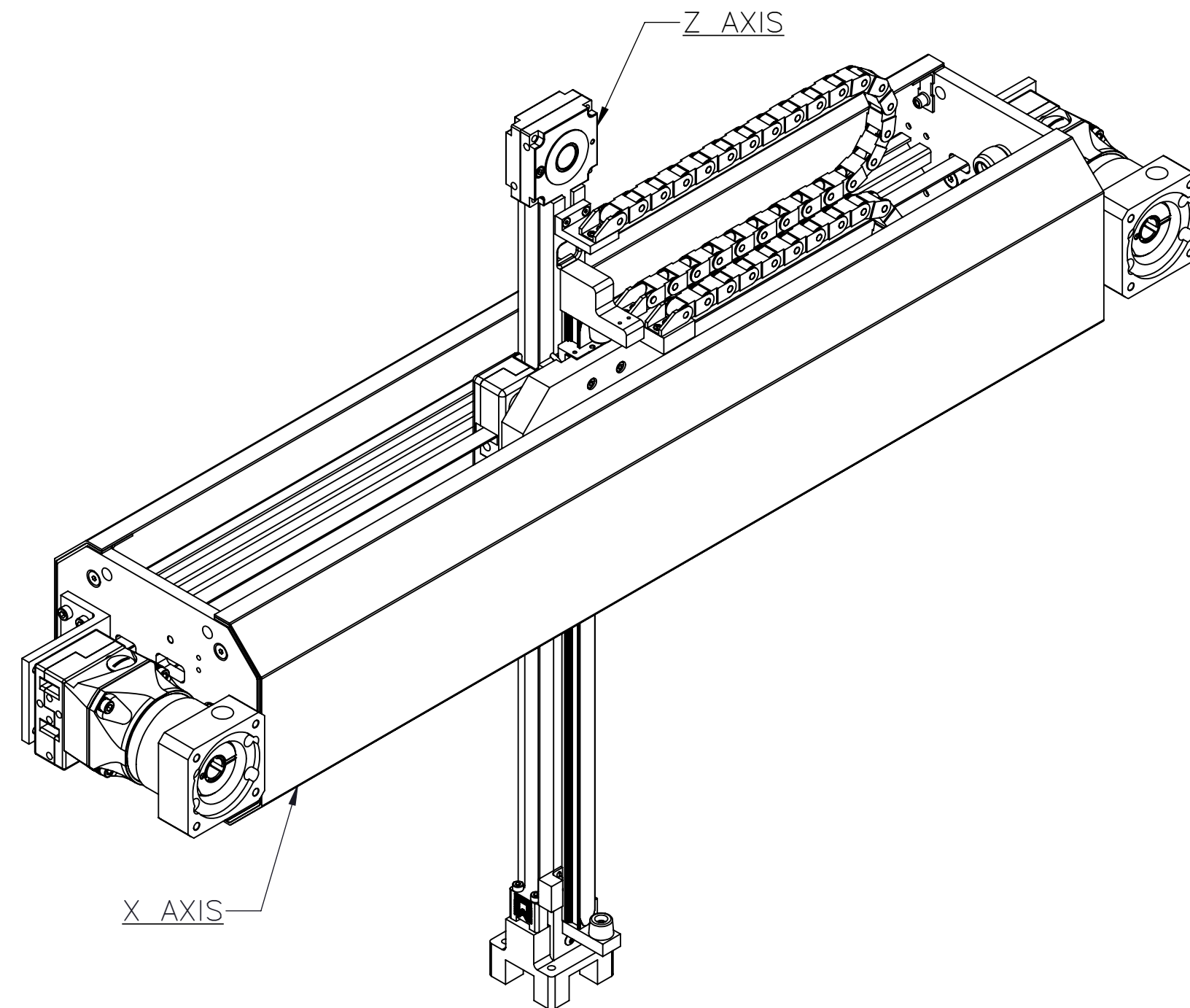


DETAIL A
SCALE 1 : 1



 MACRON DYNAMICS INC	DRAWN BY: JA CHECKED BY: LAST SAVED BY: TH	DATE: 4/24/2019 DATE: DD/MM/YYYY DATE: 10/12/2022	MATERIAL: FINISH:	TITLE: MACRON T-BOT 12 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	SHEET 3 OF 6 PART NUMBER MGS-TBG-12-X-X-X REV 00	
	SURFACE FINISH ∇ 63 BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION				
	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.				

