

MDS-SB1 -  -  - X

GEARBOX MODEL

MPG-062 \_\_\_\_\_

MRG-062 \_\_\_\_\_

RATIO: \_\_\_\_\_

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

*CENTER TO CENTER DISTANCE (mm)*

CENTER TO CENTER IN INCREMENTS OF 25mm  
LIMITS: 500mm-2950mm

*ENTER X-AXIS TRAVEL*

TRAVEL IN INCREMENTS OF 25mm  
TRAVEL LIMITS: 150mm-5775mm

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

MOTOR INFORMATION

MANUFACTURER: \_\_\_\_\_

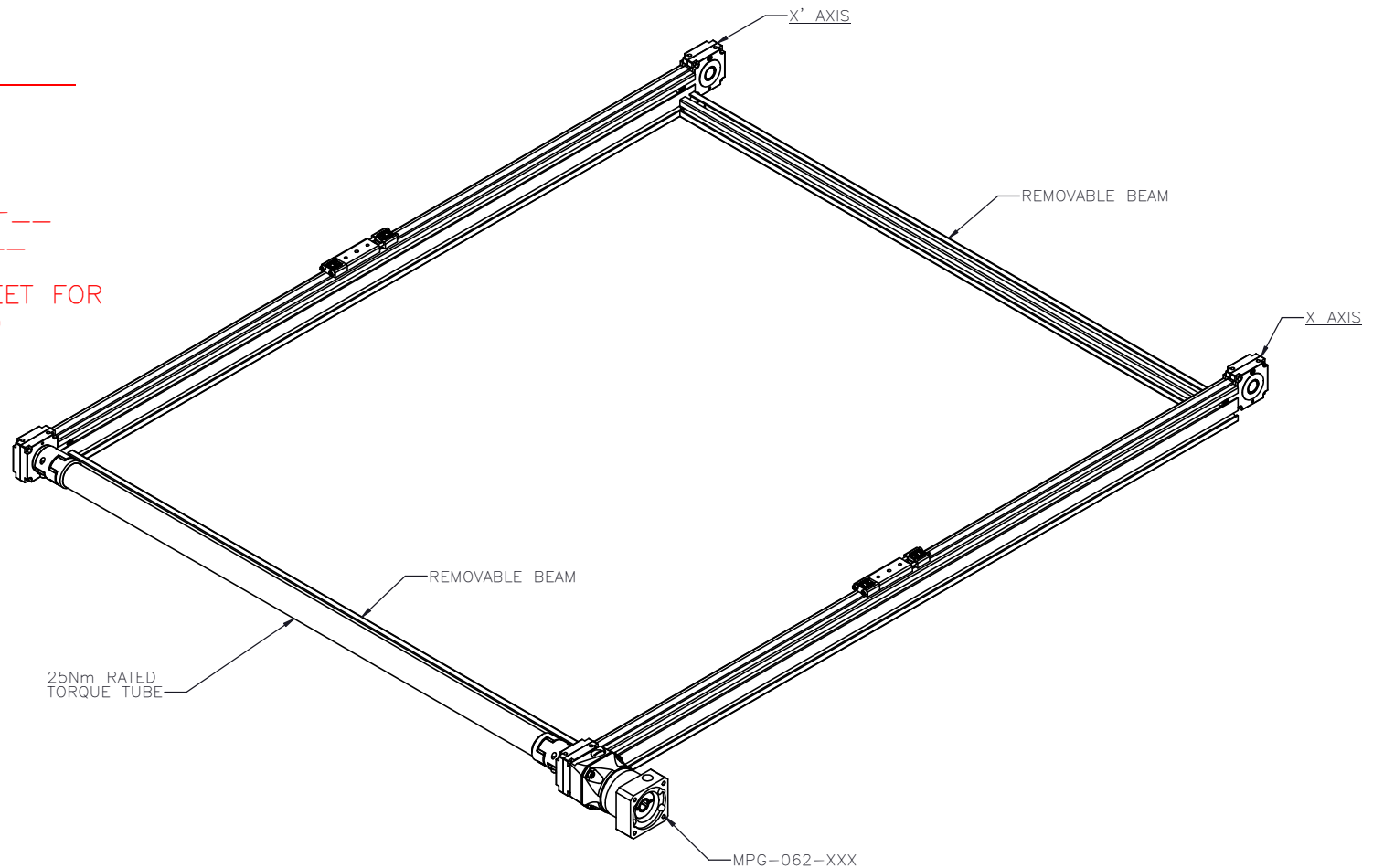
MODEL: \_\_\_\_\_

SENSOR INFORMATION X-AXIS:

HOME-QTY \_\_\_\_\_ 244-\_\_\_\_-\_\_\_\_-\_\_\_\_

EOT-QTY \_\_\_\_\_ 244-\_\_\_\_-\_\_\_\_-\_\_\_\_

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




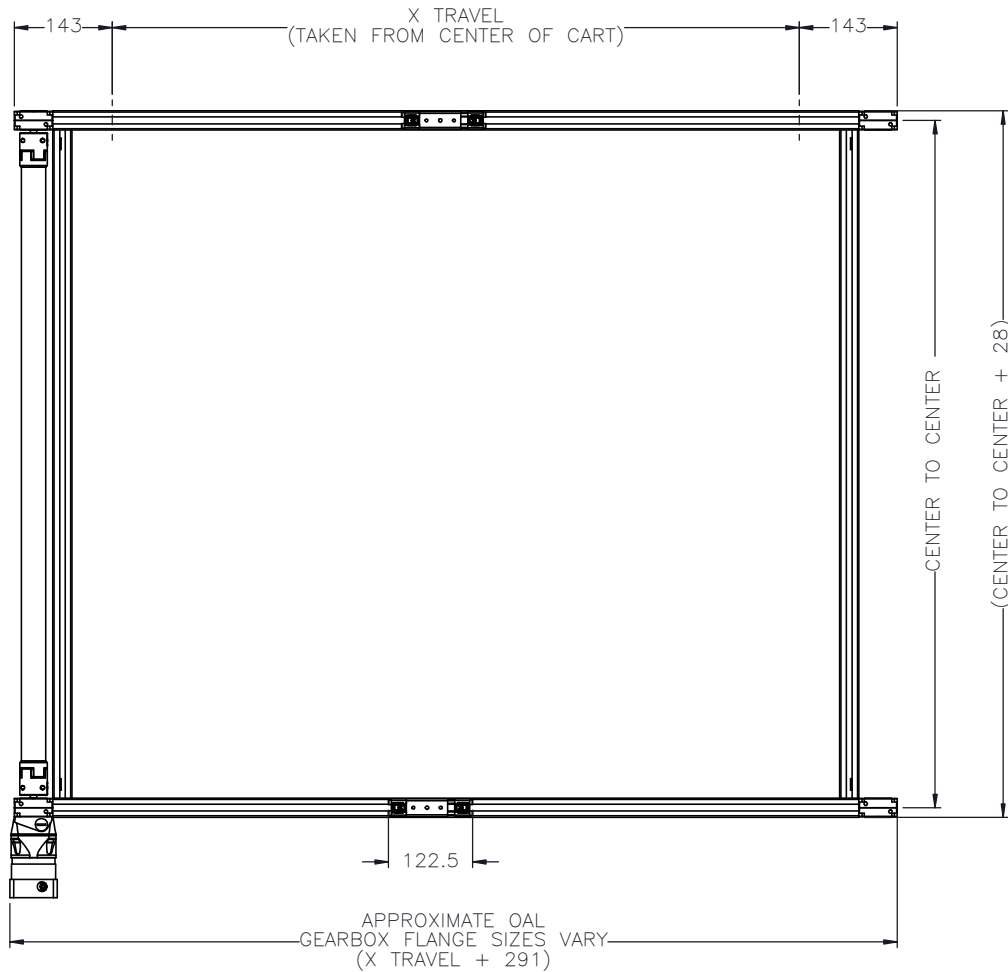
APPROVED: \_\_\_\_\_

SIGN & PRINT

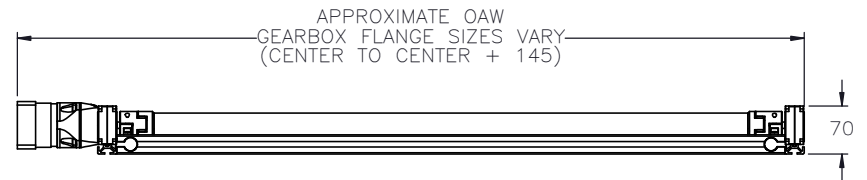
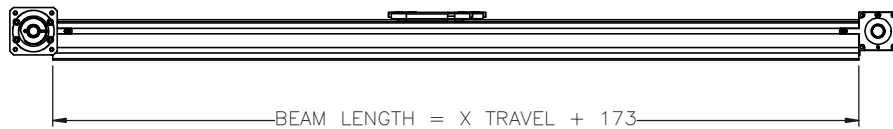
DATE: \_\_\_\_\_


PO:REFERENCE#: \_\_\_\_\_

 <b>MACRON DYNAMICS INC</b>	DRAWN BY: AW      DATE: 8/7/2023	MATERIAL:	TITLE: MACRON DUAL SINGLE BELT DRIVE-12 GANTRY	
	CHECKED BY: --      DATE: DD/MM/YYYY	FINISH:		
	LAST SAVED BY: awong      DATE: 8/8/2023	UNLESS OTHERWISE SPECIFIED: .X ± .762 DIMENSIONS ARE IN MILLIMETERS: .XX ± .254 TOLERANCES UNLESS NOTED: .XXX ± .127 OTHERWISE: ANG ± 0°30'		
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.	SURFACE FINISH      ✓ BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION	SHEET 1 OF 6	PART NUMBER MDS-SB1-X-X-X	SCALE 1:1      SHEET SIZE C

