

MGS-TBG-25- [] -X- []

GEARBOX MODEL (CHOOSE FRAME SIZE)
MPG-064____ MPG-084____
MRG-064____ MRG-084____
RATIO:_____

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

MOTOR INFORMATION
MANUFACTURER:_____
MODEL:_____

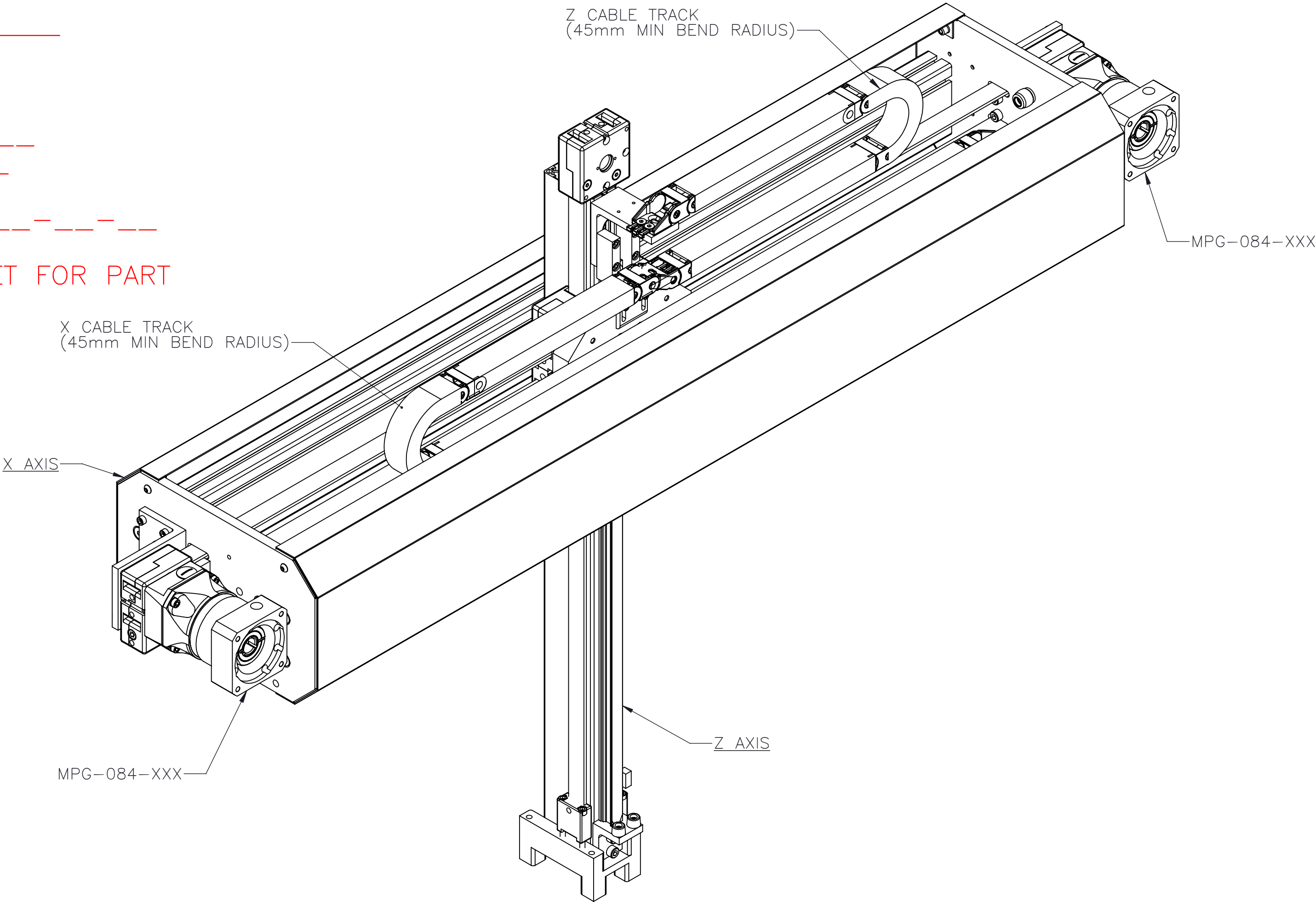
SENSOR INFORMATION X-AXIS:
HOME-QTY____ 244-____-____-____
EOT-QTY____ 244-____-____-____
SENSOR INFORMATION Z-AXIS:
EOT-QTY (2 MAX) ____ 244-____-____-____

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


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*



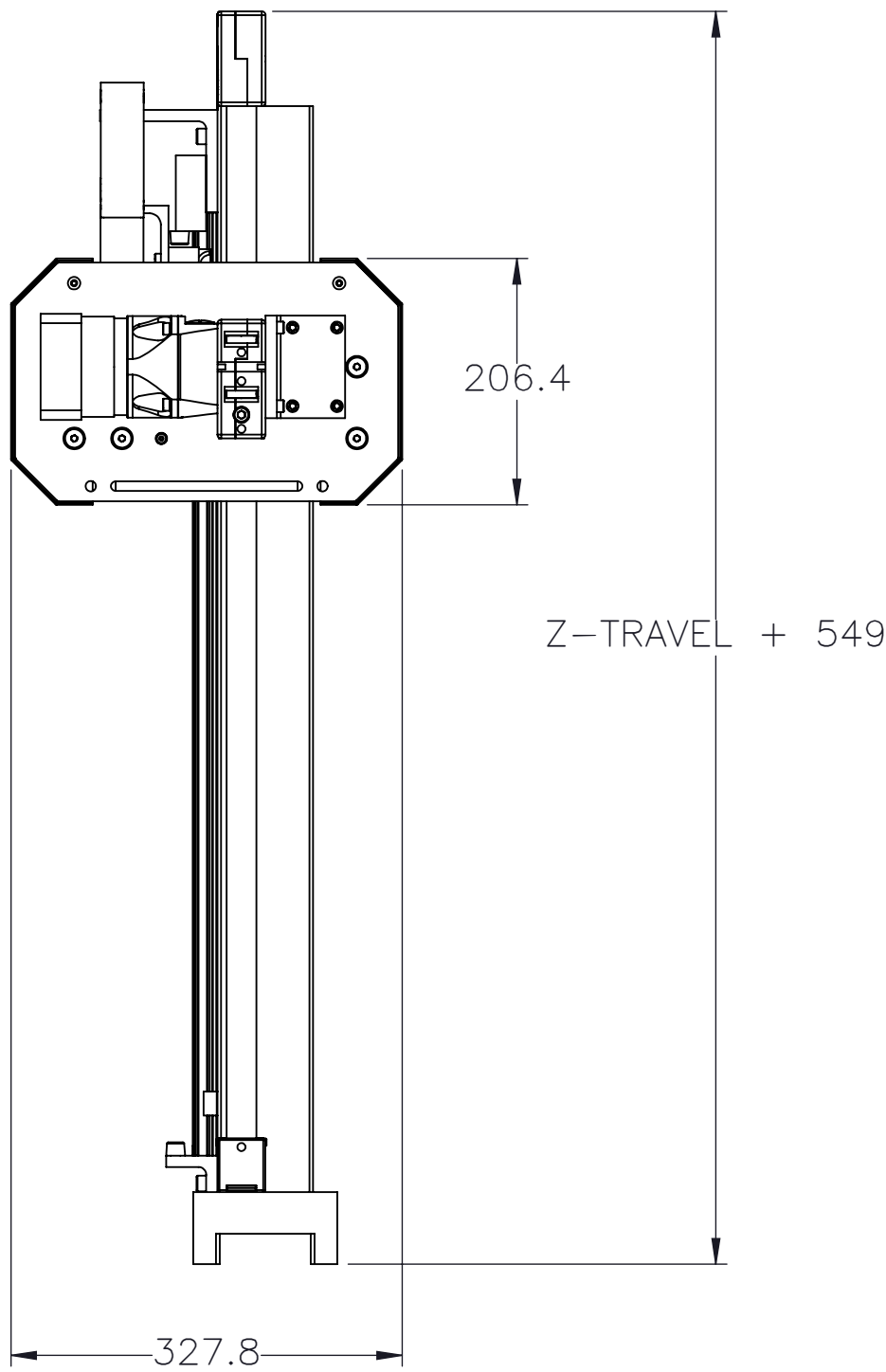
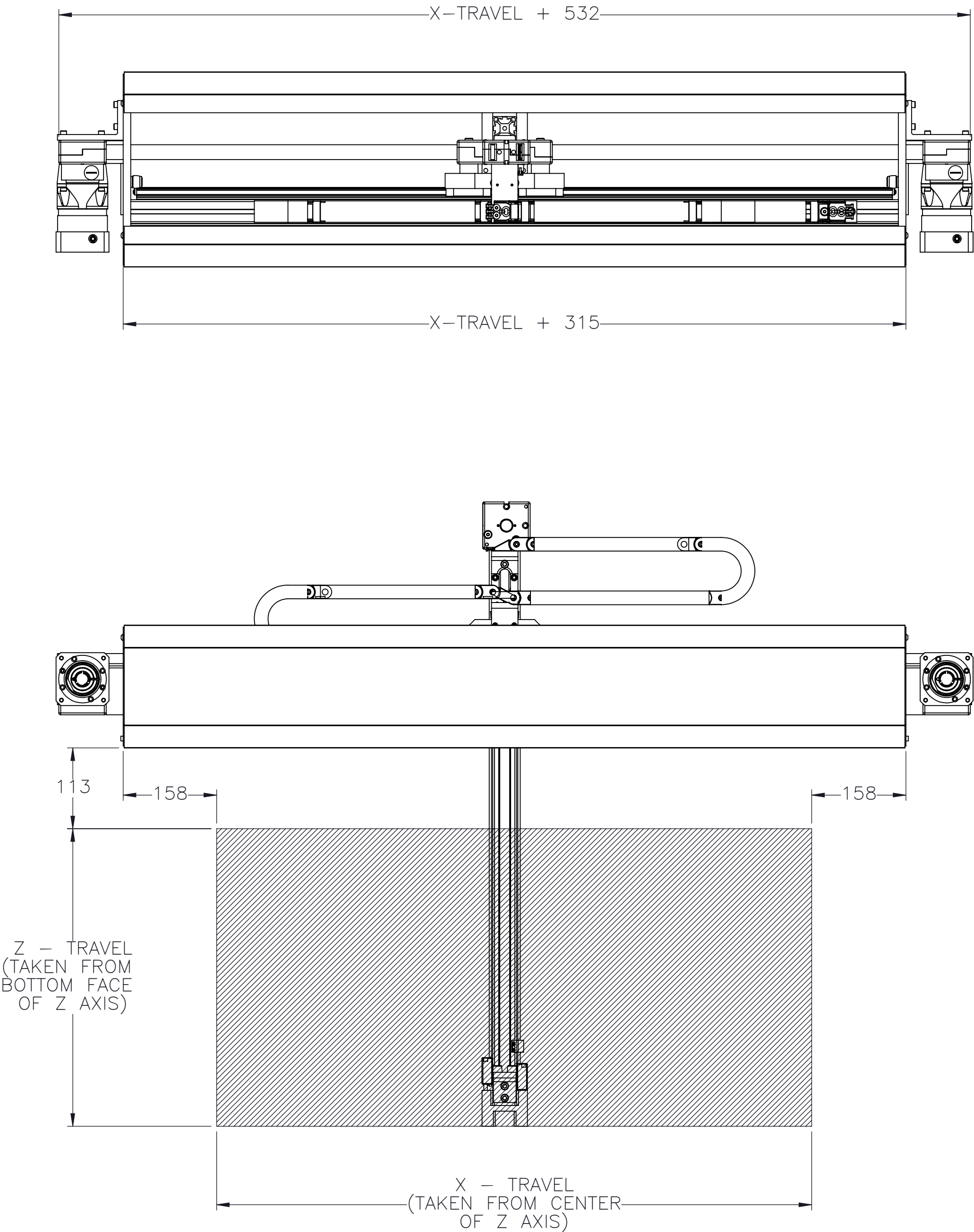
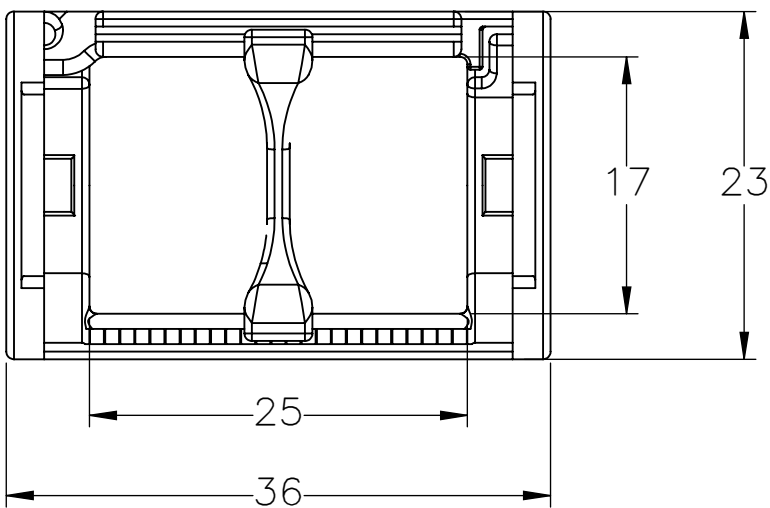
APPROVED: _____
SIGN & PRINT
DATE: _____
PO:REFERENCE#: _____

<div></div> <div>MACRON DYNAMICS INC</div>	DRAWN BY: JA	DATE: 4/24/2019	MATERIAL:		TITLE: MACRON T-BOT 25 GANTRY			
	CHECKED BY:	DATE: DD/MM/YYYY						
	LAST SAVED BY: TH	DATE: 7/22/2022						
	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETER. TOLERANCES UNLESS NOTED OTHERWISE:		FINISH:					
			.X ± .762 .XX ± .254 .XXX ± .127 ANG ± 0°30'					
<div>THIS DRAWING IS THE PROPERTY OF MACRON DYNAMICS. ANY REPRODUCTION FOR QUOTATION, MANUFACTURING, OR PURCHASING PURPOSES ONLY. RELEASE OF DRAWINGS TO OTHER CONCERNS NOT CONSTITUTE LICENSING IN ANY WAY. INFORMATION CONTAINED HEREIN IS PROPRIETARY AND CONFIDENTIAL</div>	SURFACE FINISH 63/√				SCALE 1:1		SHEET SIZE C	
	BREAK ALL SHARP EDGES		SHEET		PART NUMBER		REV	
	DIMENSIONAL LIMITS APPLY AFTER FINISHING		1 OF 10		MGS-TBG-25-X-X-X		02	
	THIRD ANGLE PROJECTION							

REVISION HISTORY			
REV.	DESCRIPTION	DATE	REVISED BY
01	SLOT ADDED TO METAL COVER AND FLIPPED METAL BOTTOM MOUNT	8/16/2021	AW
02	CHANGED CABLE TRACK	7/22/2022	TH

GANTRY FOOTPRINT

CABLE TRACK CROSS SECTION
(SAME FOR BOTH AXES)

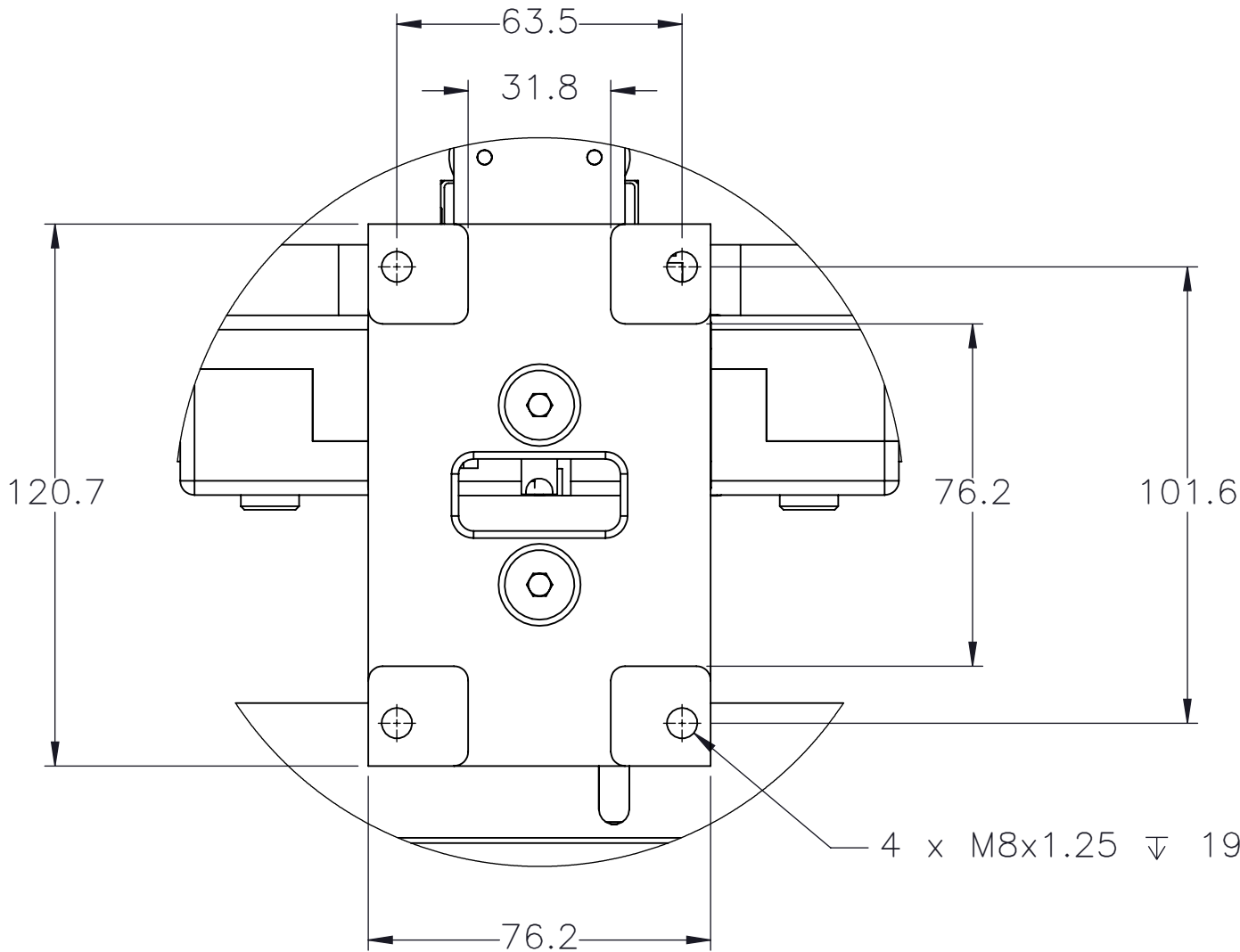
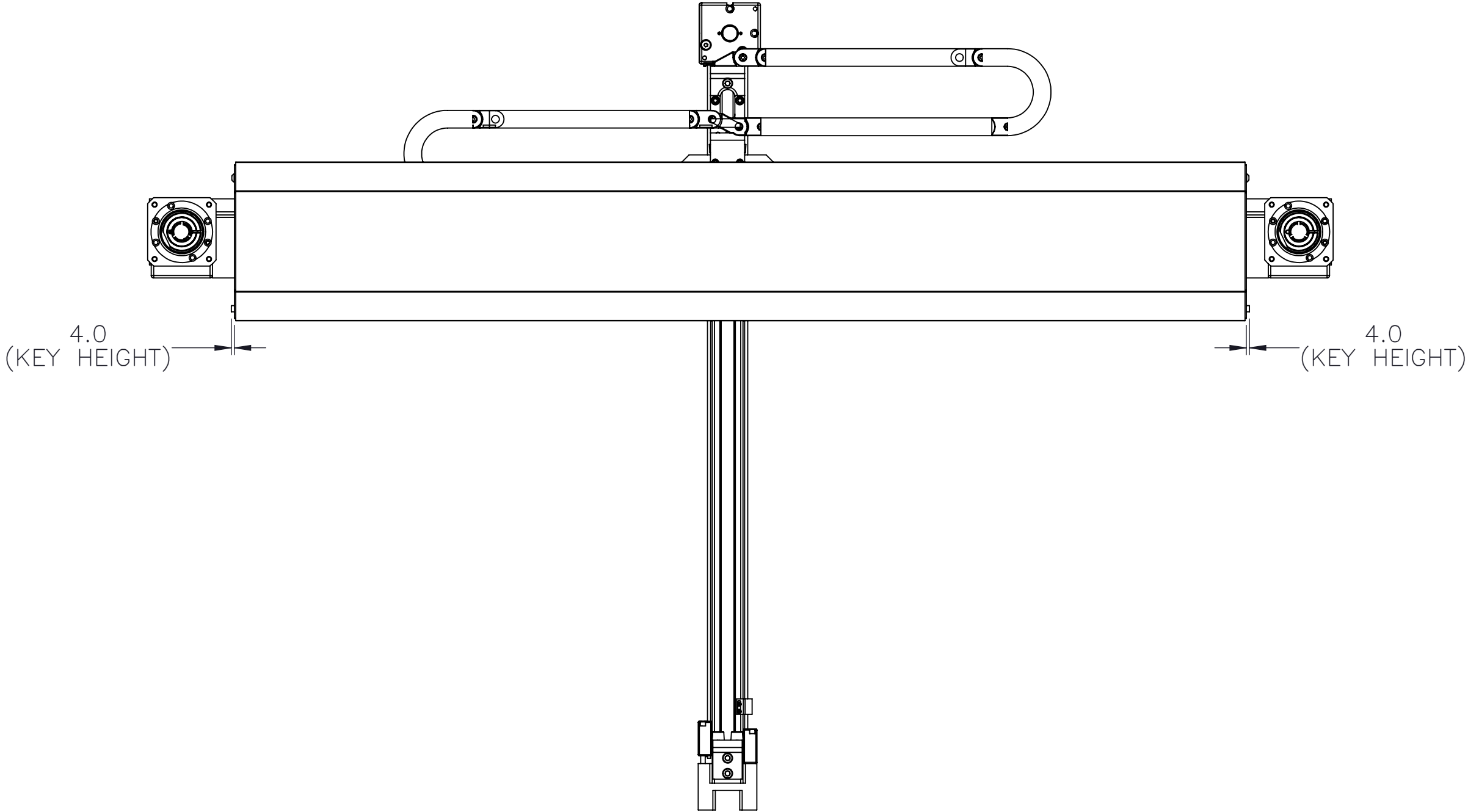
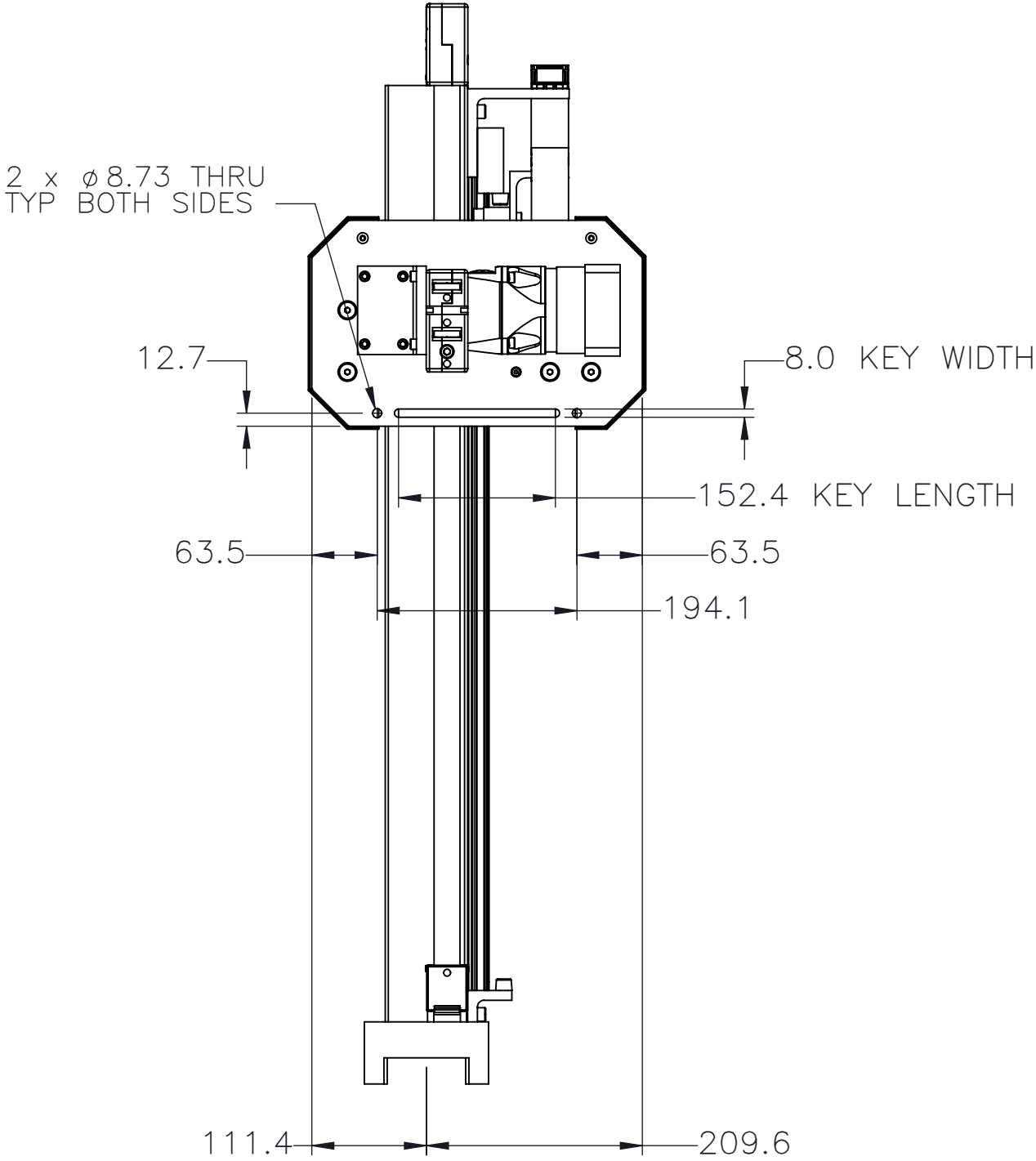


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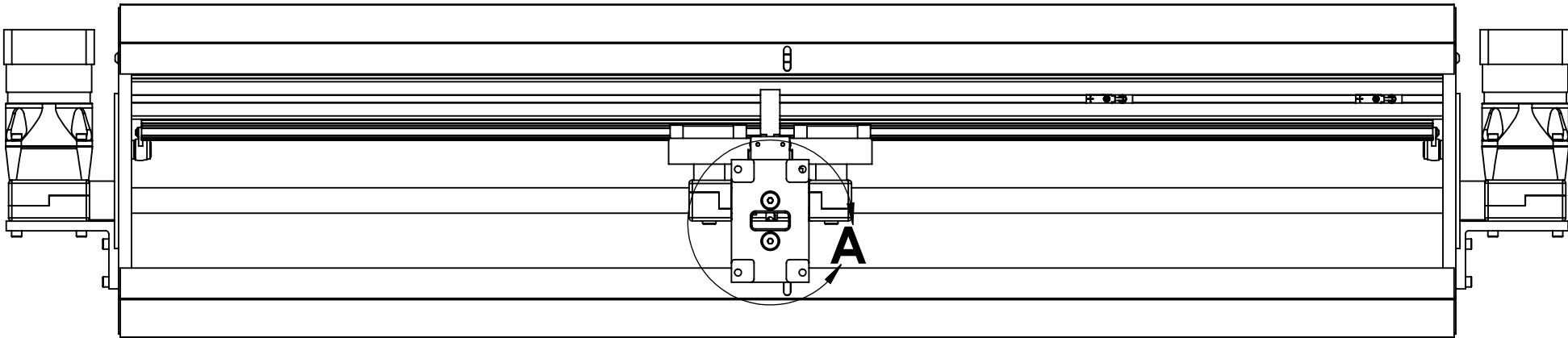
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CHECKED BY: TH	DATE: DD/MM/YYYY	FINISH:		
LAST SAVED BY: TH	DATE: 7/22/2022		SCALE 1:1	SHEET SIZE C
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES UNLESS NOTED OTHERWISE:	.X ± .03 .XX ± .010 .XXX ± .005 ANG ± 0°30'			
SURFACE FINISH 63		SHEET 2 OF 10	PART NUMBER MGS-TBG-25-X-X-X	REV 02
BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION				