MOTOR SIZING INFORMATION



PROPERTY	VALUE
PULLEY PITCH ϕ	33.42mm (1.32")
PULLEY WIDTH	16.3mm (0.64")
PULLEY MATERIAL	STEEL
TRAVEL PER REV	105mm
BELT WIDTH	12mm (.472")
ULTIMATE TENSILE STRENGTH OF BELT	800 LBS (3559 N)
RECOMMENDED BELT RUNNING LOAD	200 LBS (889 N)


X-TRAVEL = _____ mm

Y-TRAVEL = _____ mm

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

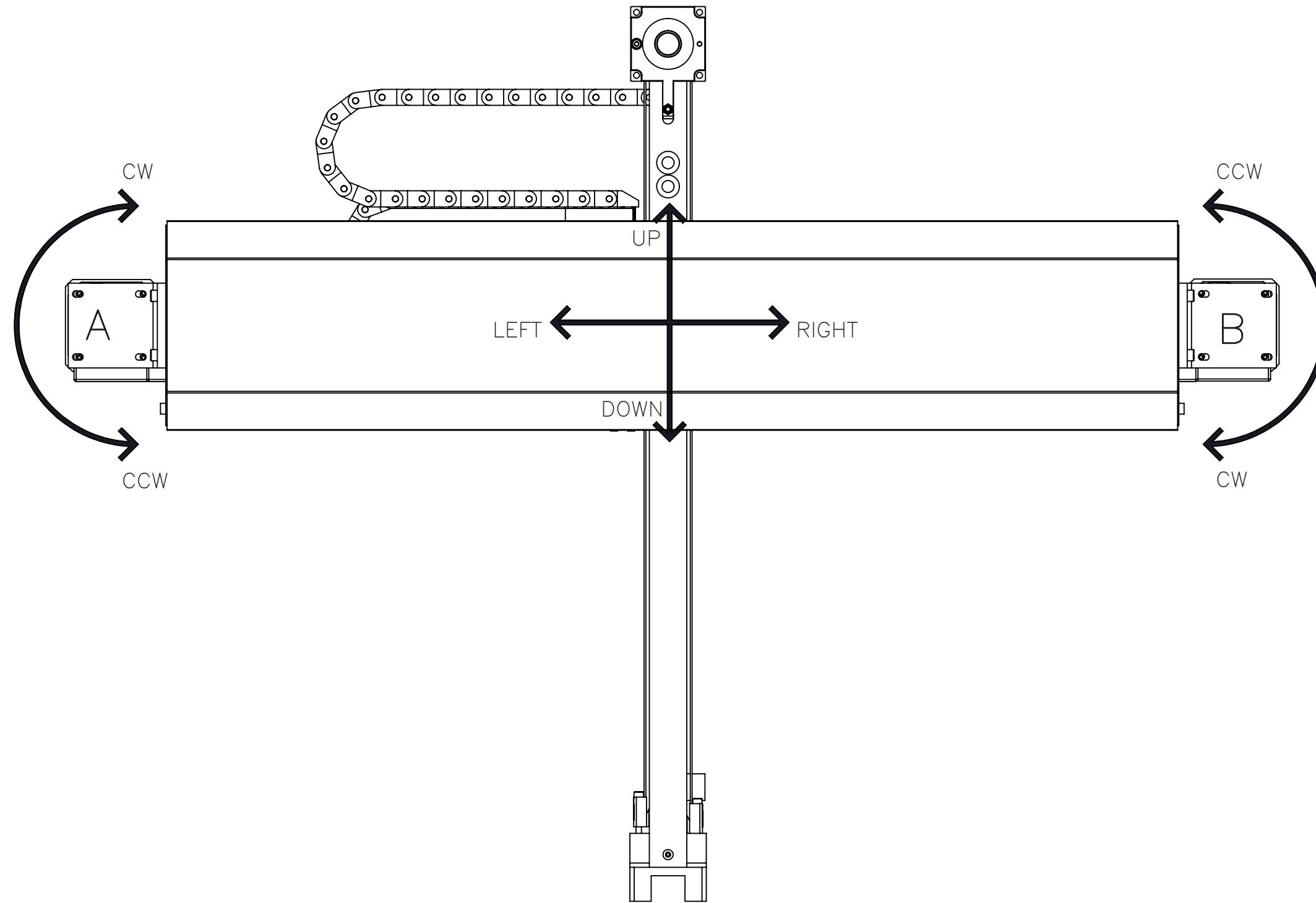
GEARBOX MASS (ADD TO SYSTEM MASSES)	MPG-062	1.0kg
	MRG-062	3.0kg

