

GEARBOX MODEL

MPG-064____MPG-084____

MRG-064____MRG-084____

RATIO:_____

FOR DIRECT-DRIVE OPTION WITH MMKs
(NO GEARBOXES) CHECK HERE: _____

MOTOR INFORMATION

MANUFACTURER:_____

MODEL:_____

SENSOR INFORMATION X-AXIS:

HOME-QTY____ 244-____-____-____

EOT-QTY____ 244-____-____-____

SENSOR INFORMATION Y-AXIS:

HOME-QTY____ 244-____-____-____

EOT-QTY____ 244-____-____-____

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

MGS-HBG-25- - - X

ENTER Y-AXIS TRAVEL

TRAVEL IN INCREMENTS OF 250mm

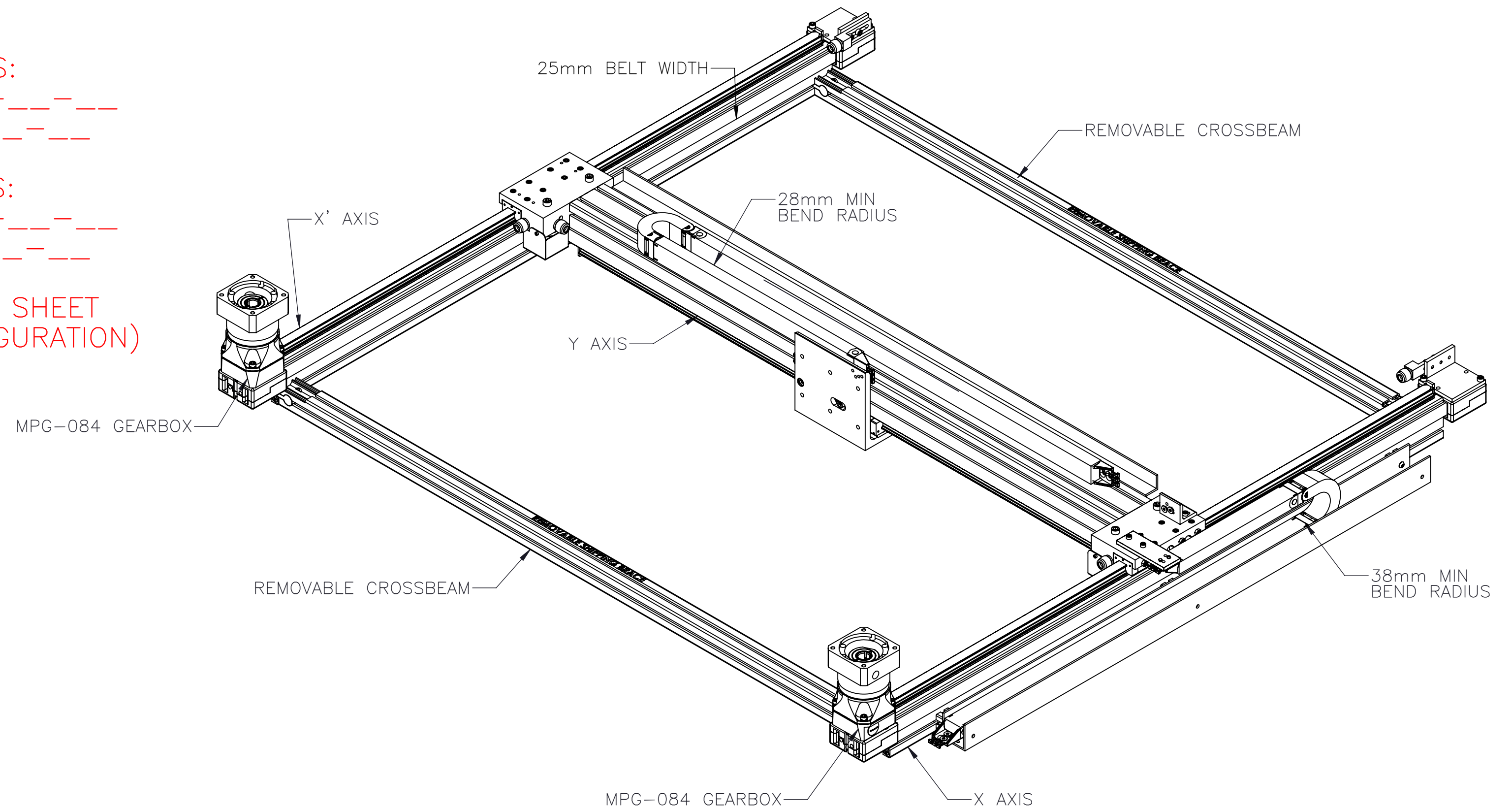
TRAVEL LIMITS: 250mm-1000mm

ENTER X-AXIS TRAVEL

TRAVEL IN INCREMENTS OF 250mm

TRAVEL LIMITS: 250mm-2000mm

*IF TRAVEL IS
OUTSIDE LIMITS
LISTED ABOVE,
CONTACT MACRON*




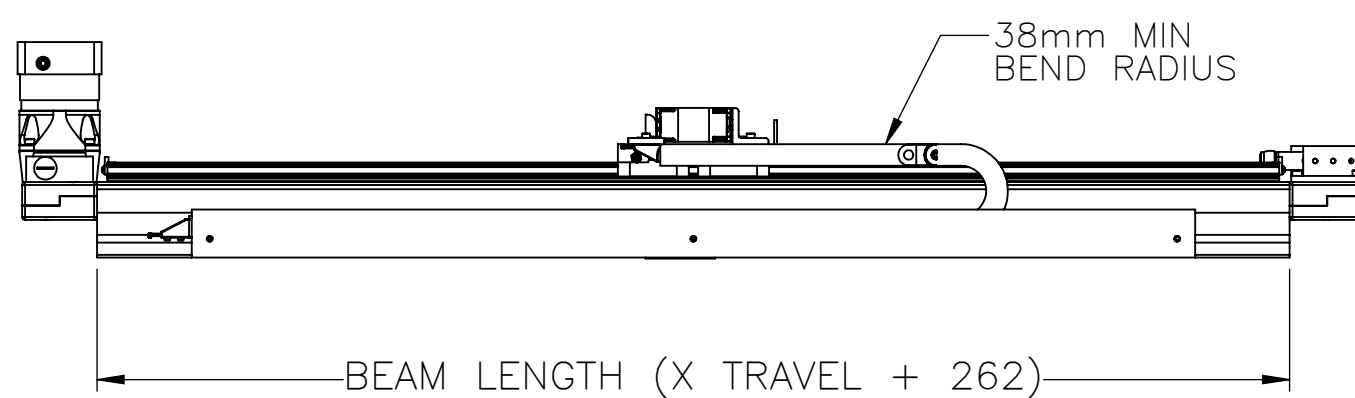
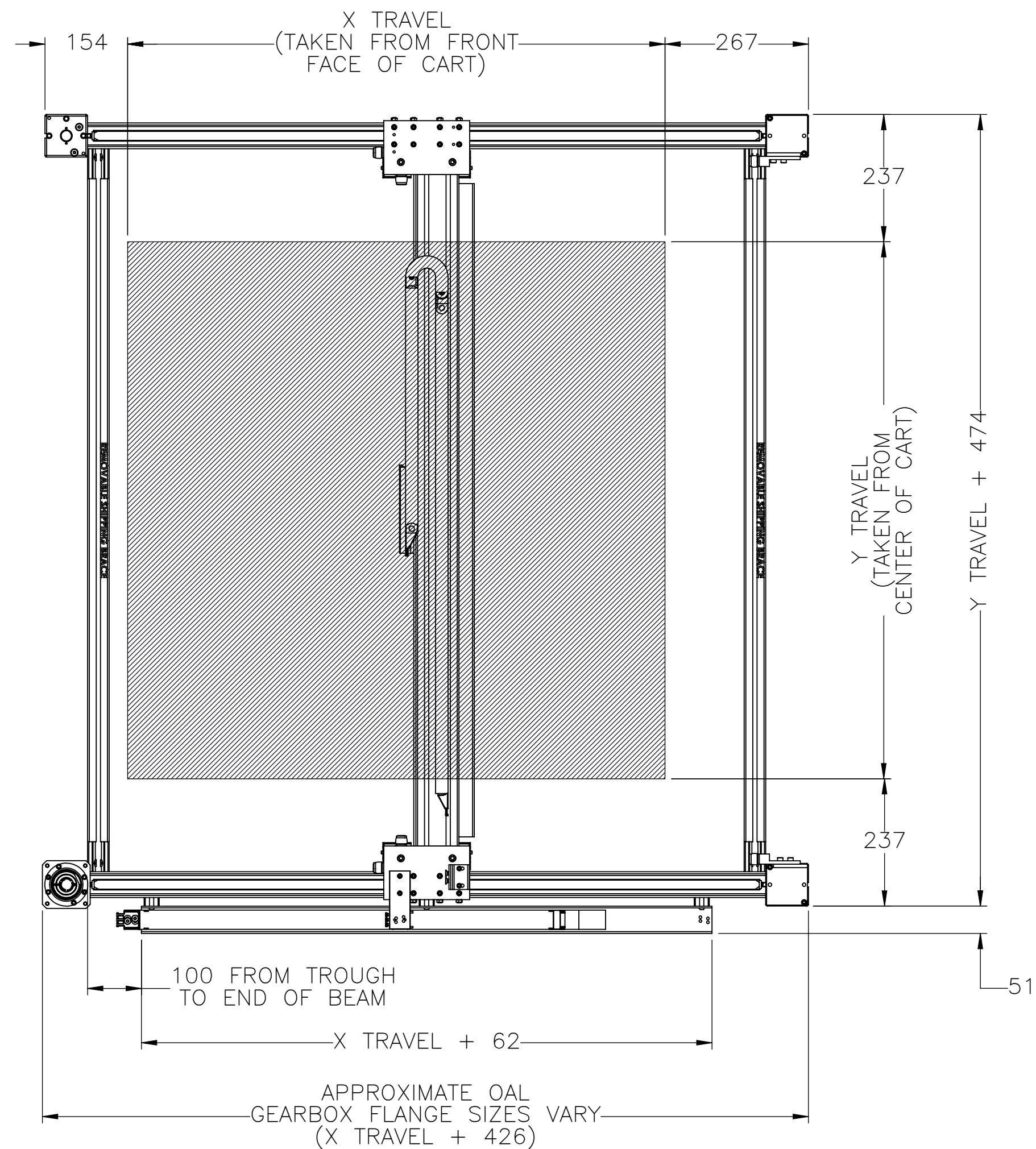
APPROVED: _____

SIGN & PRINT

DATE: _____

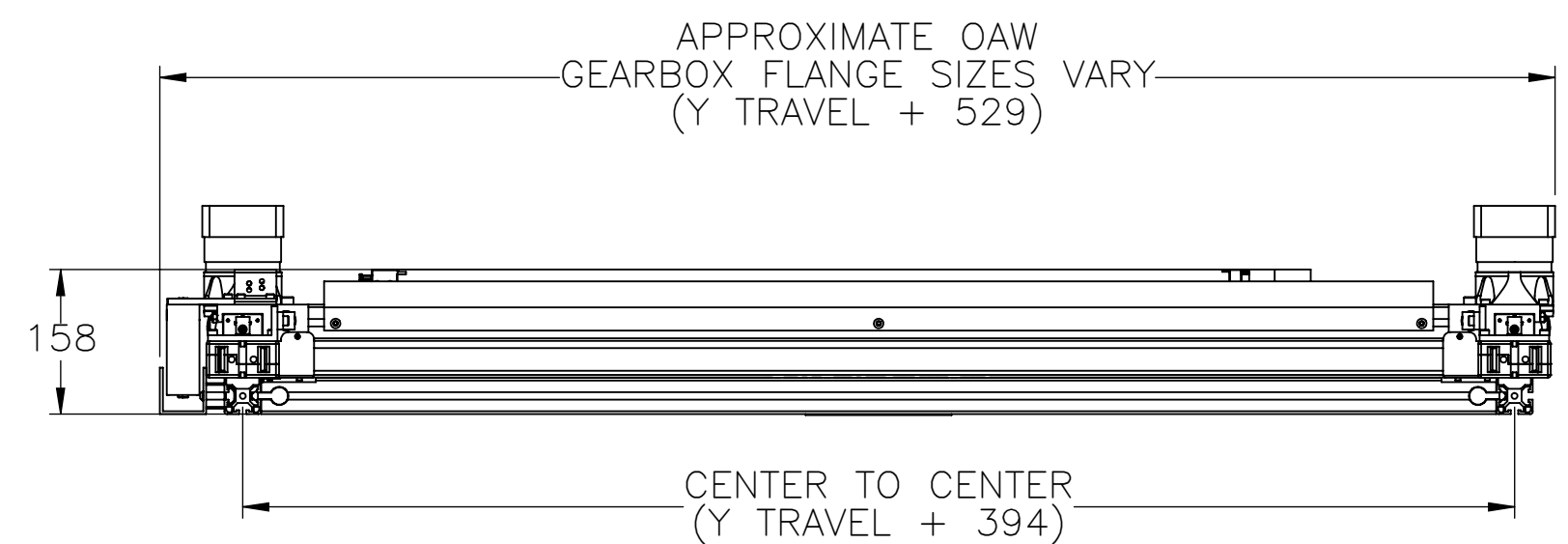
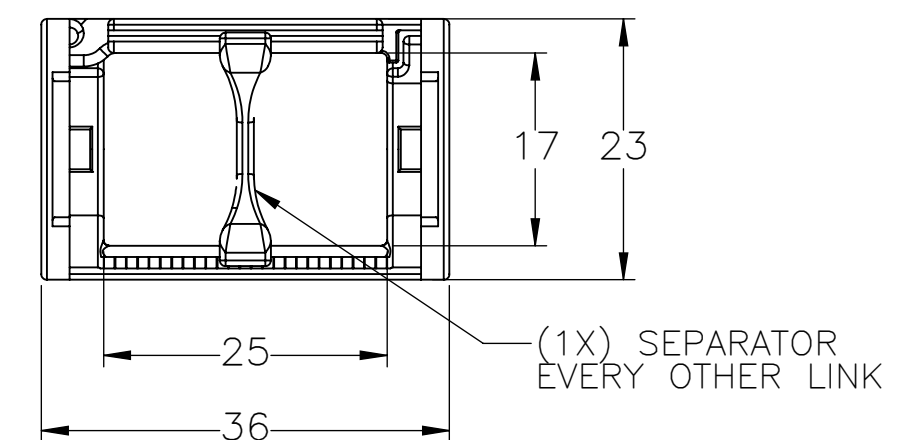
PO:REFERENCE#: _____

<div></div> <div>MACRON DYNAMICS INC</div>	DRAWN BY: TB		DATE: 1/2/2019		MATERIAL:		TITLE: MACRON H-BOT GANTRY					
	CHECKED BY:		DATE: DD/MM/YYYY									
	LAST SAVED BY: TH		DATE: 10/11/2022		FINISH:		SCALE 1:1			SHEET SIZE C		
	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETER. TOLERANCES UNLESS NOTED OTHERWISE: .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											



GANTRY FOOTPRINT

CABLE TRACK SIZE
(SAME FOR BOTH AXES)



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DRAWN BY: TB DATE: 1/2/2019
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UNLESS OTHERWISE SPECIFIED,
DIMENSIONS ARE IN MILLIMETER.
TOLERANCES UNLESS NOTED
OTHERWISE:
.X ± .762
.XX ± .254
.XXX ± .127
ANG ± 0°30'

SURFACE FINISH $\sqrt{3}$

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

MATERIAL:

FINISH:

TITLE:
MACRON H-BOT
GANTRY

SCALE 1:1 SHEET SIZE C

SHEET

PART NUMBER

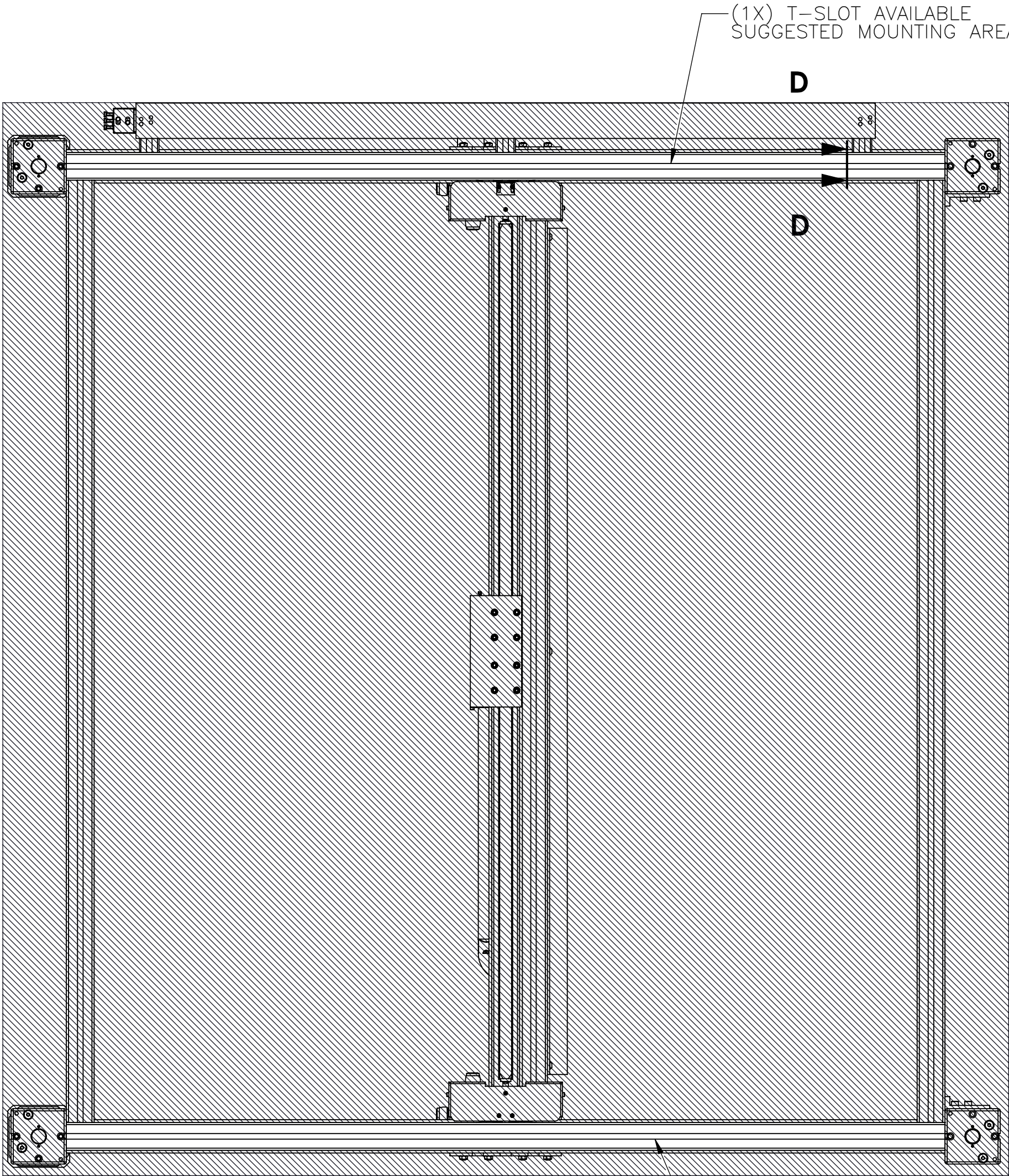