GANTRY MOUNTING FEATURES



DETAIL A
SCALE 2 : 3



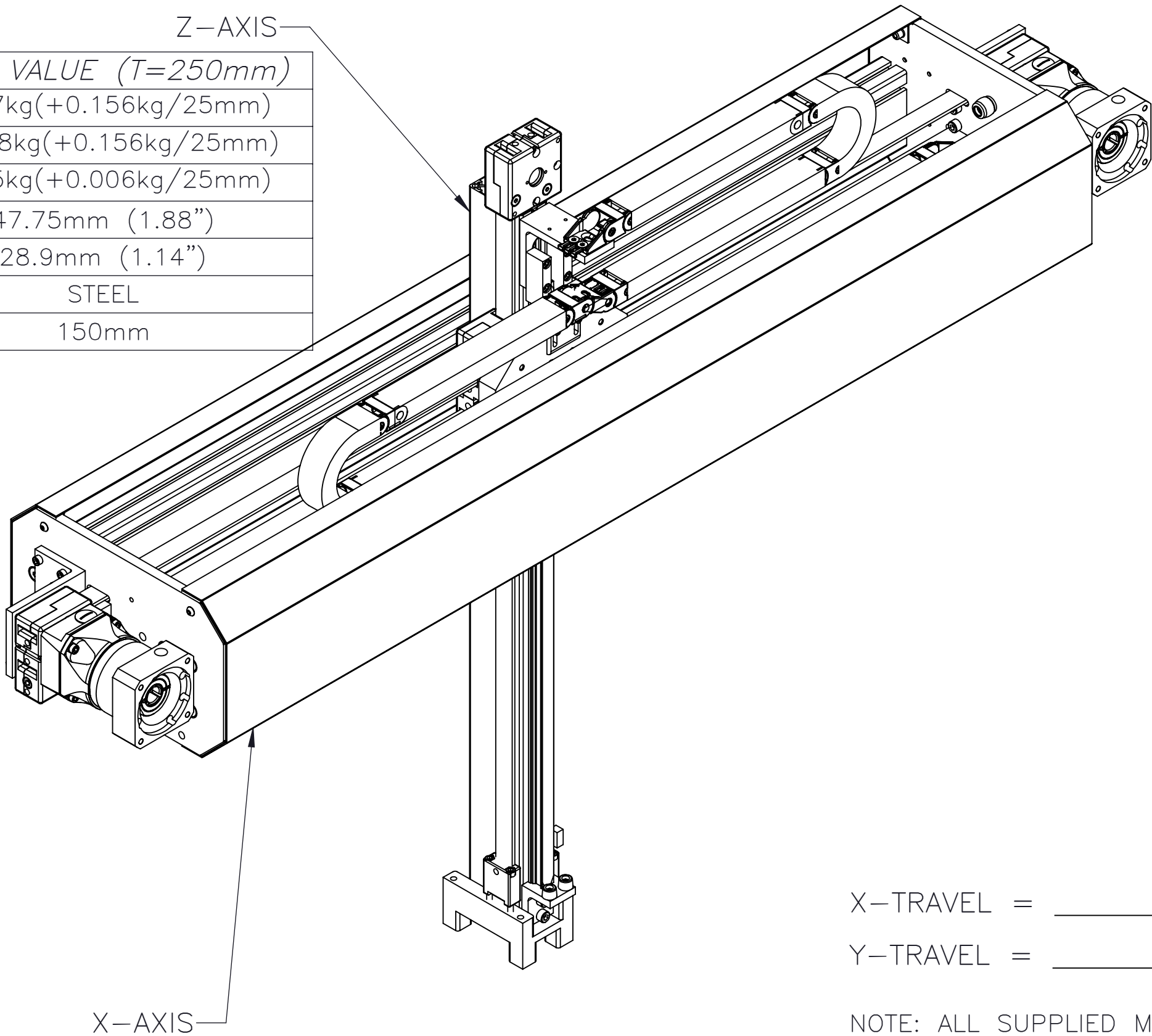
 MACRON DYNAMICS INC	DRAWN BY: JA	DATE: 4/24/2019	MATERIAL:		TITLE: MACRON T-BOT 25 GANTRY			
	CHECKED BY:	DATE: DD/MM/YYYY						
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	BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING							
	THIRD ANGLE PROJECTION		3 OF 10		MGS-TBG-25-X-X-X		02	

MOTOR SIZING INFORMATION

(INCREMENTAL ADDERS REFER TO MASS PER TRAVEL LENGTH)

BASE TRAVELS USED
X-TRAVEL = 250mm
Z-TRAVEL = 250mm

PROPERTY	BASE VALUE (T=250mm)
MOVING MASS	5.897kg(+0.156kg/25mm)
SYSTEM MASS	11.928kg(+0.156kg/25mm)
BELT MASS OF Z-AXIS	0.155kg(+0.006kg/25mm)
PULLEY PITCH ϕ	47.75mm (1.88")
PULLEY WIDTH	28.9mm (1.14")
PULLEY MATERIAL	STEEL
TRAVEL PER REV	150mm



PROPERTY	BASE VALUE (T=250mm)
*MOVING MASS	0.237kg(+0.013kg/25mm)
BELT MASS OF X-AXIS	0.184kg(+0.006kg/25mm)
PULLEY PITCH ϕ	47.75 (1.88")
PULLEY WIDTH	28.9mm (1.14")
PULLEY MATERIAL	STEEL
TRAVEL PER REV	150mm