TOTAL BELT MASS	$(X \text{ TRAVEL} \times .00008) + (Z \text{ TRAVEL} \times .00008) + .057 = \text{kg}$
TOTAL MOVING MASS	$(X \text{ TRAVEL} \times .0001) + (Z \text{ TRAVEL} \times .0026) + 3.70 = \text{kg}$
TOTAL SYSTEM MASS	$(X \text{ TRAVEL} \times .0092) + (Z \text{ TRAVEL} \times .0028) + 8.71 = \text{kg}$

 MACRON DYNAMICS INC	DRAWN BY: JA DATE: 4/24/2019 CHECKED BY: DATE: DD/MM/YYYY LAST SAVED BY: TH DATE: 10/12/2022	MATERIAL:	TITLE: MACRON T-BOT 12 GANTRY
	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. TOLERANCES UNLESS NOTED OTHERWISE: .X ± .762 .XX ± .254 .XXX ± .127 ANG ± 0°30'	FINISH:	
	SURFACE FINISH \checkmark BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION	SCALE 1:1 SHEET SIZE C	
<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 4 OF 6	PART NUMBER MGS-TBG-12-X-X-X	REV 00


MOTOR DYNAMICS

(ASSUMES MOTORS ARE ROTATING AT SAME ANGULAR VELOCITY)



ROTATIONAL DIRECTION		Z-AXIS MOVEMENT
PULLEY A	PULLEY B	
CW	CW	LEFT
CW	CCW	UP
CCW	CW	DOWN
CCW	CCW	RIGHT

*PULLEY ROTATION AND Z-AXIS MOVEMENT ARE WITH RESPECT TO THIS GANTRY VIEW

 MACRON DYNAMICS INC	DRAWN BY: JA DATE: 4/24/2019	MATERIAL:	TITLE:
	CHECKED BY: DATE: DD/MM/YYYY	FINISH:	SCALE 1:1 SHEET SIZE C
	LAST SAVED BY: TH DATE: 10/12/2022		
	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. TOLERANCES UNLESS NOTED OTHERWISE: .X ± .762 .XX ± .254 .XXX ± .127 ANG ± 0°30'	SURFACE FINISH $\sqrt{\quad}$	SHEET 5 OF 6 PART NUMBER MGS-TBG-12-X-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

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

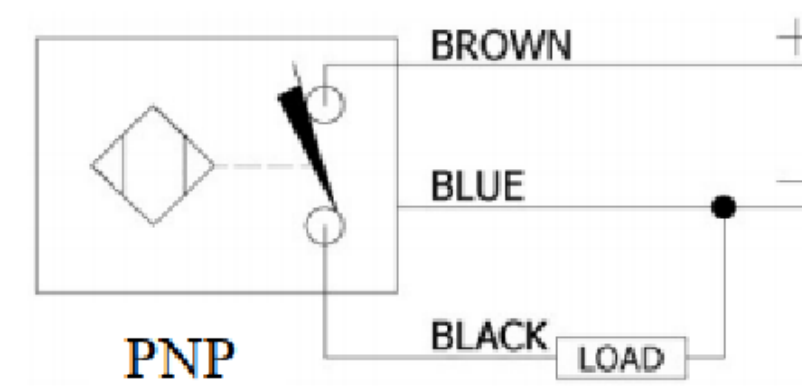
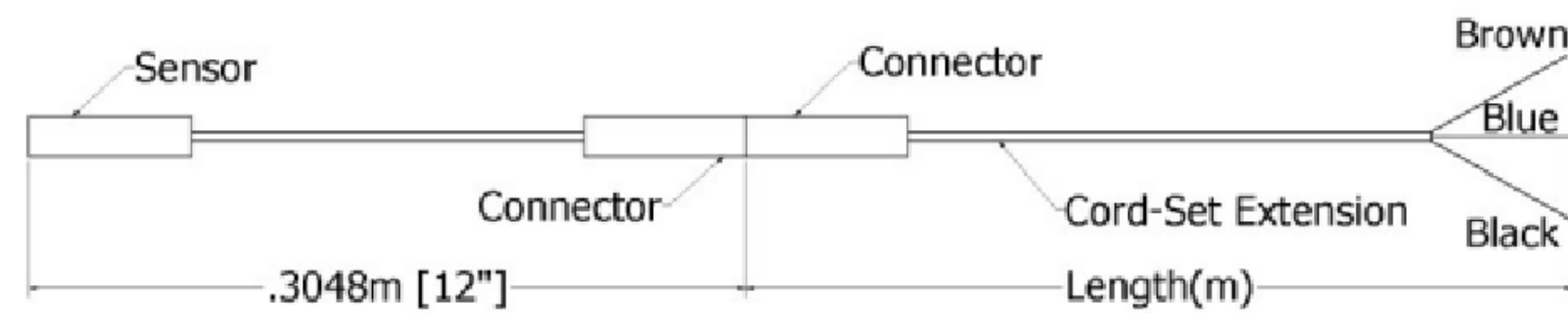
Part Number Configuration

