

MGS-TBG-50--X-

GEARBOX MODEL (CHOOSE FRAME SIZE)

MPG-084____ MPG-114____
MRG-084____ MRG-114____
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-____-NO-____

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

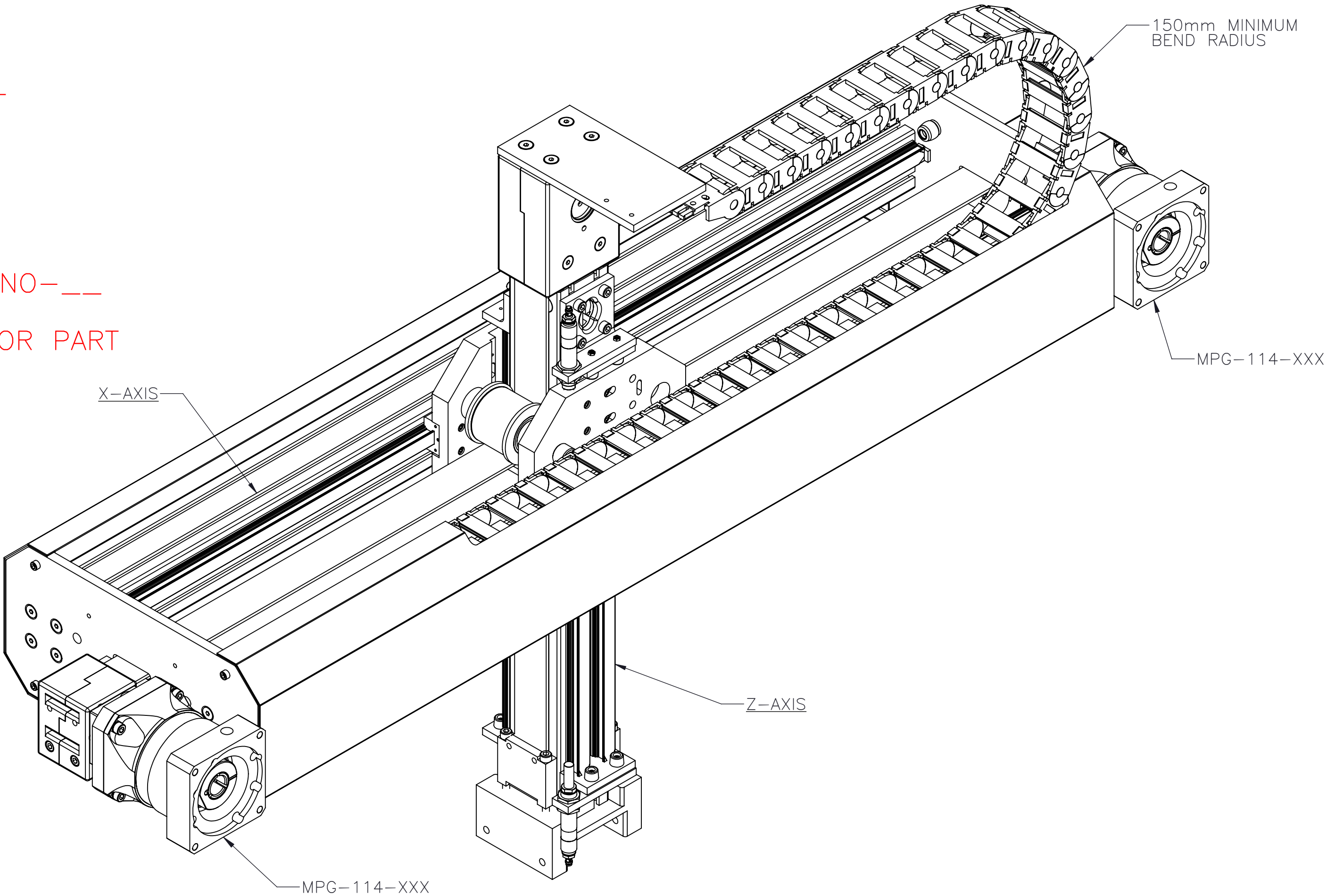
ENTER Z-AXIS TRAVEL

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*




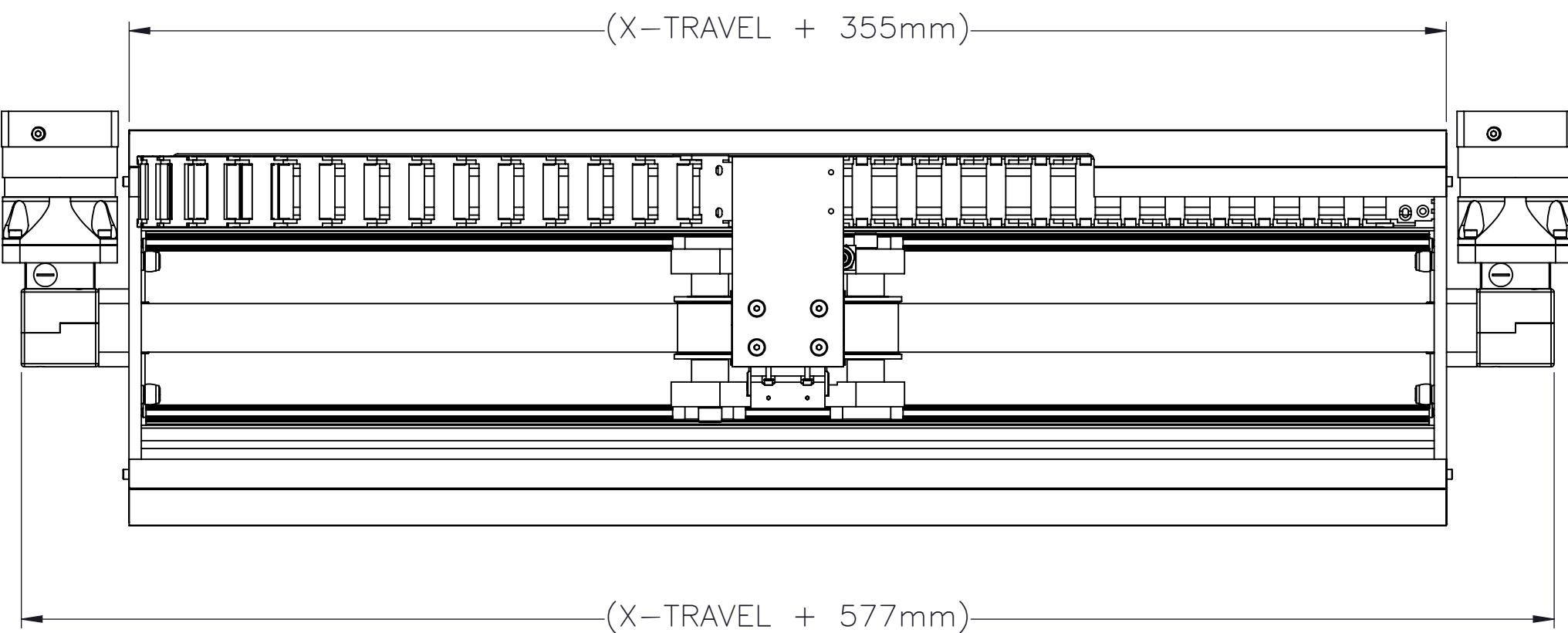