2 OF 6

MGS-HBG-25-X-X-X

REV

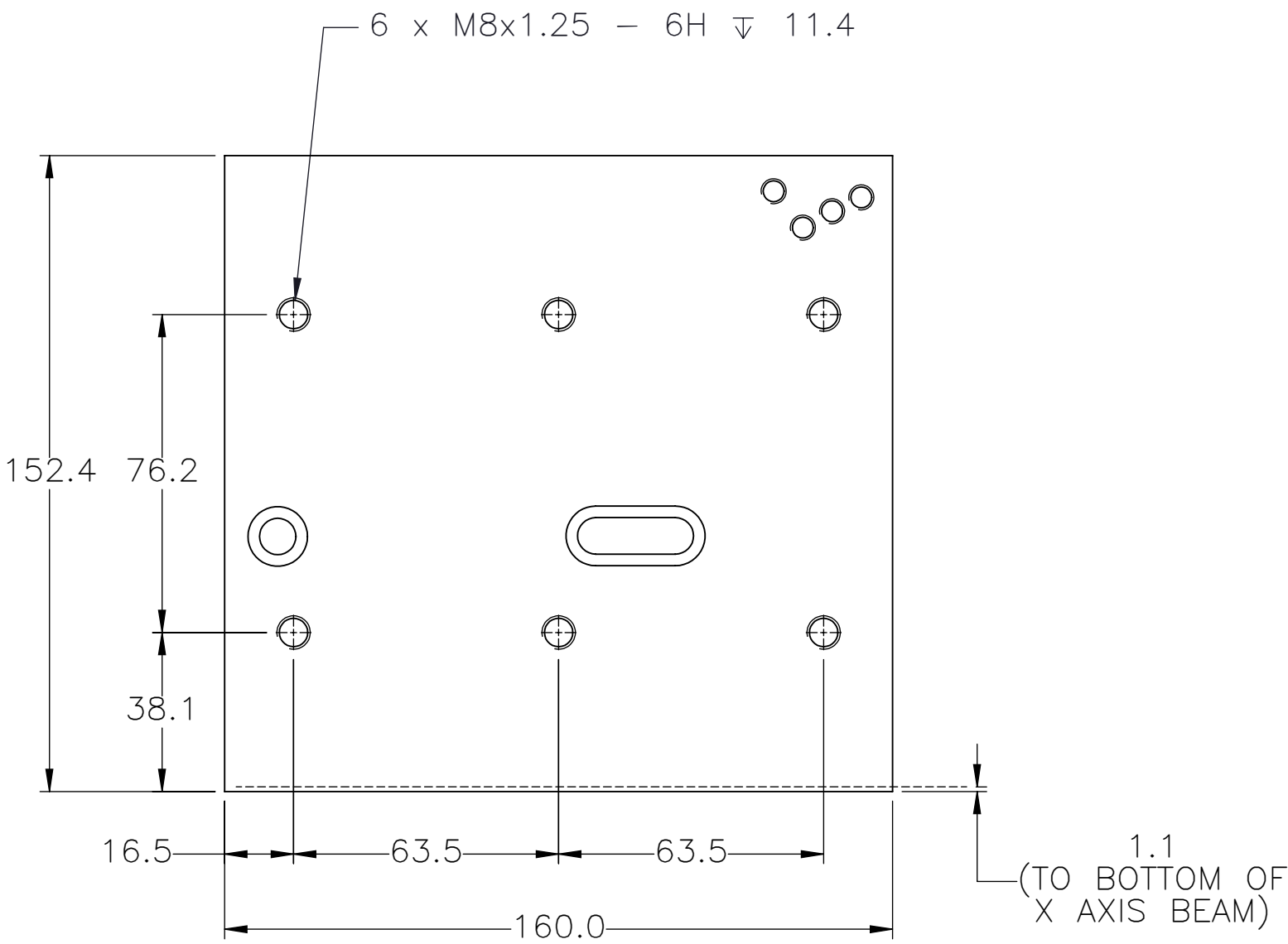
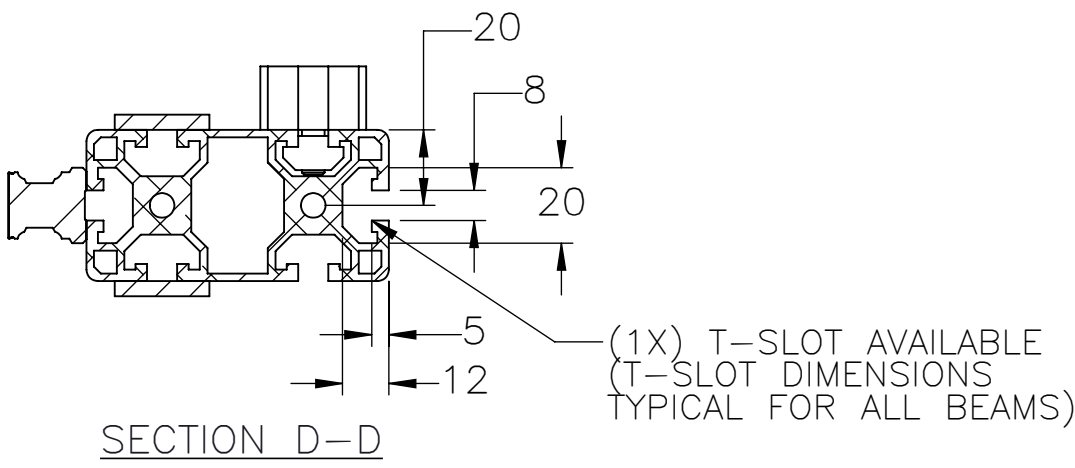
02

GANTRY MOUNTING FEATURES




*BOTTOM VIEW

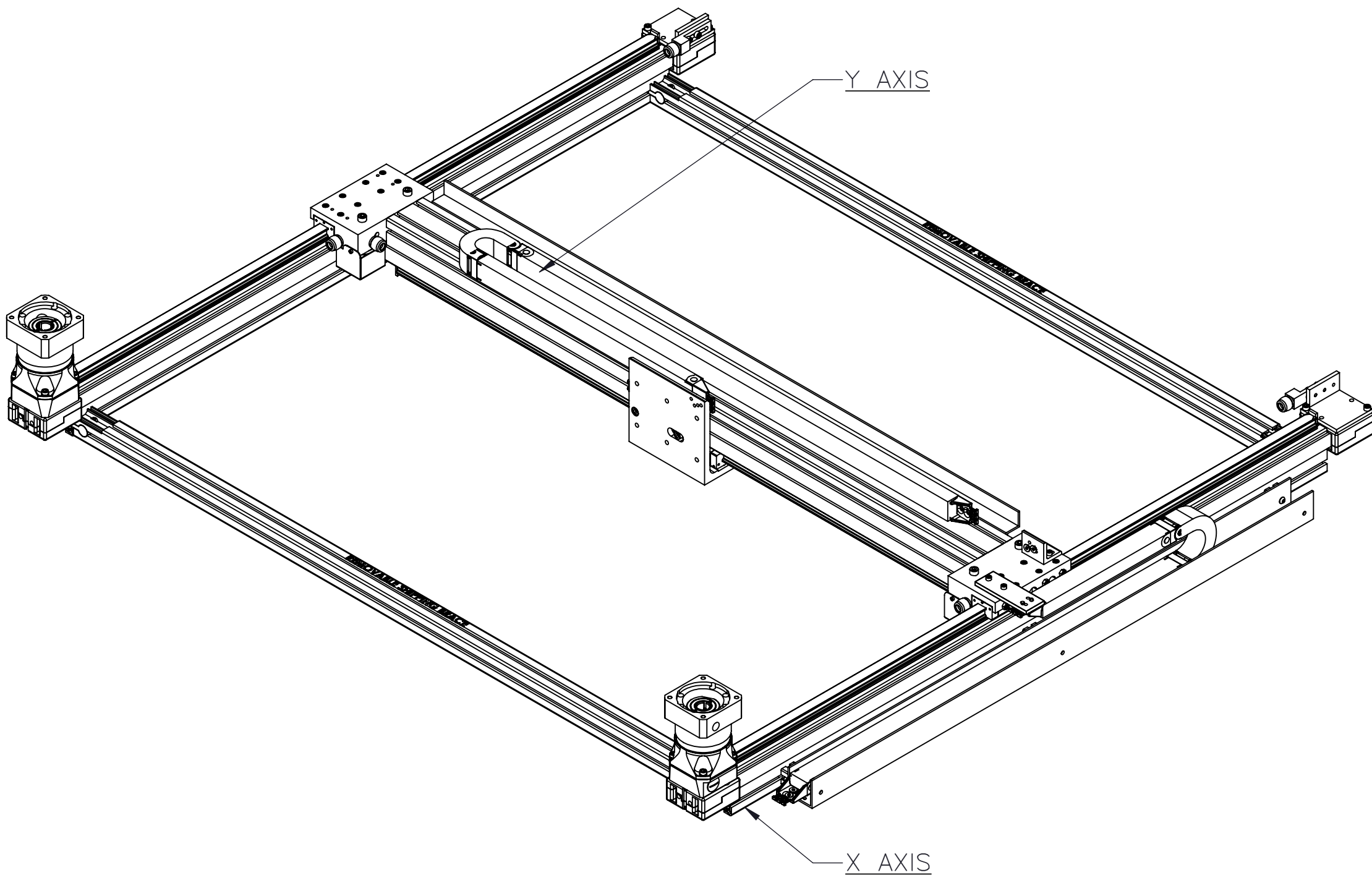
(1X) T-SLOT AVAILABLE
SUGGESTED MOUNTING AREA



CART MOUNTING FEATURES

 MACRON DYNAMICS INC	DRAWN BY: TB	DATE: 1/2/2019	MATERIAL:		TITLE: MACRON H-BOT GANTRY			
	CHECKED BY:	DATE: DD/MM/YYYY						
	LAST SAVED BY: TH	DATE: 10/11/2022	FINISH:		SCALE 1:1 SHEET SIZE C			
	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETER. TOLERANCES UNLESS NOTED OTHERWISE:						.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 SIZING WORKSHEET



PROPERTY	VALUE
PULLEY PITCH ϕ	47.75mm (1.88")
PULLEY WIDTH	28.9mm (1.14")
PULLEY MATERIAL	STEEL
TRAVEL PER REV	150mm
BELT WIDTH	25mm (.98")
ULTIMATE TENSILE STRENGTH OF BELT	1750 LBS (7787 N)
RECOMMENDED BELT RUNNING LOAD	437 LBS (1945 N)



X-TRAVEL = _____ mm

Y-TRAVEL = _____ mm

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

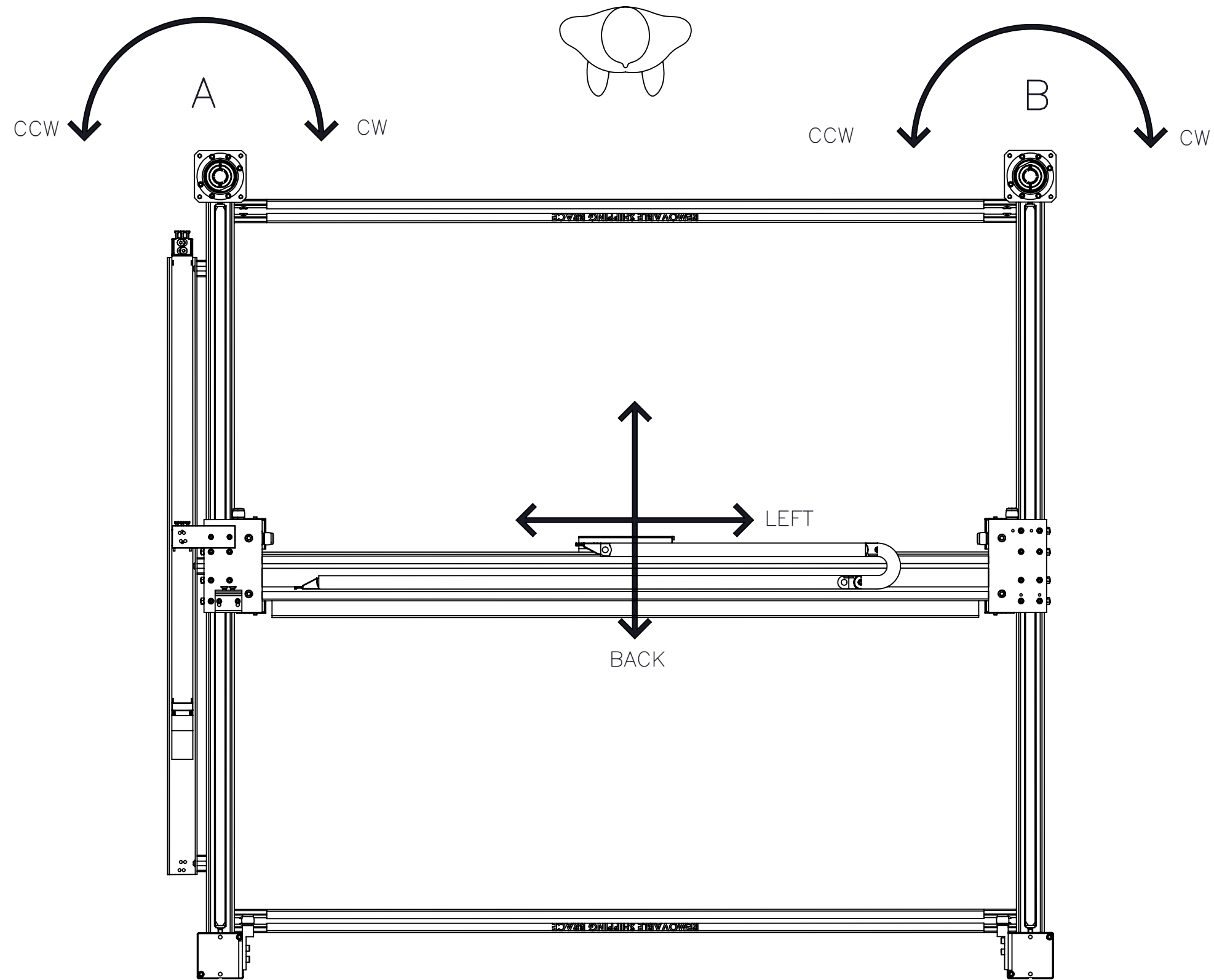
GEARBOX MASS (ADD TO SYSTEM MASSES)	MPG-064	1.0kg
	MPG-084	2.3kg
	MRG-064	3.0kg
	MRG-084	5.6kg

TOTAL BELT MASS	$(X \text{ TRAVEL} \times .00048) + (Y \text{ TRAVEL} \times .00024) + .21 = \text{kg}$
TOTAL MOVING MASS	$(X \text{ TRAVEL} \times .0009) + (Y \text{ TRAVEL} \times .0043) + 14.23 = \text{kg}$
TOTAL SYSTEM MASS	$(X \text{ TRAVEL} \times .0118) + (Y \text{ TRAVEL} \times .0116) + 19.83 = \text{kg}$

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	LAST SAVED BY: TH	DATE: 10/11/2022				
	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. TOLERANCES UNLESS NOTED OTHERWISE:		FINISH:			
	.X ± .762 .XX ± .254 .XXX ± .127 ANG ± 0°30'					
SURFACE FINISH 		SHEET		PART NUMBER		REV
BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION		4 OF 6		MGS-HBG-25-X-X-X		02
				SCALE 1:1		SHEET SIZE C

MOTOR DYNAMICS

(ASSUMES MOTORS ARE ROTATING AT SAME ANGULAR VELOCITY)



ROTATIONAL DIRECTION		Y-AXIS CART MOVEMENT
PULLEY A	PULLEY B	
CW	CW	LEFT
CW	CCW	BACK
CCW	CW	FRONT
CCW	CCW	RIGHT

PULLEY ROTATION AND Y-AXIS CART MOVEMENT
ARE WITH RESPECT TO THIS GANTRY VIEW



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DRAWN BY:	TB
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CHECKED BY:

LAST SAVED BY:

	.X	±	.762
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS.	.XX	±	.254
TOLERANCES UNLESS NOTED OTHERWISE:	.XXX	±	.127
	ANG	±	0° 30'

DATE:	1/2/2019
-------	----------

DATE: DD/MM/YYYY

DATE: 10/11/2022

ECIFIED,	.X ±	.762
METERS.	.XX ±	.254
NOTED	.XXX ±	.127
	ANG ±	0.30'

MATERIAL:

FINISH:

SHEET

--	--

TITLE: MACRON H-BOT GANTRY

SCALE	1:1	SHEET SIZE	C
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REV

	PART NUMBER
--	-------------

MGS-HBG-25-X-X-X

REV

SPECIFICATIONS

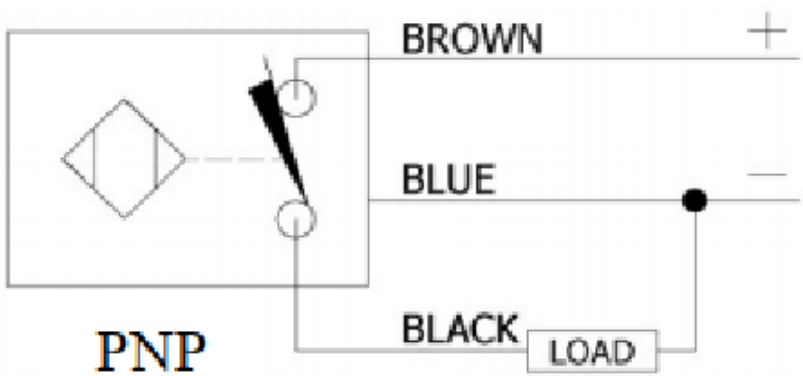
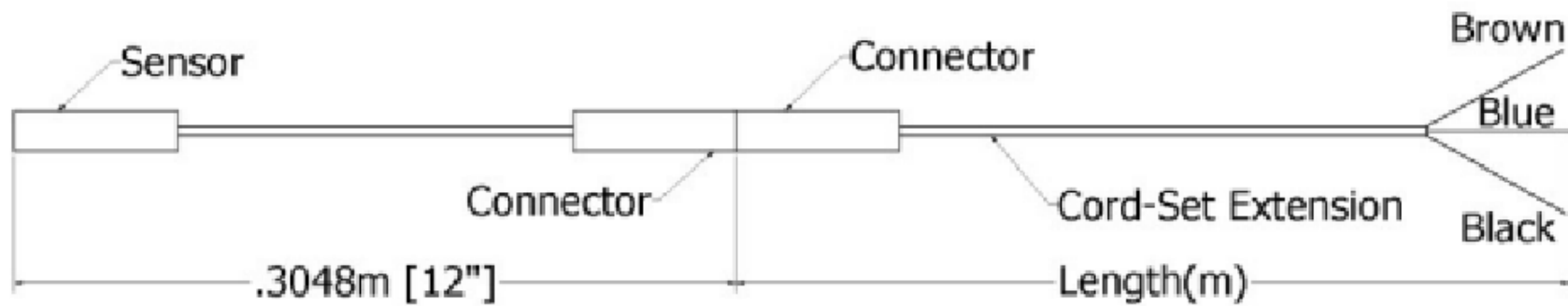
Sensor Type	Inductive
Sensor Size	Fits all 8mm wide T-Slots
Operating Voltage	10–30 VDC
Voltage Drop Across Conducting Sensor	≤1.8 V at 100 mA
Number of Conductors (AWG)	3x26 AWG
Temperature Range	-40°C to 105°C

Part Number
Configuration
244-____-____-____

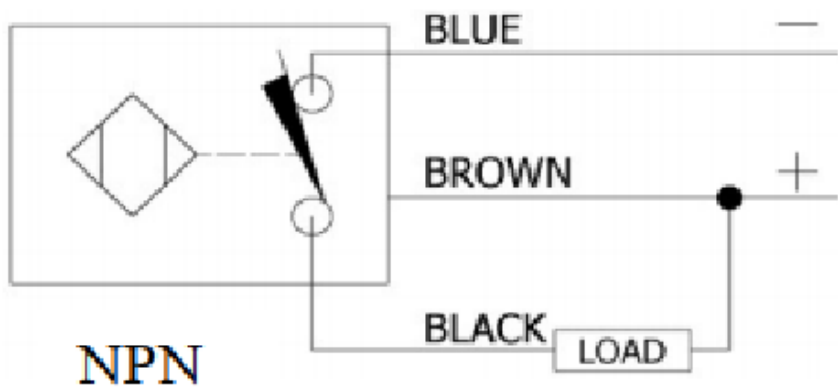
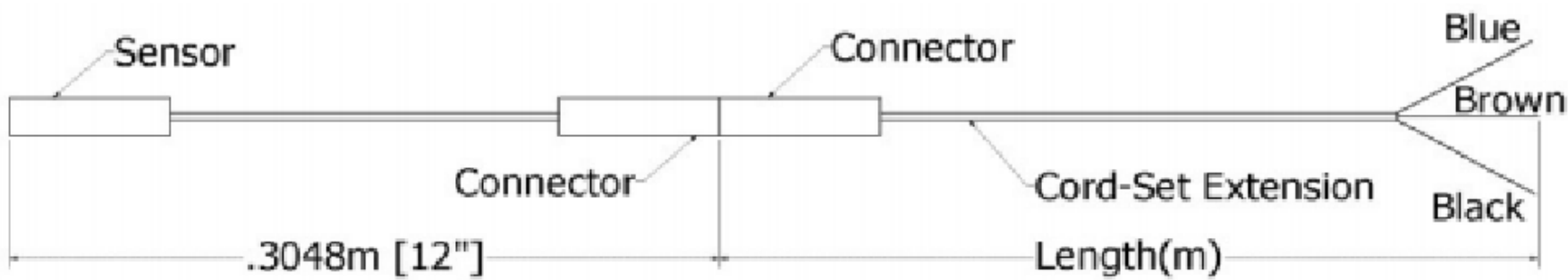
PNP or NPN	NC or NO	02	Meters
PNP or NPN	NC or NO	06	Meters
PNP or NPN	NC or NO	12	Meters

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

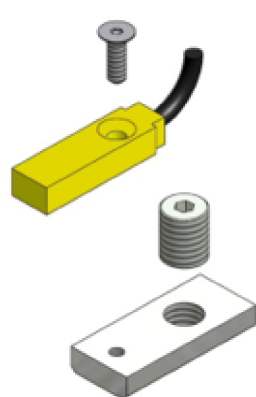
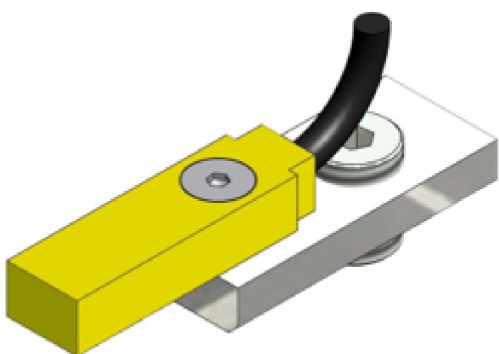
PNP Diagrams




NPN Diagrams



KIT INCLUDES – SENSOR, CORDSET EXTENSION, AND MOUNTING HARDWARE



 MACRON DYNAMICS INC	DRAWN BY: JA	DATE: 1/2/2019	MATERIAL:		TITLE: T-SLOT SENSOR KIT				
	CHECKED BY:	DATE: DD/MM/YYYY							
	LAST SAVED BY: TH	DATE: 10/11/2022							
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	SURFACE FINISH $\sqrt{63}$								
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THIRD ANGLE PROJECTION									