*Z AXIS SYSTEM MASS NEEDS TO BE ADDED TO THIS

X-TRAVEL = _____ mm

Y-TRAVEL = _____ mm

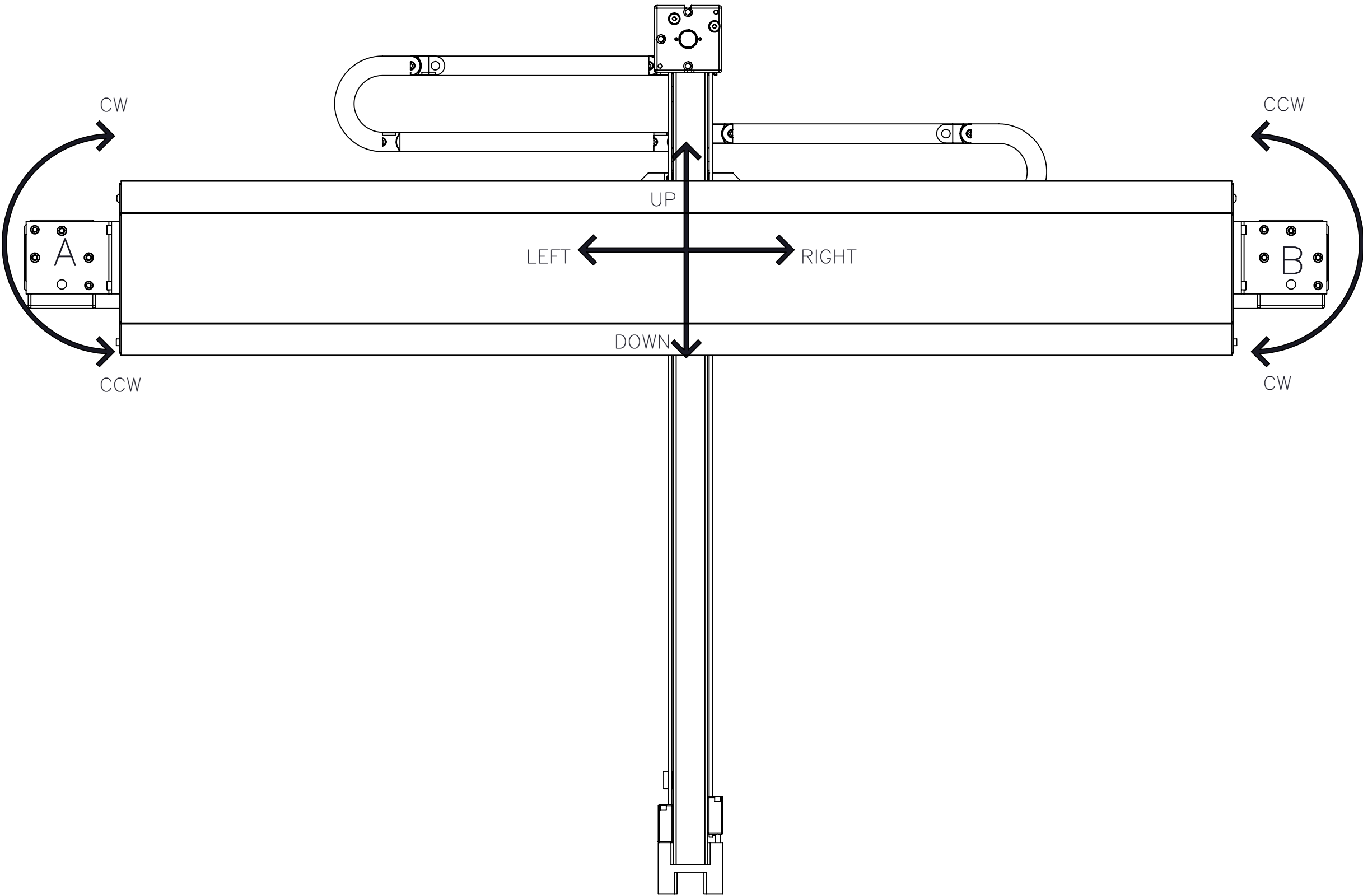
NOTE: ALL SUPPLIED MASSES DO NOT INCLUDE CUSTOMER COMPONENTS (MOTORS, CABLES, ETC)

GEARBOX MASS (ADD TO SYSTEM MASSES)	MPG-064	1.0kg
	MPG-084	2.3kg
	MRG-064	3.0kg
	MRG-084	5.6kg

TOTAL BELT MASS	$(X \text{ TRAVEL} \times .00024) + (Z \text{ TRAVEL} \times .00024) + .221 = \text{kg}$								
TOTAL SYSTEM MASS	$(X \text{ TRAVEL} \times .0228) + (Z \text{ TRAVEL} \times .0059) + 26.72 = \text{kg}$								
<div> MACRON DYNAMICS INC</div>		DRAWN BY: JA	DATE: 4/24/2019	MATERIAL:		TITLE: MACRON T-BOT 25 GANTRY			
		CHECKED BY:	DATE: DD/MM/YYYY						
		LAST SAVED BY: TH	DATE: 7/22/2022	FINISH:					
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		SURFACE FINISH \checkmark				SCALE 1:1		SHEET SIZE C	
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		DIMENSIONAL LIMITS APPLY AFTER FINISHING							
		THIRD ANGLE PROJECTION							


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

<div></div> <div>MACRON DYNAMICS INC</div>	DRAWN BY: JA	DATE: 4/24/2019	MATERIAL:		TITLE:	
	CHECKED BY:	DATE: DD/MM/YYYY				
	LAST SAVED BY: TH	DATE: 7/22/2022	FINISH:		SCALE 1:1 SHEET SIZE C	
	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. TOLERANCES UNLESS NOTED OTHERWISE:					
	SURFACE FINISH $\sqrt{63}$		SHEET		PART NUMBER	
BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION		5 OF 10		MGS-TBG-25-X-X-X		
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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