APPROVED: _____

SIGN & PRINT

DATE: _____

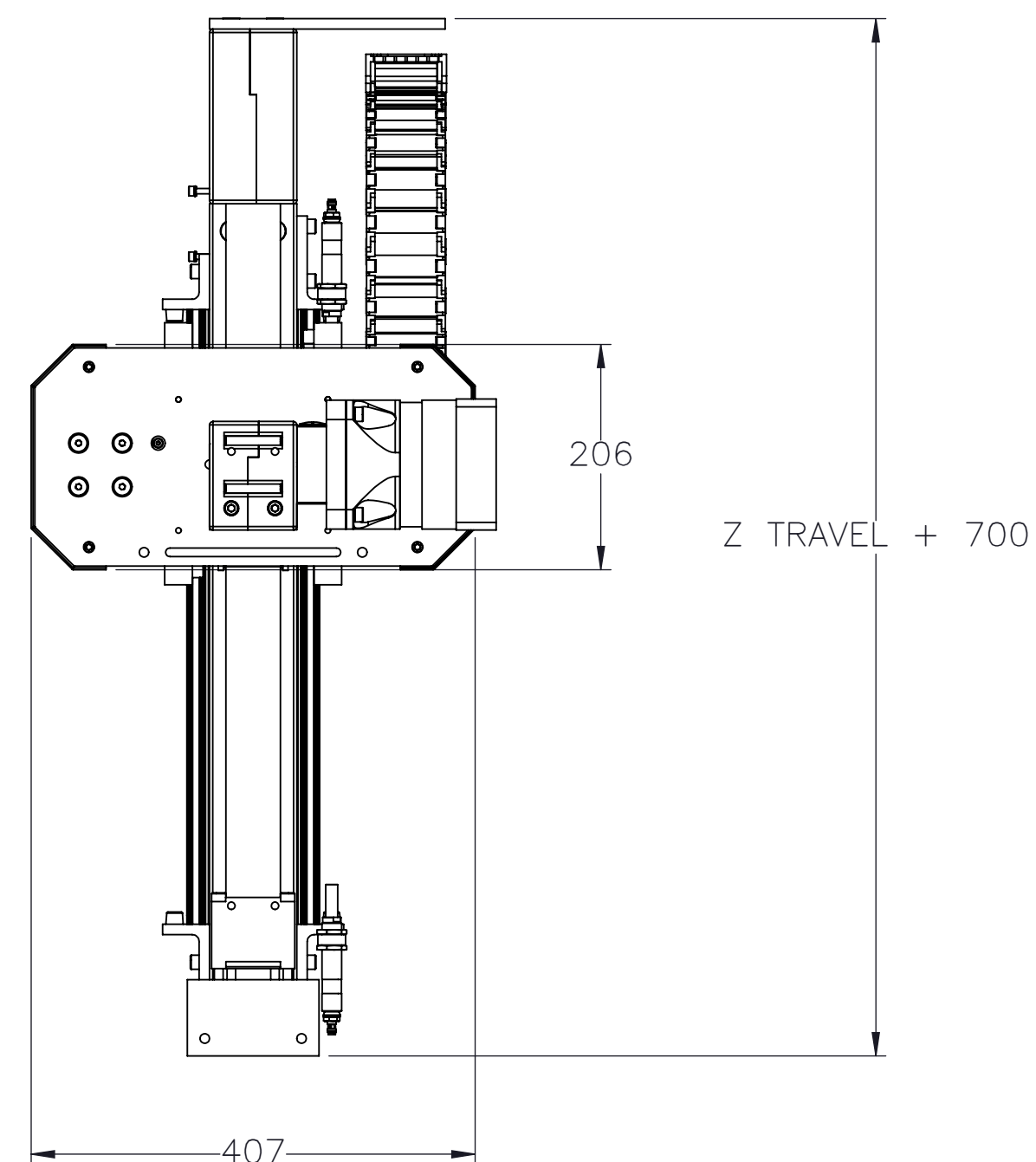
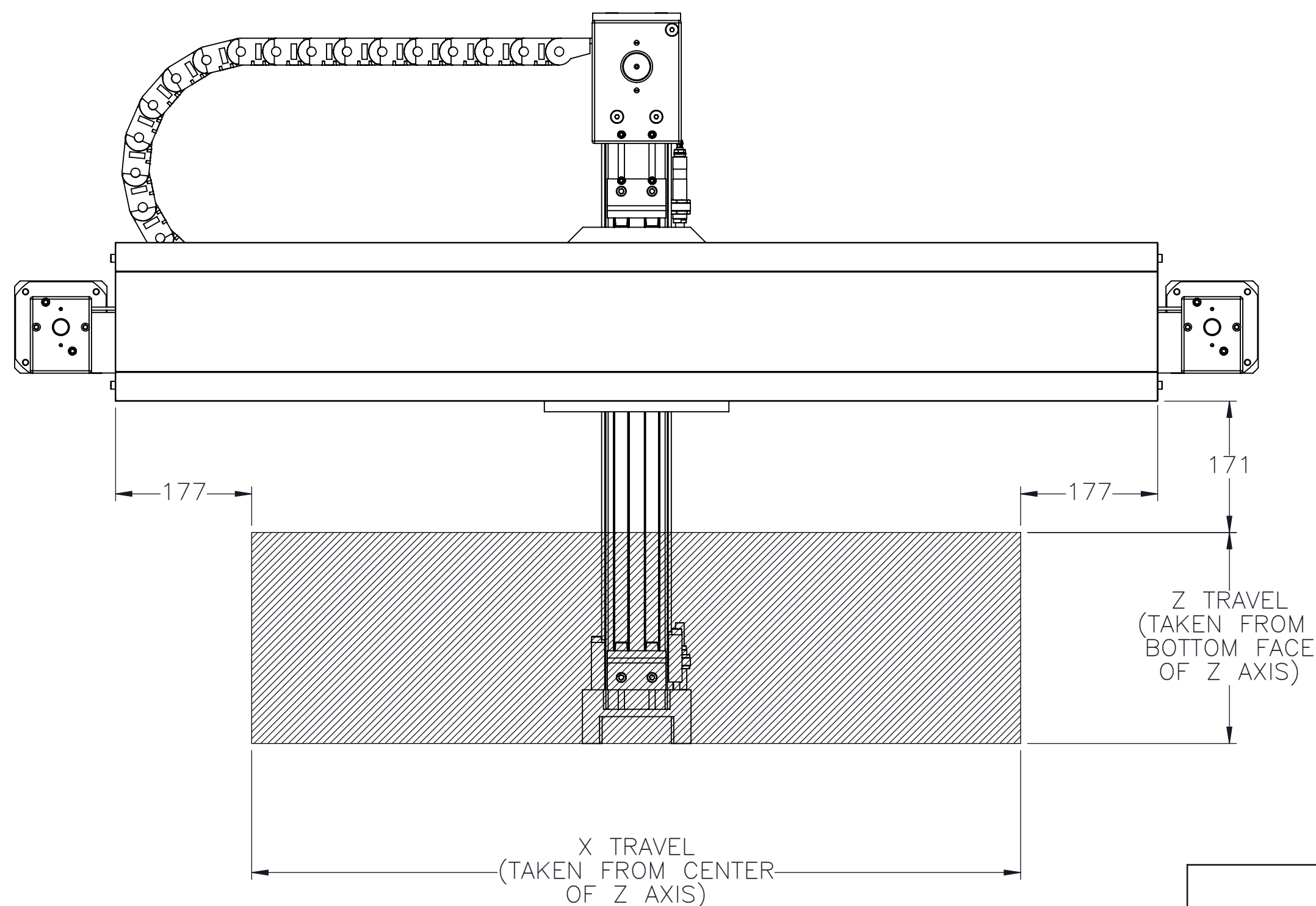
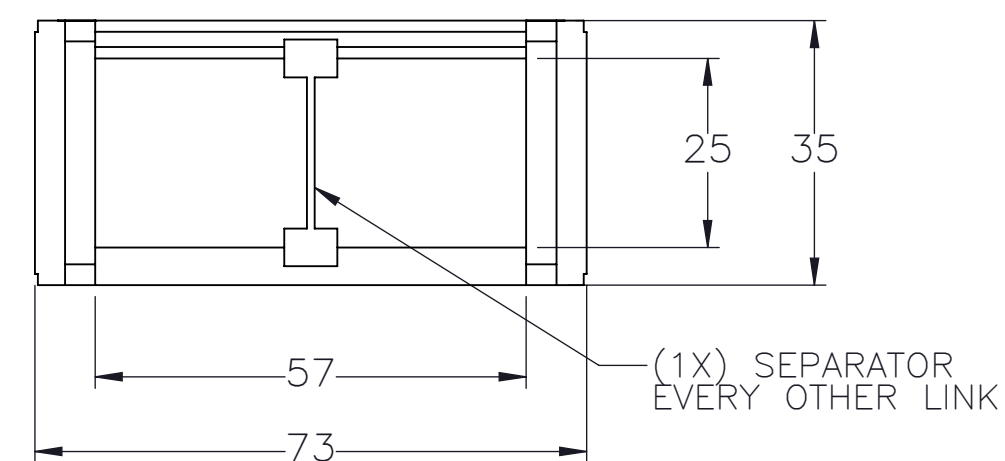
PO:REFERENCE#: _____


<div></div> <div>MACRON DYNAMICS INC</div>	DRAWN BY: TH	DATE: 8/14/2019	MATERIAL:		TITLE: MACRON TBG 50 GANTRY			
	CHECKED BY: — —	DATE: 8/14/2019						
	LAST SAVED BY: Tim	DATE: 8/16/2021	FINISH:		SCALE 1:1 SHEET SIZE C			
	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. TOLERANCES UNLESS NOTED OTHERWISE:						.X ± .762 .XX ± .254 .XXX ± .127 ANG ± 0°30'	
THIS DRAWING IS THE PROPERTY OF MACRON DYNAMICS. ANY REPRODUCTION 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 $\sqrt{\text{63}}$		SHEET 1 OF 20		PART NUMBER MGS-TBG-50-X-X-X		REV 01	
	BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING							
	THIRD ANGLE PROJECTION							



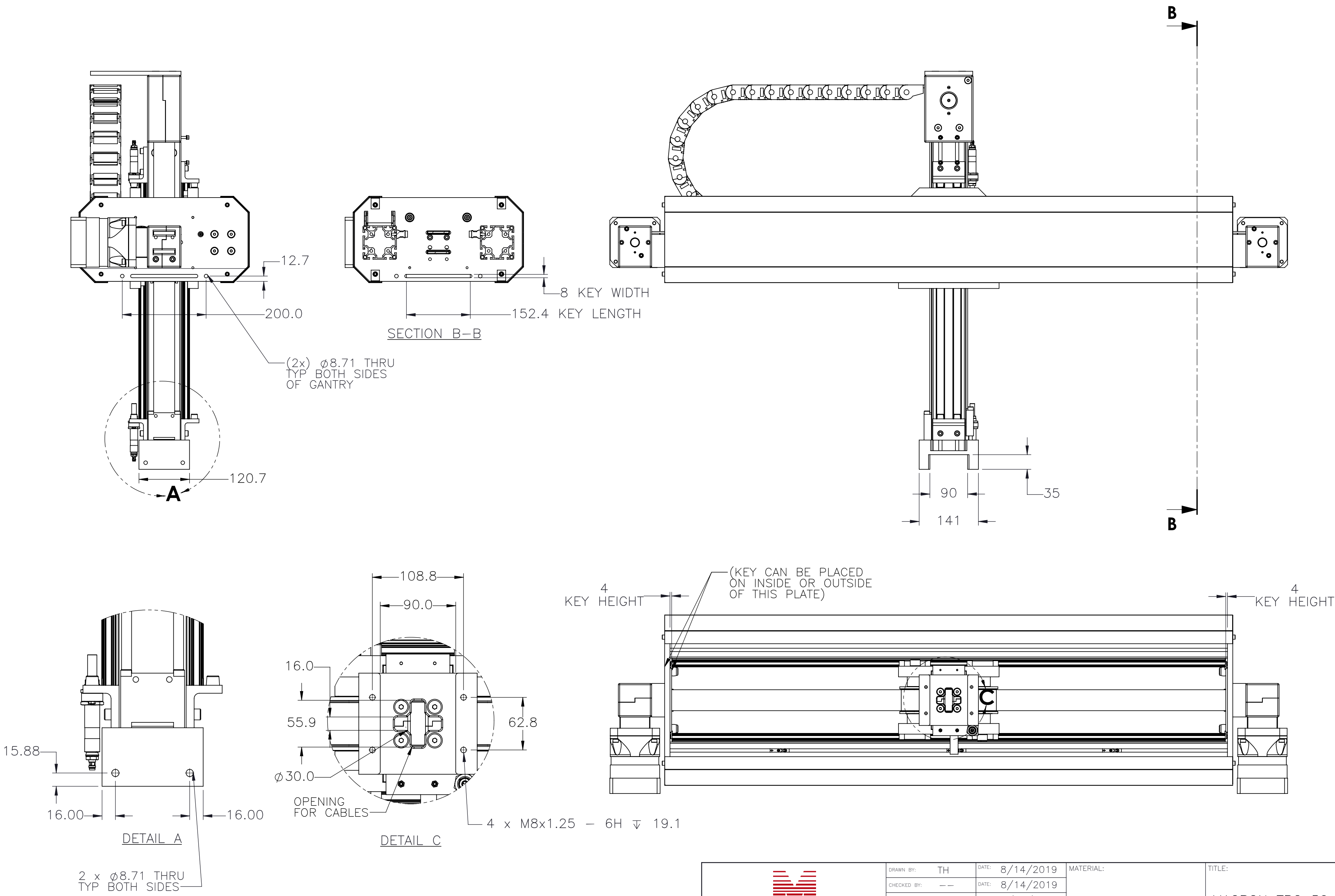
GANTRY FOOTPRINT


CABLE TRACK CROSS SECTION



<div></div> <div>MACRON DYNAMICS INC</div>	DRAWN BY: TH	DATE: 8/14/2019	MATERIAL:		TITLE: MACRON TBG 50 GANTRY			
	CHECKED BY: — —	DATE: 8/14/2019						
	LAST SAVED BY: Tim	DATE: 8/16/2021	FINISH:		SCALE 1:1 SHEET SIZE C			
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	BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING							
	THIRD ANGLE PROJECTION							

GANTRY MOUNTING FEATURES



 MACRON DYNAMICS INC	DRAWN BY: TH	DATE: 8/14/2019	MATERIAL:	TITLE: MACRON TBG 50 GANTRY	
	CHECKED BY: --	DATE: 8/14/2019	FINISH:		
	LAST SAVED BY: Tim	DATE: 8/16/2021		SCALE 1:1	SHEET SIZE C
	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. TOLERANCES UNLESS NOTED OTHERWISE:		.X \pm .762 .XX \pm .254 .XXX \pm .127 ANG \pm 0°30'		
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	BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING		3 OF 20	MGS-TBG-50-X-X-X	01
	THIRD ANGLE PROJECTION				

MOTOR SIZING INFORMATION

(INCREMENTAL ADDERS REFER TO MASS PER TRAVEL LENGTH)

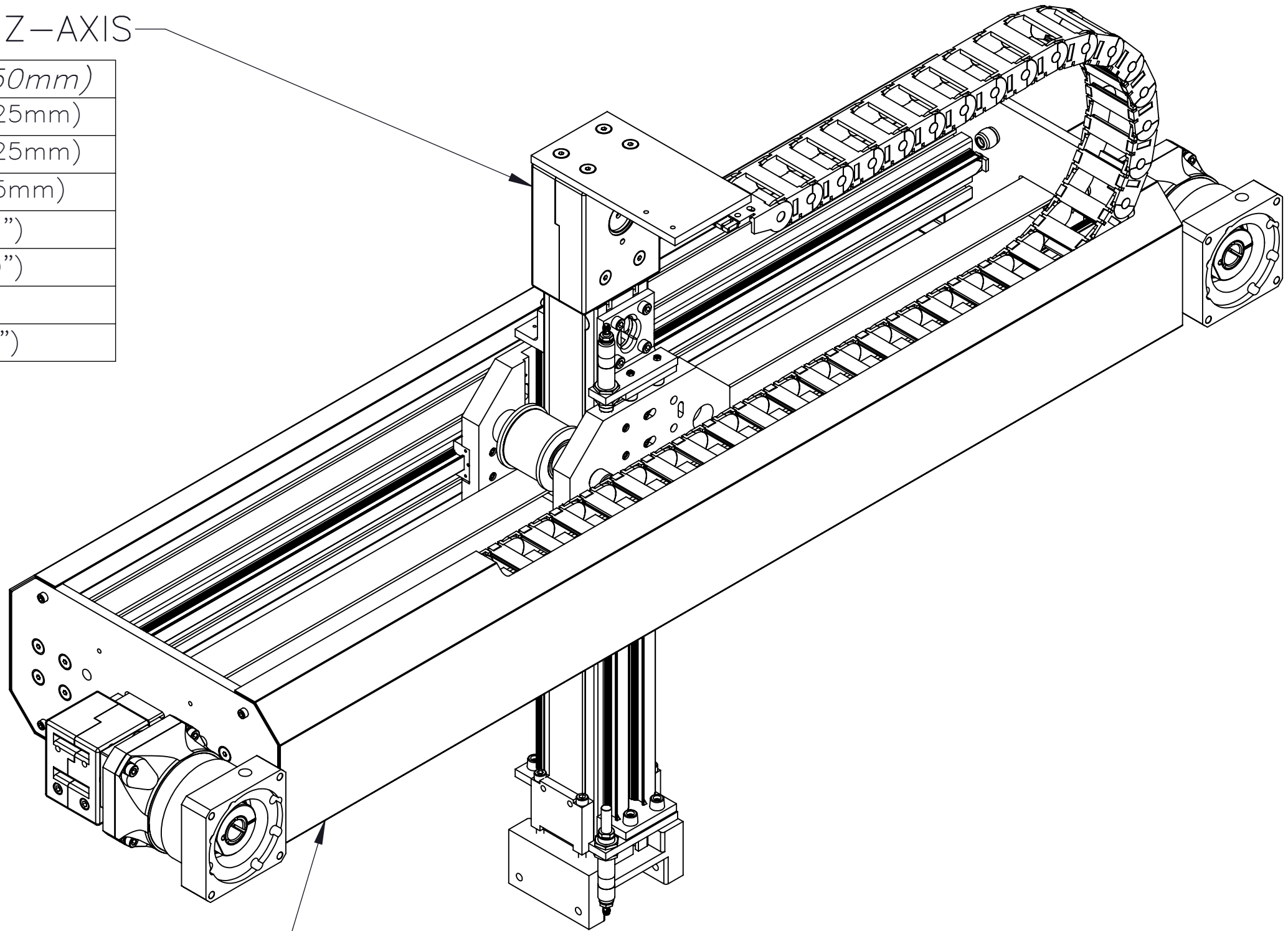
BASE TRAVELS USED

X-TRAVEL = 250mm

Z-TRAVEL = 250mm

PROPERTY	BASE VALUE (T=250mm)
MOVING MASS	17.683kg(+0.400kg/25mm)
SYSTEM MASS	30.141kg(+0.376kg/25mm)
BELT MASS OF Z AXIS	0.561kg(+.017kg/25mm)
PULLEY PITCH ϕ	89.13mm (3.509")
PULLEY WIDTH	54.86mm (2.160")
PULLEY MATERIAL	STEEL
TRAVEL PER REV	280mm (11.024")

Z-AXIS



X-AXIS

PROPERTY	BASE VALUE (T=250mm)
*MOVING MASS	0.225kg(+0.0225kg/25mm)
BELT MASS OF X AXIS	0.450kg(+.017kg/25mm)
PULLEY PITCH ϕ	48.13mm (1.895")
PULLEY WIDTH	53.95mm (2.124")
PULLEY MATERIAL	STEEL
TRAVEL PER REV	150mm (5.906")

*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)

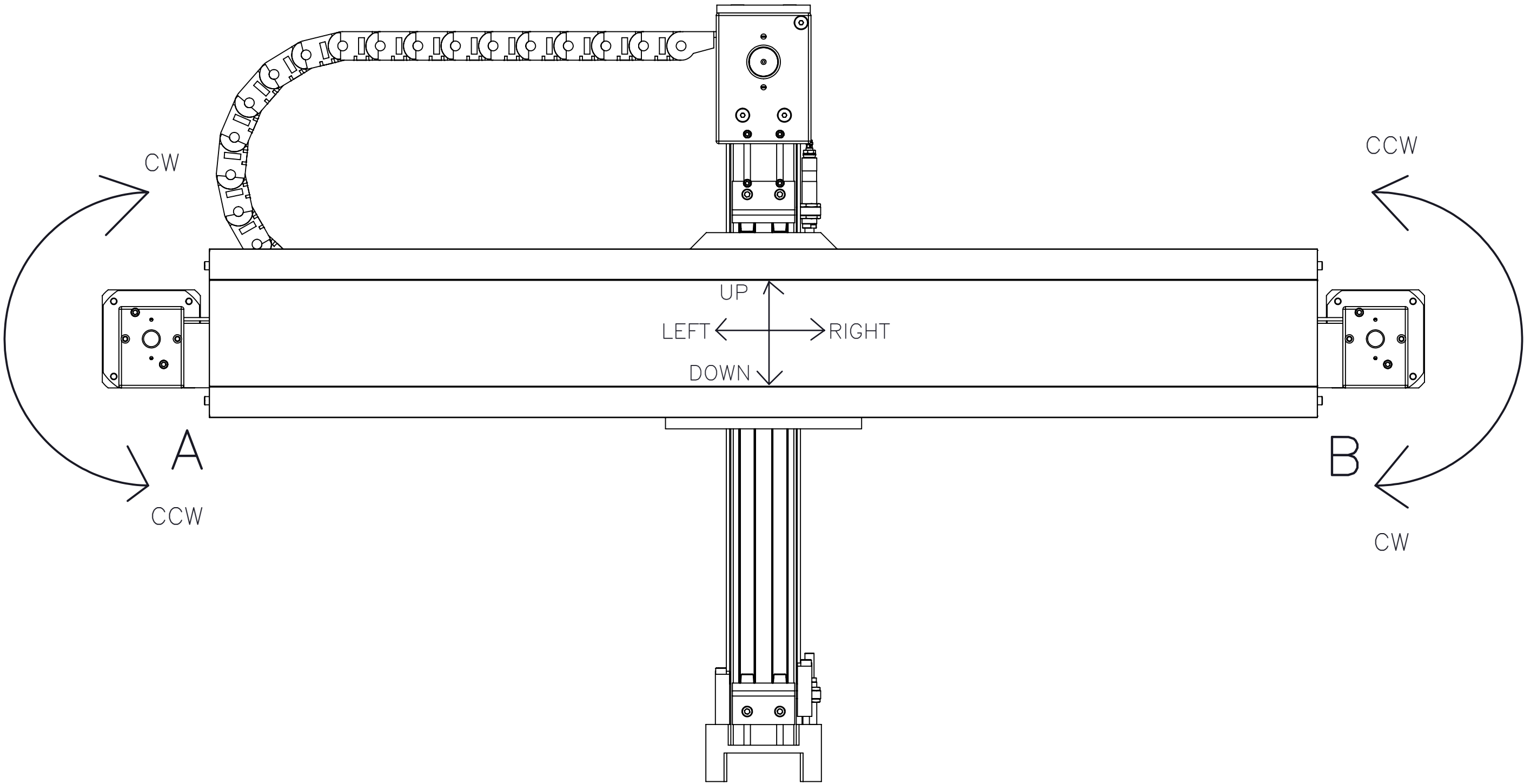
GEARBOX
MASS (ADD
TO SYSTEM
MASSES)

MPG-084	2.3kg
MPG-114	5.8kg
MRG-084	5.6kg
MRG-114	15.0kg

TOTAL BELT MASS	$(X \text{ TRAVEL} \times .00068) + (Z \text{ TRAVEL} \times .00068) + .70 = \text{kg}$										
TOTAL SYSTEM MASS	$(X \text{ TRAVEL} \times .0235) + (Z \text{ TRAVEL} \times .0161) + 45.52 = \text{kg}$										
<div></div> <div>MACRON DYNAMICS INC</div>		DRAWN BY: JA		DATE: 8/14/2019		MATERIAL:		TITLE: MACRON TBG 50 GANTRY			
		CHECKED BY: —		DATE: 8/14/2019							
		LAST SAVED BY: JA		DATE: 8/16/2021							
		UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. TOLERANCES UNLESS NOTED OTHERWISE:				FINISH:					
						.X ± .762 .XX ± .254 .XXX ± .127 ANG ± 0°30'					
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		BREAK ALL SHARP EDGES 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 THE THIS GANTRY VIEW

<div></div> <div>MACRON DYNAMICS INC</div>	DRAWN BY: TH	DATE: 8/14/2019	MATERIAL:		TITLE: MACRON TBG 50 GANTRY					
	CHECKED BY: —	DATE: 8/14/2019								
	LAST SAVED BY: Tim	DATE: 8/16/2021	FINISH:		SCALE 1:1		SHEET SIZE C			
	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. TOLERANCES UNLESS NOTED OTHERWISE:									
	SURFACE FINISH		63	SHEET		PART NUMBER			REV	
BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION			5 OF 20		MGS-TBG-50-X-X-X				01	
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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

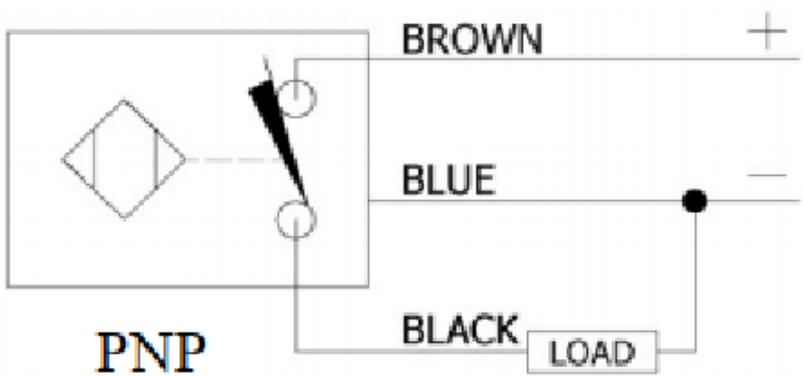
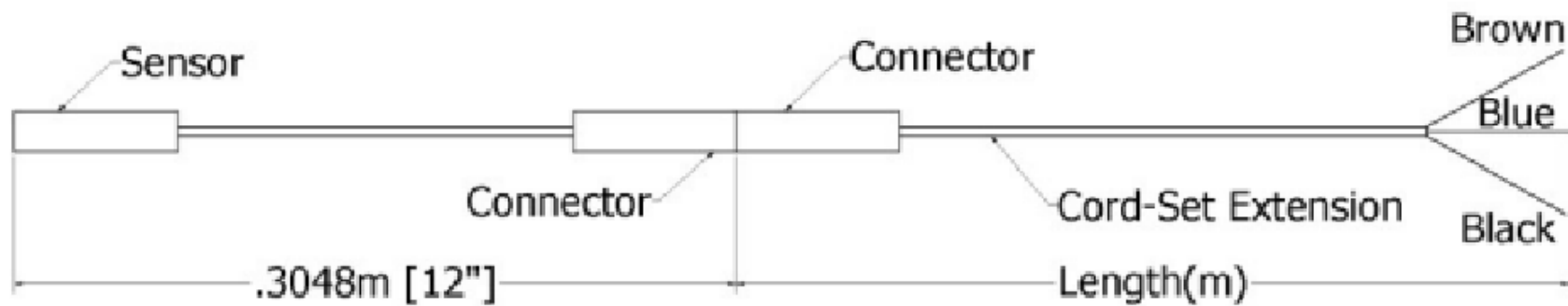
Part Number Configuration

244-_-_-_-_-

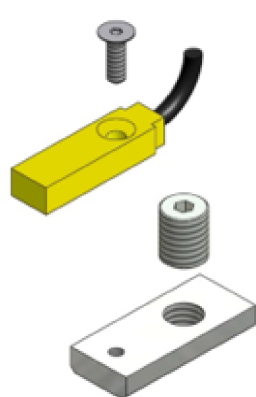
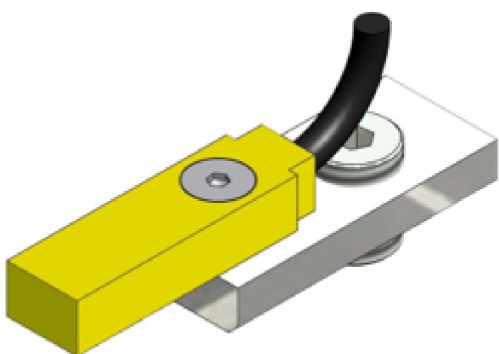
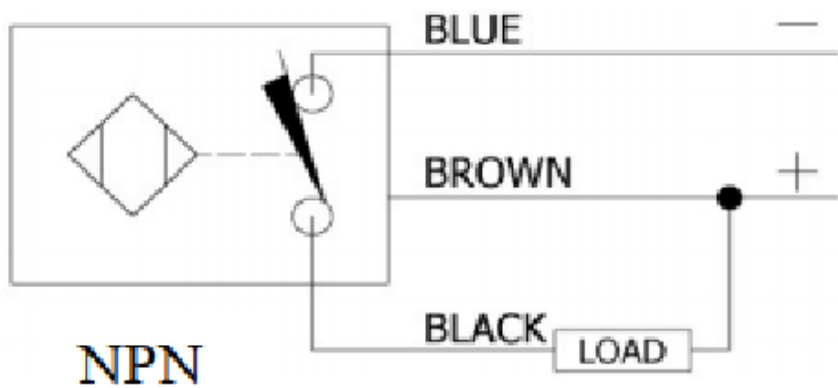
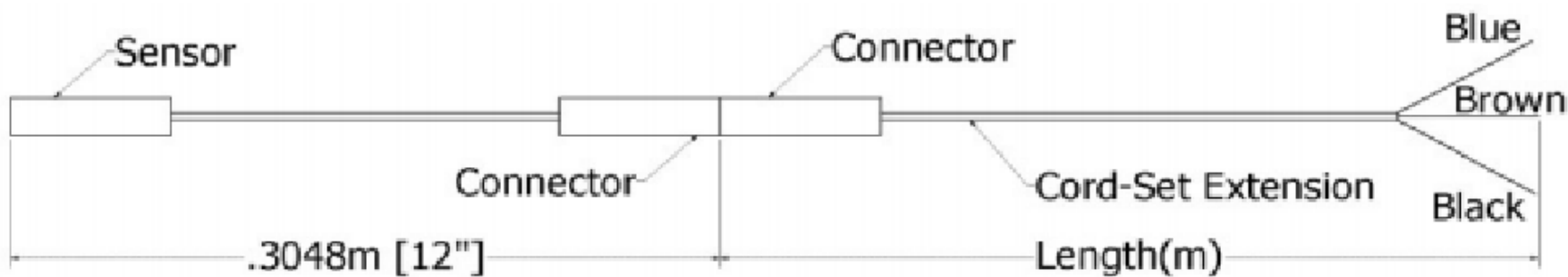
PNP or NPN	NC or NO	02	Meters
PNP or NPN	NC or NO	06	Meters
PNP or NPN	NC or NO	12	Meters

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	DATE: 11/26/2017	MATERIAL:		TITLE: T-SLOT SENSOR KIT	
	CHECKED BY: —	DATE: 2/11/2016				
	LAST SAVED BY: Paul	DATE: 8/16/2021	FINISH:		SCALE 1:1 SHEET SIZE C	
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SURFACE FINISH $\sqrt{63}$		SHEET		PART NUMBER		REV
BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING		6 OF 20				
THIRD ANGLE PROJECTION						

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