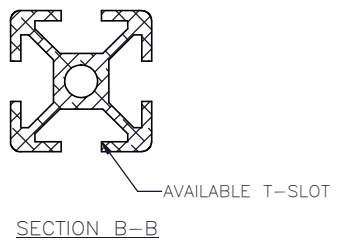
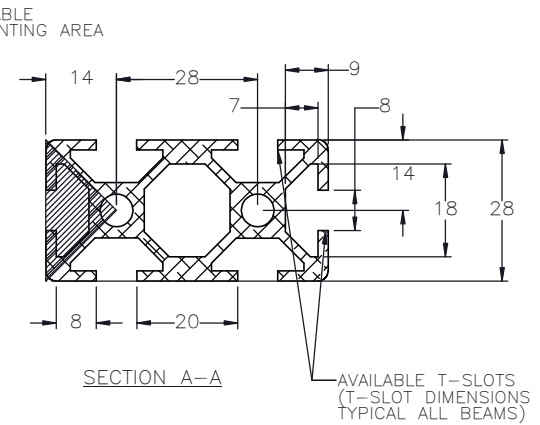
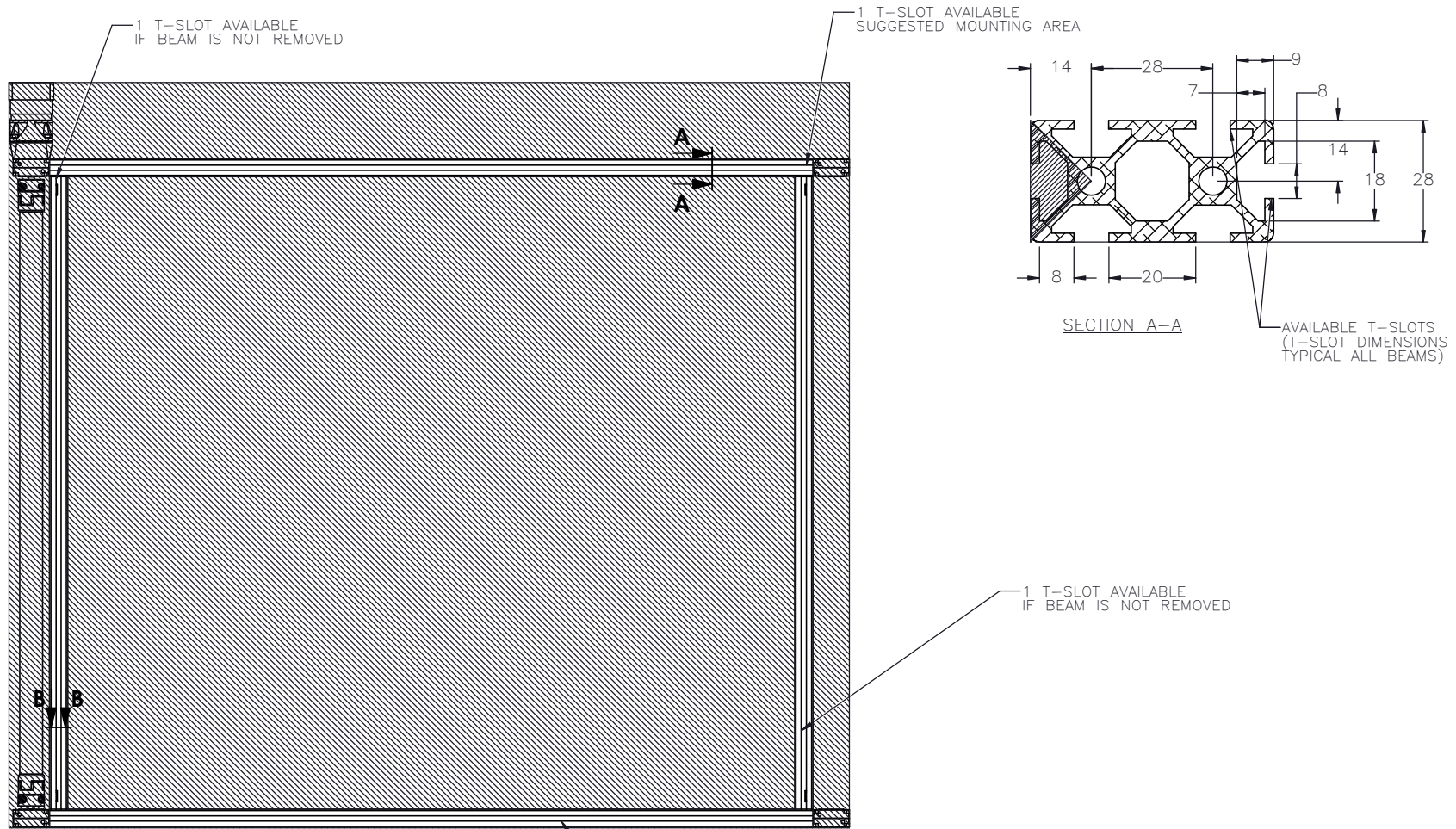



# GANTRY FOOTPRINT



 <b>MACRON DYNAMICS INC</b>	DRAWN BY: AW      DATE: 8/7/2023	MATERIAL:	TITLE: MACRON DUAL SINGLE BELT DRIVE-12 GANTRY	
	CHECKED BY: --      DATE: DD/MM/YYYY	FINISH:		
	LAST SAVED BY: awong      DATE: 8/8/2023	UNLESS OTHERWISE SPECIFIED: .X ± .762 DIMENSIONS ARE IN MILLIMETERS: .XX ± .254 TOLERANCES UNLESS NOTED: .XXX ± .127 OTHERWISE: ANG ± 0°30'	SCALE: 1:1	SHEET SIZE: C
	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.	SURFACE FINISH: 63 BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING <b>THIRD ANGLE PROJECTION</b>	SHEET: 2 OF 6 PART NUMBER: MDS-SB1-X-X-X	REV