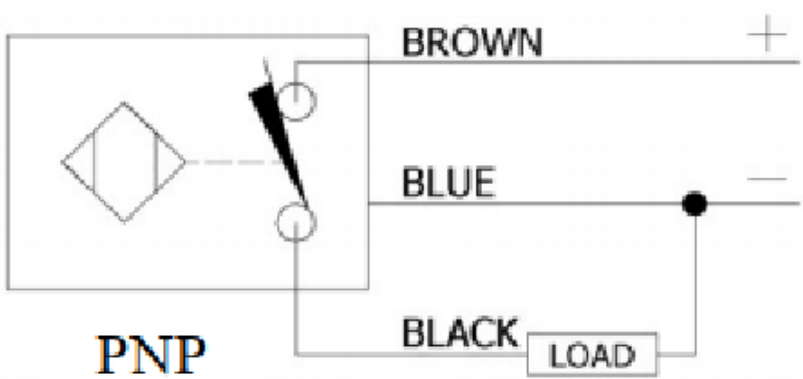
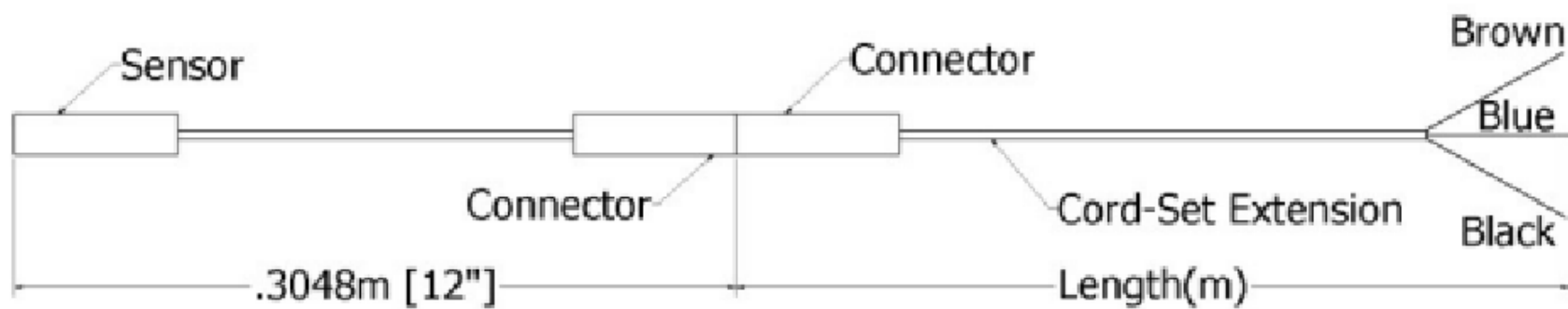
Part Number Configuration

244-_-_-_-_-

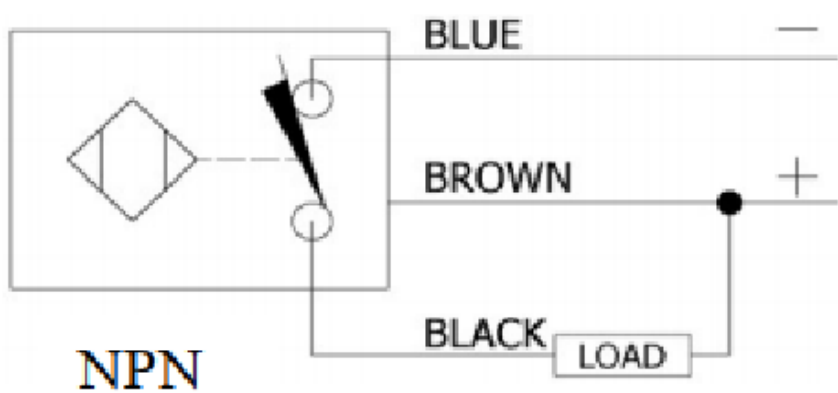
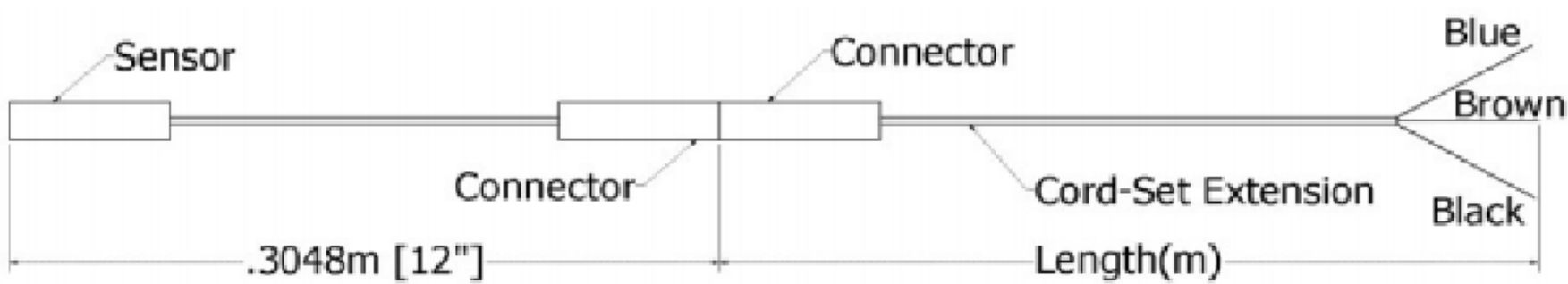
PNP or NPN	NC or NO	02	Meters
PNP or NPN	NC or NO	06	Meters
PNP or NPN	NC or NO	12	Meters

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

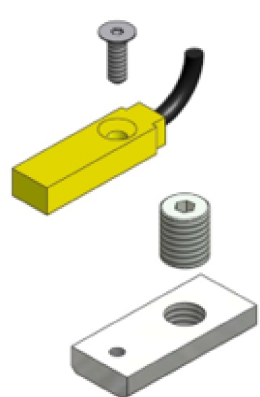
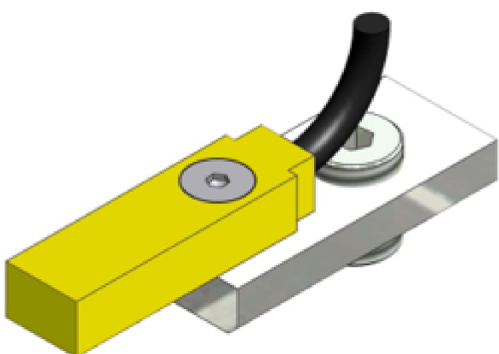
PNP Diagrams




NPN Diagrams



KIT INCLUDES – SENSOR, CORDSET EXTENSION, AND MOUNTING HARDWARE



<div></div> <div>MACRON DYNAMICS INC</div>	DRAWN BY: PHW	DATE: 11/26/2017	MATERIAL:		TITLE: T-SLOT SENSOR KIT			
	CHECKED BY:	DATE: DD/MM/YYYY						
	LAST SAVED BY: Paul	DATE: 7/22/2022	FINISH:		SCALE 1:1 SHEET SIZE C			
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	SURFACE FINISH $\sqrt{63}$							
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BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION								