

MGS-14H- - - X

GEARBOX MODEL (X AXIS)

MPG-118 _____
 MRG-118 _____
 RATIO: _____

GEARBOX MODEL (Y AXIS)

MPG-118 _____
 MRG-118 _____
 RATIO: _____

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

MOTOR INFORMATION (X AXIS)

MANUFACTURER: _____
 MODEL: _____

MOTOR INFORMATION (Y AXIS)

MANUFACTURER: _____
 MODEL: _____

SENSOR INFORMATION X-AXIS:

HOME-QTY _____ 244-____-____-____
 EOT-QTY _____ 244-____-____-____

SENSOR INFORMATION Y-AXIS:

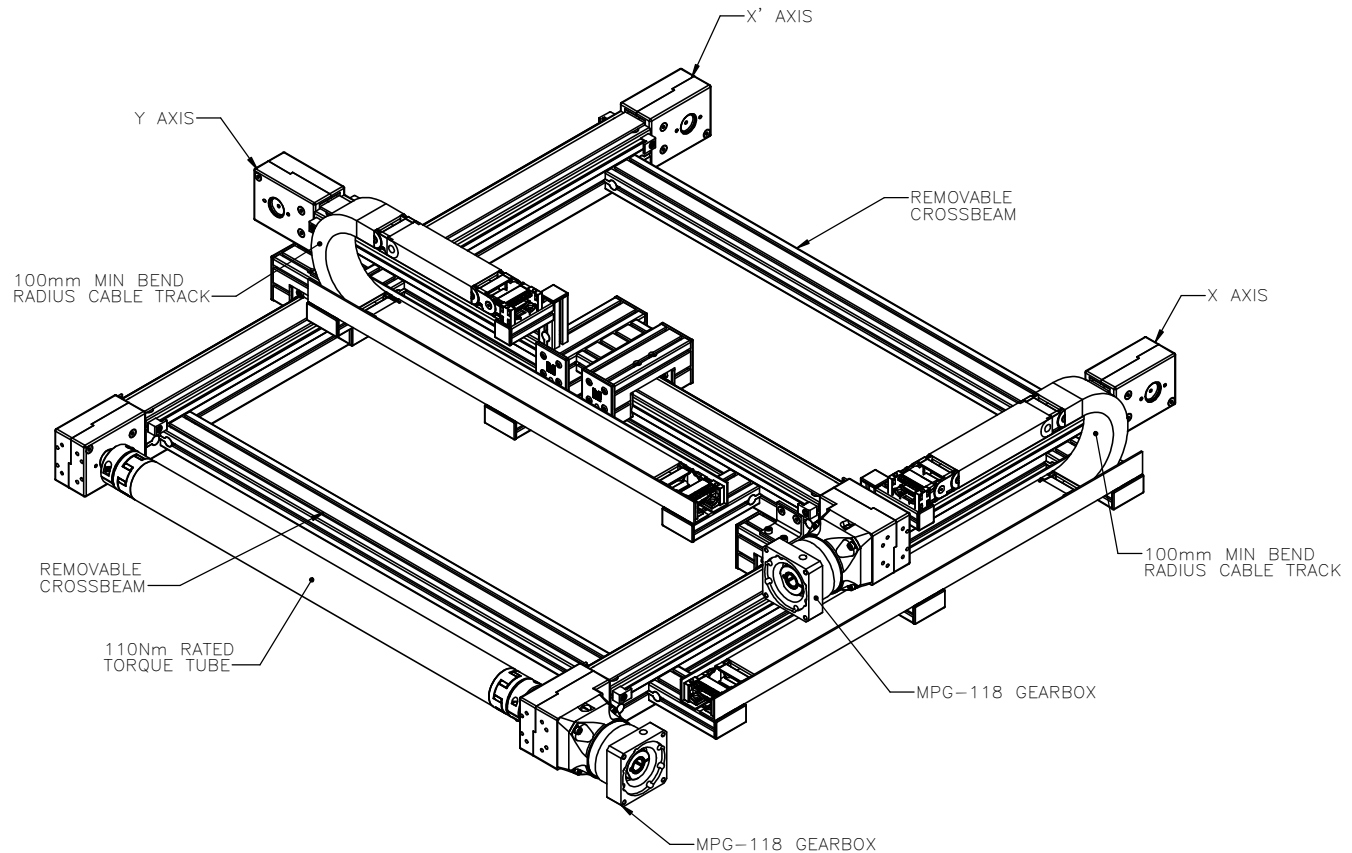
HOME-QTY _____ 244-____-____-____
 EOT-QTY _____ 244-____-____-____

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

ENTER Y-AXIS TRAVEL
 CENTER TO CENTER IN INCREMENTS OF 25mm
 LIMITS: 500mm-2950mm

ENTER X-AXIS TRAVEL
 TRAVEL IN INCREMENTS OF 25mm
 TRAVEL LIMITS: 500mm-5575mm

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



APPROVED: _____

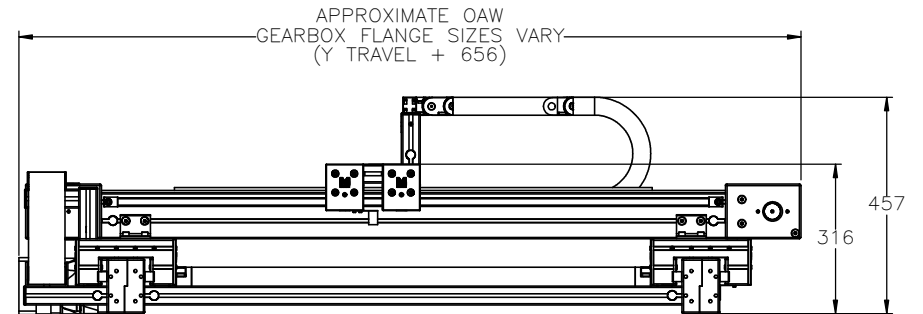
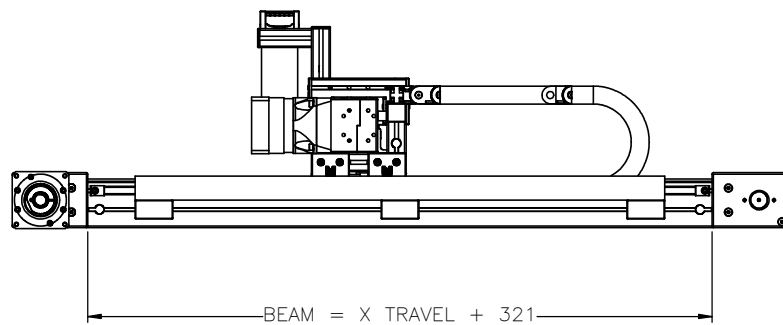
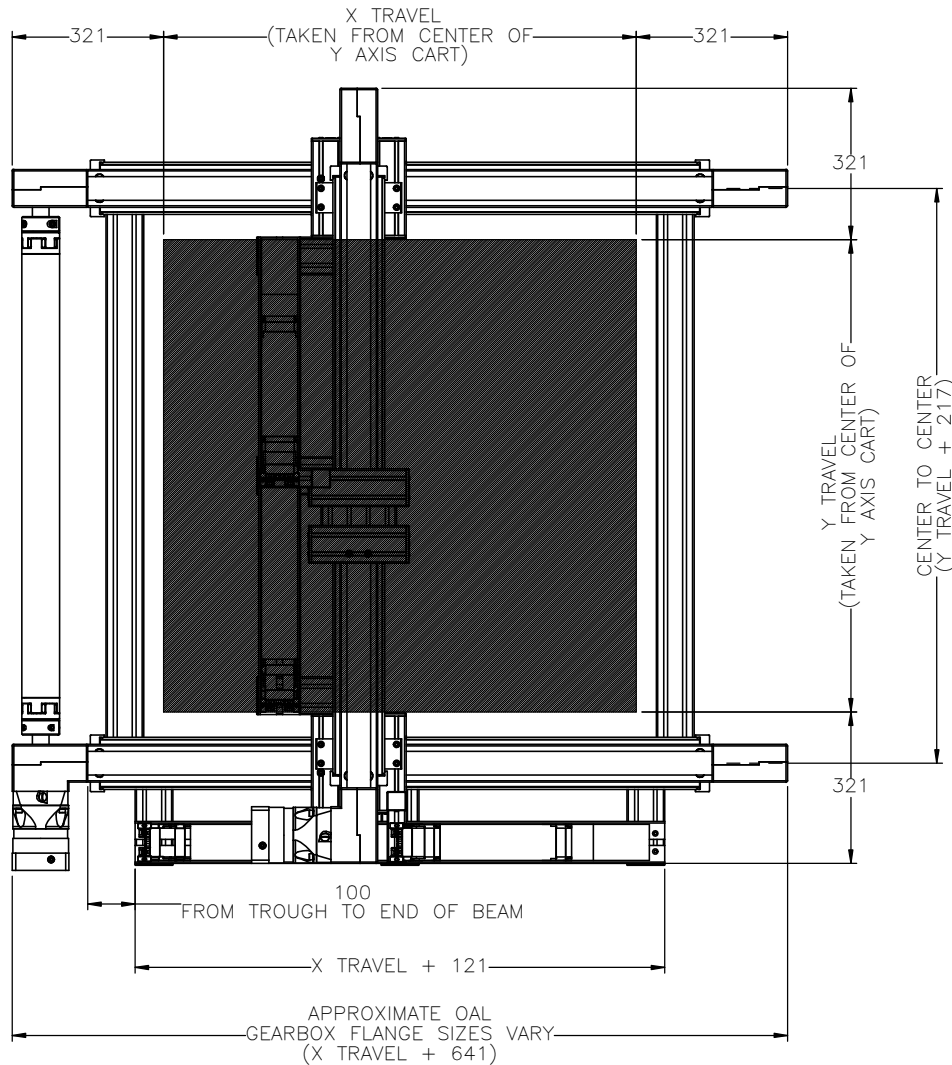
SIGN & PRINT


DATE: _____

PO:REFERENCE#: _____

	DRAWN BY: AW DATE: 9/26/2023	MATERIAL:	TITLE: MACRON 14H XY SYSTEM	
	CHECKED BY: DATE: DD/MM/YYYY	FINISH:		
	LAST SAVED BY: awong DATE: 10/2/2023	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS: TOLERANCES UNLESS NOTED: OTHERWISE:	.X ± .762 .XX ± .254 .XXX ± .127 ANG ± 0°30'	SCALE: 1:1 SHEET SIZE: C
	SURFACE FINISH: <input checked="" type="checkbox"/>	BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION	SHEET: 1 OF 6 PART NUMBER: MGS-14H-I-JF-1000-1000-X	REV:

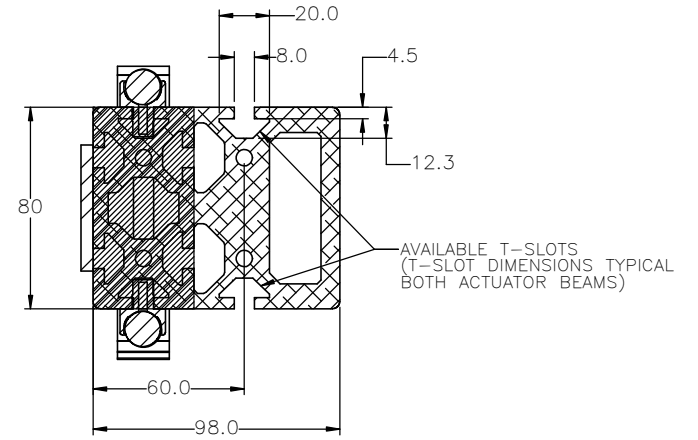
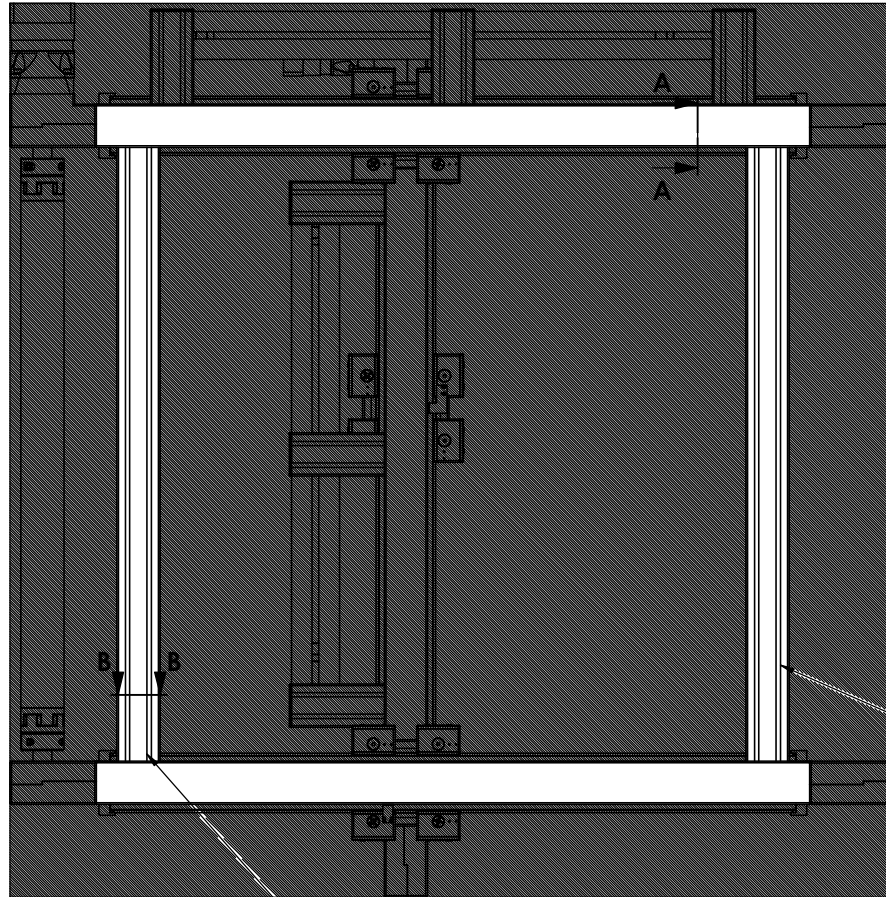
GANTRY FOOTPRINT



 MACRON DYNAMICS INC	DRAWN BY: AW DATE: 9/26/2023	MATERIAL:	TITLE: MACRON 14H XY SYSTEM	
	CHECKED BY: DATE: DD/MM/YYYY	FINISH:		
	LAST SAVED BY: awong DATE: 10/2/2023	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS TOLERANCES UNLESS NOTED: OTHERWISE:	.X ± .762 .XX ± .254 .XXX ± .127 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: <input checked="" type="checkbox"/> BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION	SHEET: 2 OF 6 PART NUMBER: MGS-14H-1-JF-1000-1000-X	REV:

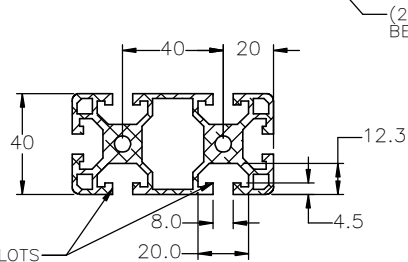
GANTRY MOUNTING FEATURES

BOTTOM VIEW



SECTION A-A


(2x) T-SLOTS AVAILABLE IF BEAM IS NOT REMOVED



(2x) T-SLOTS AVAILABLE IF BEAM IS NOT REMOVED

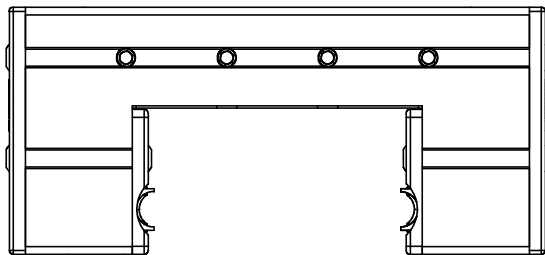
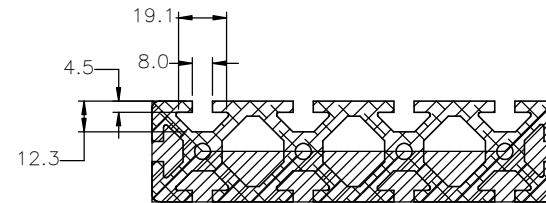
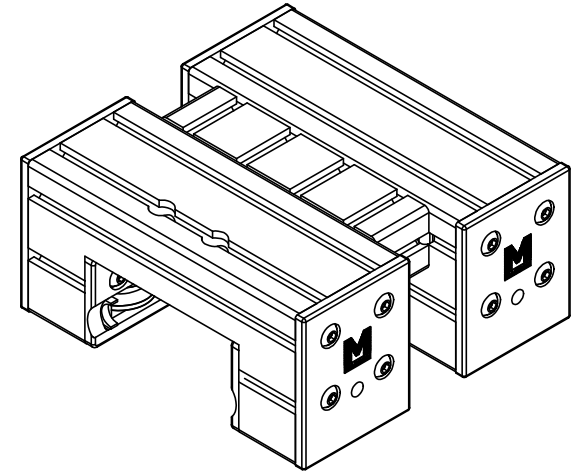
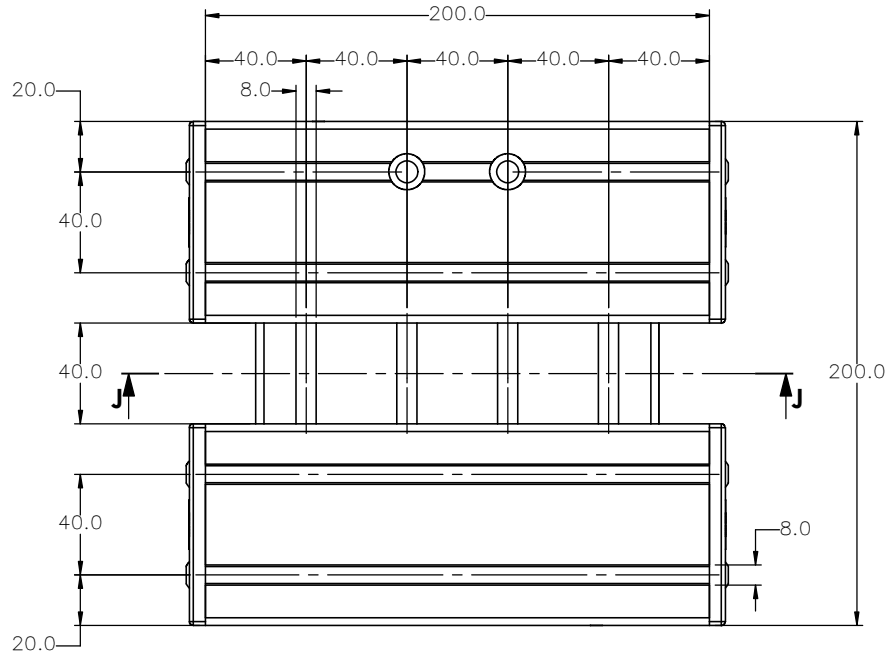
AVAILABLE T-SLOTS


SECTION B-B

 MACRON DYNAMICS INC	DRAWN BY: AW DATE: 9/26/2023	MATERIAL:	TITLE: MACRON 14H XY SYSTEM
	CHECKED BY: DATE: DD/MM/YYYY	FINISH:	
	LAST SAVED BY: awong DATE: 10/2/2023	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS: TOLERANCES UNLESS NOTED: .XX ± .254 .XXX ± .127 OTHERWISE: ANG ± 0°30'	SCALE: 1:1 SHEET SIZE: C
	SURFACE FINISH: <input checked="" type="checkbox"/>	BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION	SHEET: 3 OF 6 PART NUMBER: MGS-14H-I-JF-1000-1000-X

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CART MOUNTING FEATURES

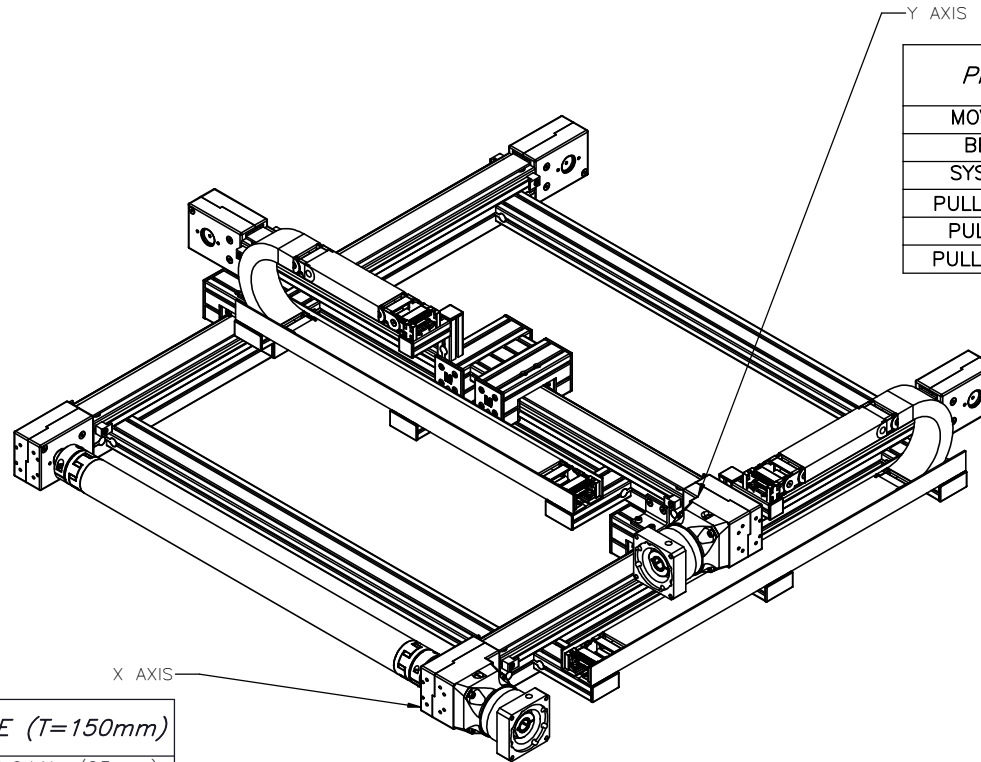


 MACRON DYNAMICS INC	DRAWN BY: AW CHECKED BY: LAST SAVED BY: qwong	DATE: 9/26/2023 DATE: DD/MM/YYYY DATE: 10/2/2023	MATERIAL: FINISH:	TITLE: CSA-14S	
	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. TOLERANCES UNLESS NOTED OTHERWISE:		.X ± .762 .XX ± .254 .XXX ± .127 ANG ± 0°30'	SCALE: 1:1 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: <input checked="" type="checkbox"/> BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION	SHEET: 4 OF 6 PART NUMBER: MGS-14H-I-JF-1000-1000-X	REV: C

MOTOR SIZING WORKSHEET

(INCREMENTAL ADDERS REFER TO MASS PER TRAVEL LENGTH)

BASE VALUES USED:
 X-TRAVEL = 150mm
 Y-TRAVEL = 500mm



PROPERTY	BASE VALUE (T=500mm)
MOVING MASS	6.191(+0.032kg/25mm)
BELT MASS	0.453(+0.009kg/25mm)
SYSTEM MASS	25.127(+0.553kg/25mm)
PULLEY PITCH ϕ	47.75mm (1.88")
PULLEY WIDTH	28.9mm (1.14")
PULLEY MATERIAL	STEEL

PROPERTY	BASE VALUE (T=150mm)
*MOVING MASS	13.297kg(+0.041kg/25mm)
BELT MASS	0.422kg(+0.009kg/25mm)
PULLEY PITCH ϕ	47.75mm (1.88")
PULLEY WIDTH	28.9mm (1.14")
PULLEY MATERIAL	STEEL
**TORQUE TUBE LENGTH	597mm
TORQUE TUBE ϕ	80mm
**TORQUE TUBE MASS	2.255kg(+0.057kg/25mm)
TORQUE TUBE MATERIAL	ANODIZED ALUMINUM ELASTOMER STYLE COUPLINGS WITH HUB
TRAVEL PER REV	150mm

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-118	5.8kg
	MRG-118	15.0kg

TOTAL SYSTEM MASS	(X TRAVEL x .02785) + (Y TRAVEL x .0222) + 72.17 = kg		
<p>MACRON DYNAMICS INC</p> <p><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></p>	DRAWN BY: AW CHECKED BY: qwong LAST SAVED BY: qwong	DATE: 9/26/2023 DATE: DD/MM/YYYY DATE: 10/2/2023	MATERIAL: FINISH: SCALE: 1:1 SHEET SIZE: C
	SURFACE FINISH: <input checked="" type="checkbox"/> BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION		SHEET: 5 OF 6 PART NUMBER: MGS-14H-1-JF-1000-1000-X
	TITLE: MACRON 14H XY SYSTEM		REV:
	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. TOLERANCES UNLESS NOTED OTHERWISE: .XX ± .254, .XXX ± .127, ANG ± 0°30'		

*SYSTEM MASS OF Y-AXIS NEEDS TO BE ADDED TO THIS

**BASE VALUE AT Y TRAVEL = 500mm

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

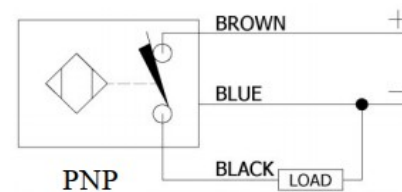
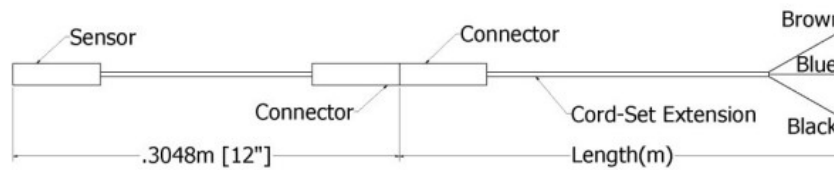
Part Number Configuration

244- - - - -

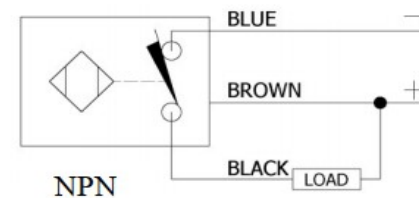
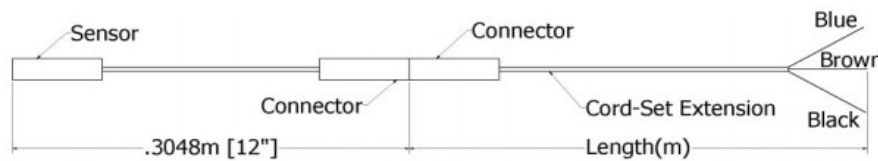
PNP or NPN	NC or NO	02	Meters
PNP or NPN	NC or NO	06	Meters
PNP or NPN	NC or NO	12	Meters

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

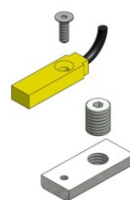
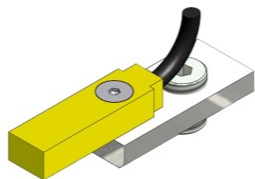
PNP Diagrams



NPN Diagrams



KIT INCLUDES – SENSOR, CORDSET EXTENSION, AND MOUNTING HARDWARE



	DRAWN BY: AW DATE: 9/26/2023 CHECKED BY: DATE: DD/MM/YYYY LAST SAVED BY: qwong DATE: 10/2/2023	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 ✓	SCALE 1:1	SHEET SIZE C
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