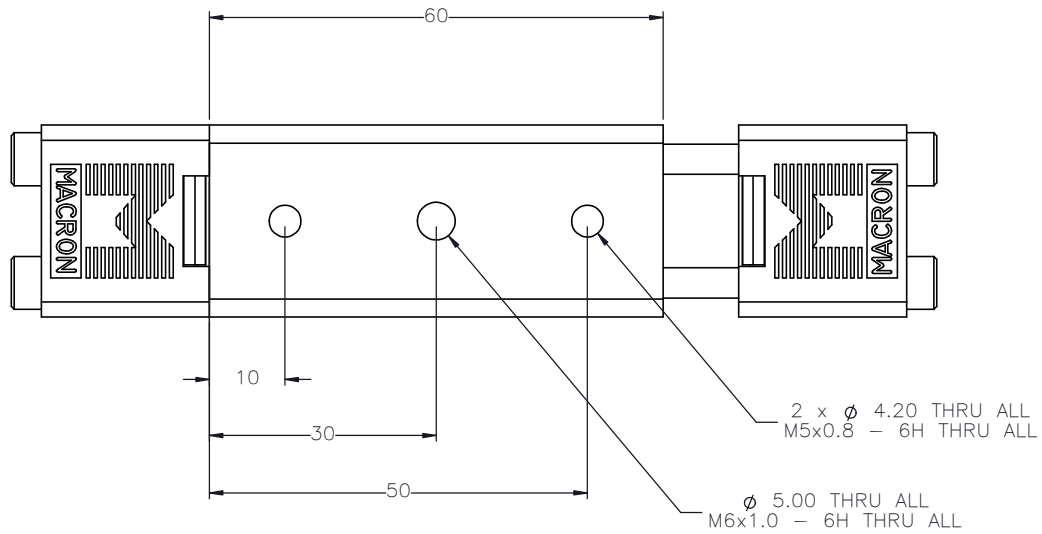
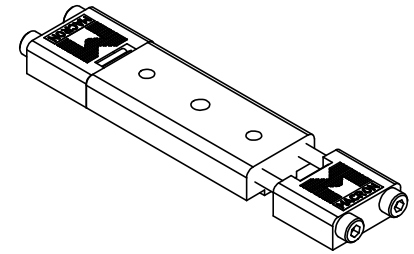
# GANTRY MOUNTING FEATURES




 <b>MACRON DYNAMICS INC</b>	DRAWN BY: <b>AW</b> DATE: <b>8/7/2023</b>	MATERIAL:	TITLE: <b>MACRON DUAL                  SINGLE BELT                  DRIVE-12' GANTRY</b>
	CHECKED BY: <b>--</b> DATE: <b>DD/MM/YYYY</b>	FINISH:	
	LAST SAVED BY: <b>awong</b> DATE: <b>8/8/2023</b>	UNLESS OTHERWISE SPECIFIED: <b>.X ± .762</b> DIMENSIONS ARE IN MILLIMETERS: <b>.XX ± .254</b> TOLERANCES UNLESS NOTED: <b>.XXX ± .127</b> OTHERWISE: <b>ANG ± 0°30'</b>	SCALE: <b>1:1</b> SHEET SIZE: <b>C</b>
	SURFACE FINISH: <b>63</b> BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING <b>THIRD ANGLE PROJECTION</b>	SHEET: <b>3 OF 6</b> PART NUMBER: <b>MDS-SB1-X-X-X</b>	REV: <b>C</b>

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# CART MOUNTING FEATURES



 <b>MACRON DYNAMICS INC</b>	DRAWN BY: <b>AW</b> DATE: <b>8/7/2023</b>	MATERIAL:	TITLE:
	CHECKED BY: <b>--</b> DATE: <b>DD/MM/YYYY</b>	FINISH:	<b>SBD-12 TENSION BLOCK</b>
	LAST SAVED BY: <b>awong</b> DATE: <b>8/8/2023</b>		
	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS. TOLERANCES UNLESS NOTED: OTHERWISE:	.X ± .762 .XX ± .254 .XXX ± .127 ANG ± 0°30'	SCALE: <b>1:1</b>
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.	SURFACE FINISH      63 BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING <b>THIRD ANGLE PROJECTION</b>	SHEET: <b>4 OF 6</b>	PART NUMBER: <b>MDS-SB1-X-X-X</b>

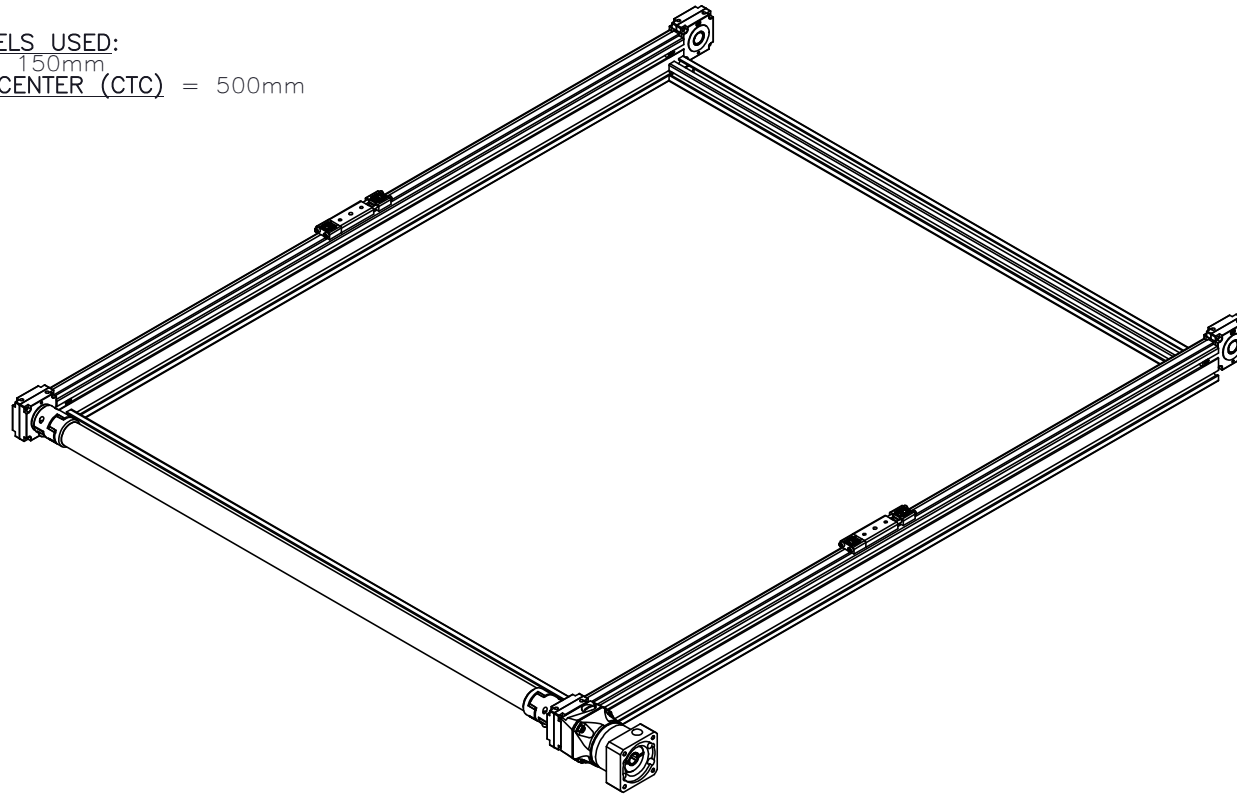
# MOTOR SIZING WORKSHEET

(INCREMENTAL ADDERS REFER TO MASS PER TRAVEL LENGTH)

BASED TRAVELS USED:

X-TRAVEL = 150mm

CENTER TO CENTER (CTC) = 500mm




PROPERTY	BASE VALUE (T=150mm, CTC=500mm)
**MOVING MASS	0.166kg(+0.014kg/25mm)
BELT MASS	0.079kg(+0.004kg/25mm)
PULLEY PITCH $\phi$	33.42mm (1.32")
PULLEY WIDTH	16.3mm (.640")
PULLEY MATERIAL	STEEL
TORQUE TUBE LENGTH	464mm
TORQUE TUBE $\phi$	35mm
TORQUE TUBE MASS	0.117kg(+0.017kg/25mm)
TORQUE TUBE MATERIAL	ANODIZED ALUMINUM ELASTOMER STYLE COUPLINGS WITH HUB
TRAVEL PER REV	105mm

X-TRAVEL = \_\_\_\_\_ mm  
CENTER TO CENTER (CTC) = \_\_\_\_\_ mm

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

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

TOTAL SYSTEM MASS	(X-TRAVEL x .0031) + (CTC x .0023) + 2.836 = kg		
 <b>MACRON DYNAMICS INC</b>	DRAWN BY: AW      DATE: 8/7/2023 CHECKED BY: --      DATE: DD/MM/YYYY LAST SAVED BY: qwong      DATE: 8/8/2023	MATERIAL:	TITLE: MACRON DUAL SINGLE BELT DRIVE-12 GANTRY
	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. TOLERANCES UNLESS NOTED OTHERWISE: .X ± .762 .XX ± .254 .XXX ± .127 ANG ± 0°30'	FINISH:	SCALE 1:1    SHEET SIZE C
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.	SURFACE FINISH <input checked="" type="checkbox"/> BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING <b>THIRD ANGLE PROJECTION</b>	SHEET 5 OF 6      PART NUMBER MDS-SB1-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

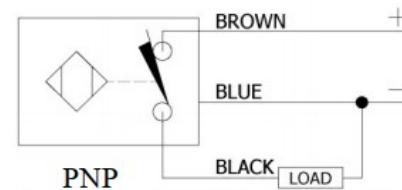
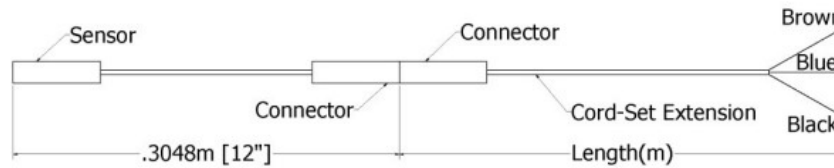
# Part Number Configuration

## 244- \_ \_ \_ - \_ \_ \_

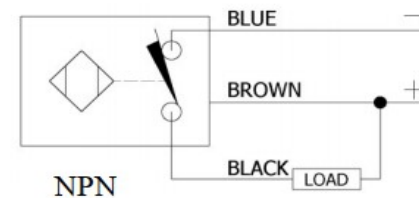
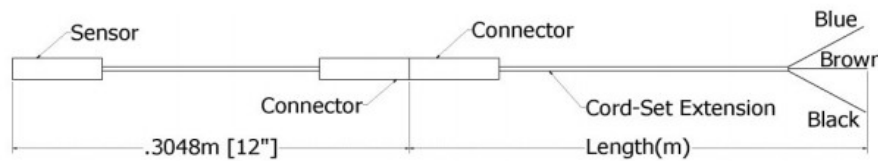
PNP or NPN	NC or NO	02	Meters
PNP or NPN	NC or NO	06	Meters
PNP or NPN	NC or NO	12	Meters

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

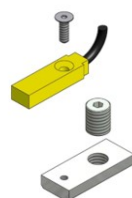
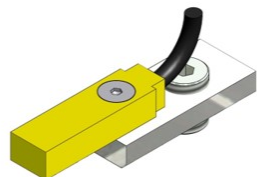
### PNP Diagrams



### NPN Diagrams



KIT INCLUDES – SENSOR, CORDSET EXTENSION, AND MOUNTING HARDWARE



	DRAWN BY: AW      DATE: 8/7/2023 CHECKED BY: --      DATE: DD/MM/YYYY LAST SAVED BY: awong      DATE: 8/8/2023	MATERIAL:	TITLE:
	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. TOLERANCES UNLESS NOTED OTHERWISE: .X ± .762 .XX ± .254 .XXX ± .127 ANG ± 0°30'	FINISH:	T-SLOT SENSOR KIT
	SURFACE FINISH: ✓	SHEET: 6 OF 6	SCALE: 1:1
	BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION	PART NUMBER: MDS-SB1-X-X-X	SHEET SIZE: C