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

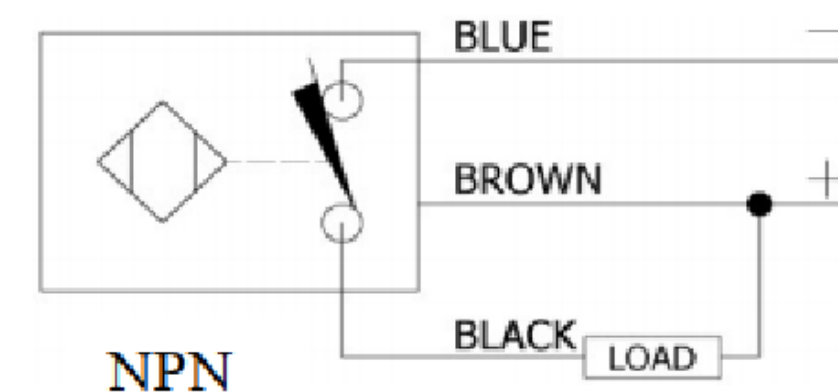
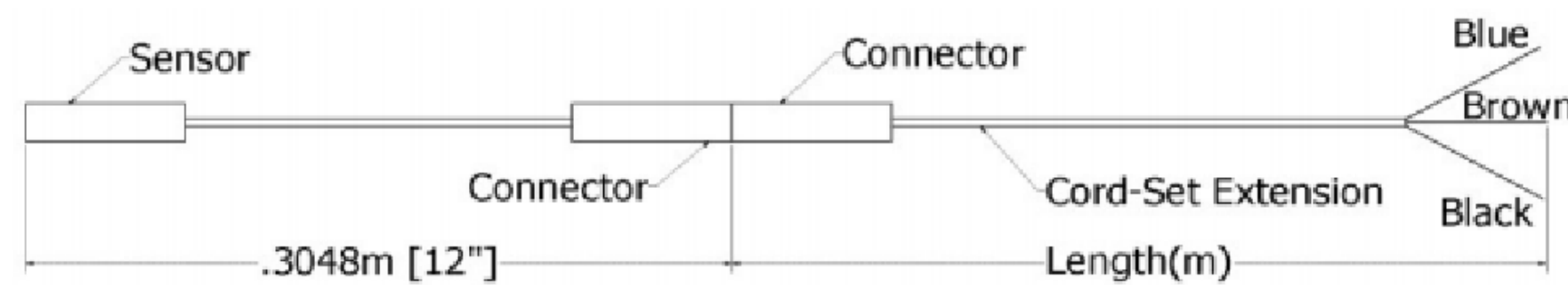
PNP or NPN	NC or NO	02	Meters
PNP or NPN	NC or NO	06	Meters
PNP or NPN	NC or NO	12	Meters

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

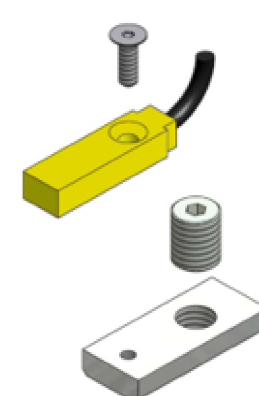
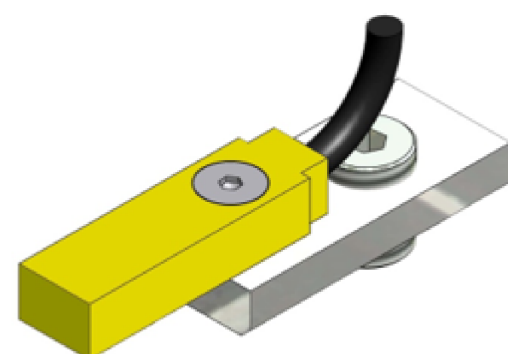
PNP Diagrams



NPN Diagrams



KIT INCLUDES – SENSOR, CORDSET EXTENSION, AND MOUNTING HARDWARE



	DRAWN BY: PHW CHECKED BY: LAST SAVED BY: Paul	DATE: 11/26/2017 DATE: DD/MM/YYYY DATE: 10/12/2022	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: 63 ✓ BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION	SHEET: 6 OF 6 PART NUMBER:	SCALE: 1:1 SHEET SIZE: C REV: