

MGS-R20- - - X

GEARBOX MODEL (X AXIS)
 MPG-064 ___ MPG-084 ___ MPG-114 ___
 MRG-064 ___ MRG-084 ___ MRG-114 ___
 RATIO: _____

GEARBOX MODEL (Y AXIS)
 MPG-064 ___ MPG-084 ___ MPG-114 ___
 MRG-064 ___ MRG-084 ___ MRG-114 ___
 RATIO: _____

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

MOTOR INFORMATION (X AXIS)
 MANUFACTURER: _____
 MODEL: _____

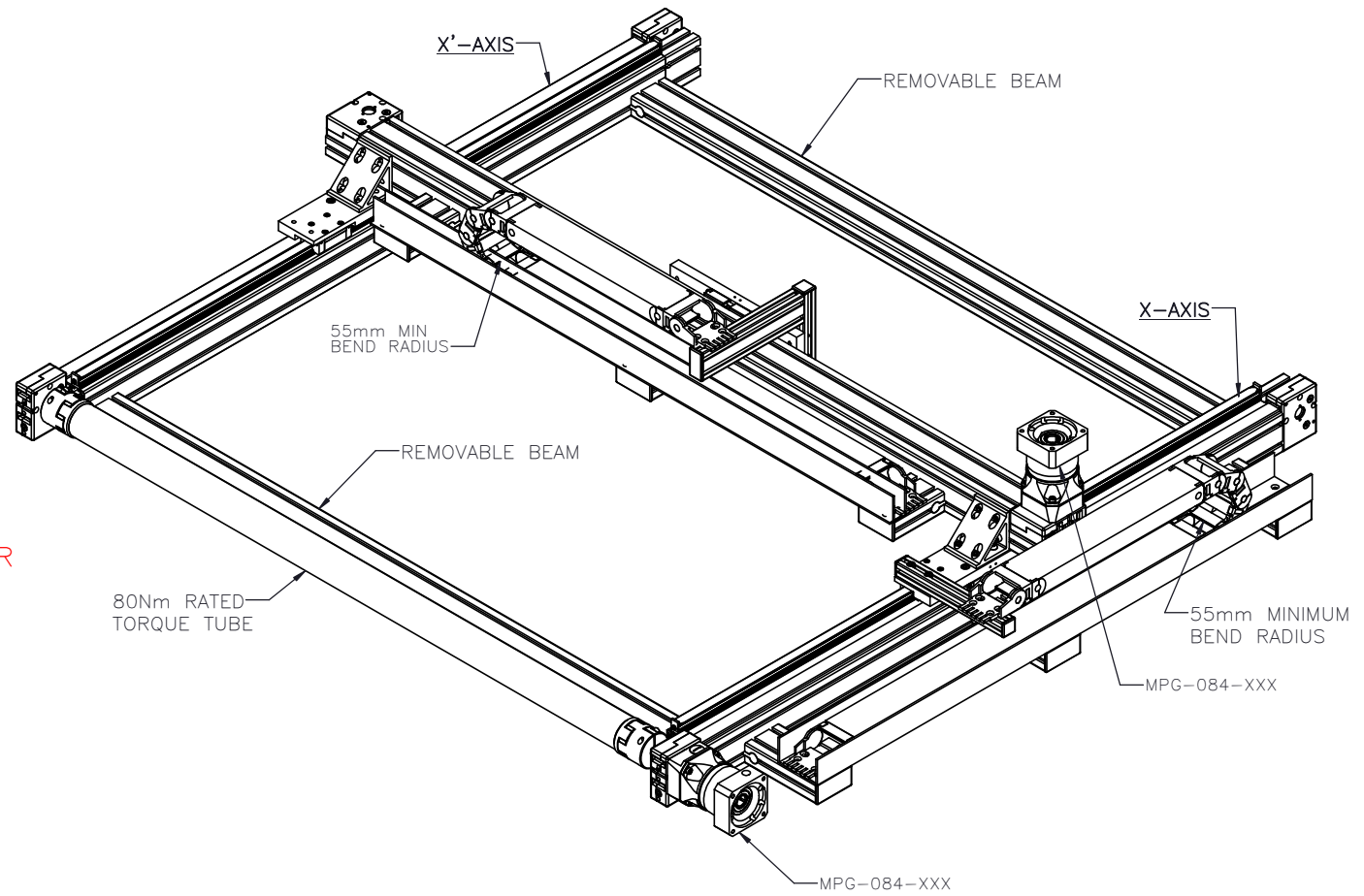
MOTOR INFORMATION (Y AXIS)
 MANUFACTURER: _____
 MODEL: _____

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
 TRAVEL IN INCREMENTS OF 25mm
 TRAVEL LIMITS: 500mm-2950mm

ENTER X-AXIS TRAVEL
 TRAVEL IN INCREMENTS OF 25mm
 TRAVEL LIMITS: 150mm-5575mm

*IF TRAVEL IS
 OUTSIDE LIMITS
 LISTED, CONTACT
 MACRON*




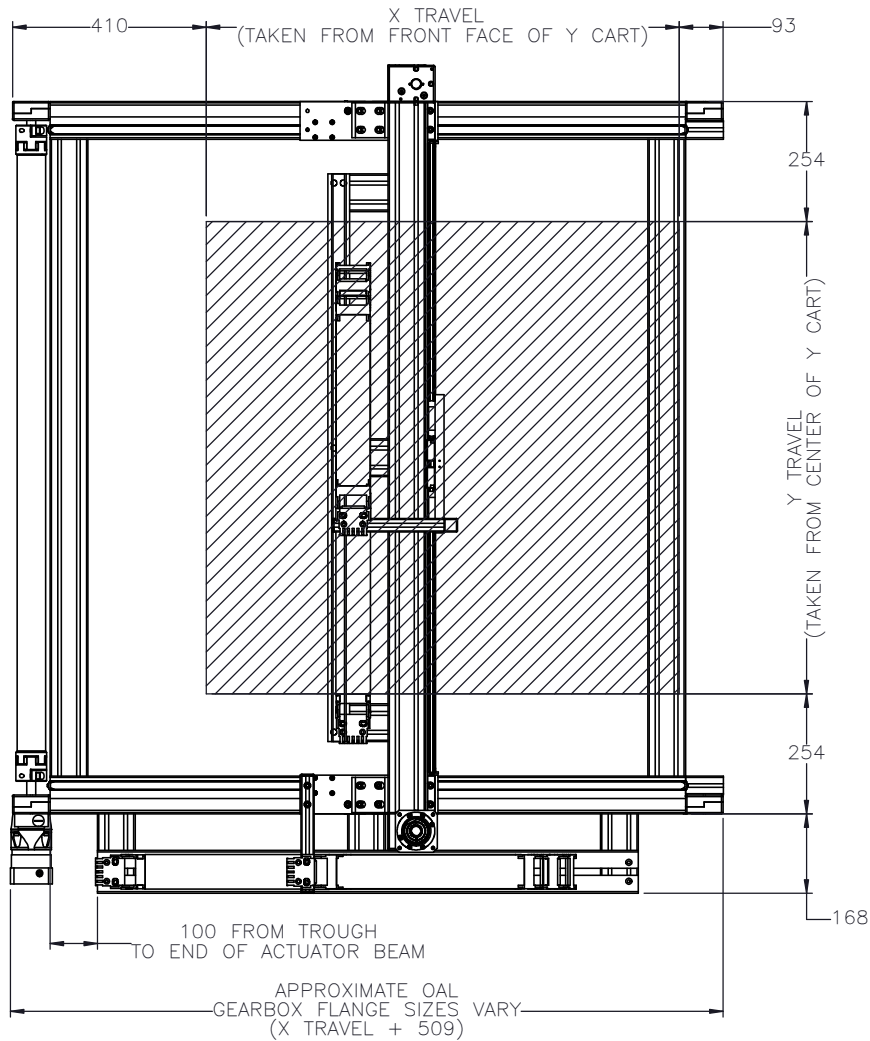
APPROVED: _____
 SIGN & PRINT

DATE: _____

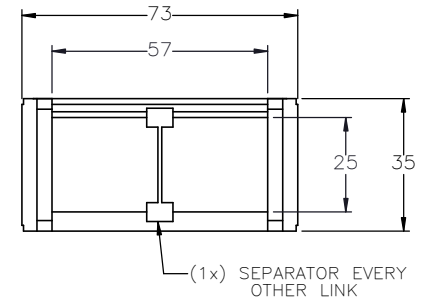
PO:REFERENCE#: _____

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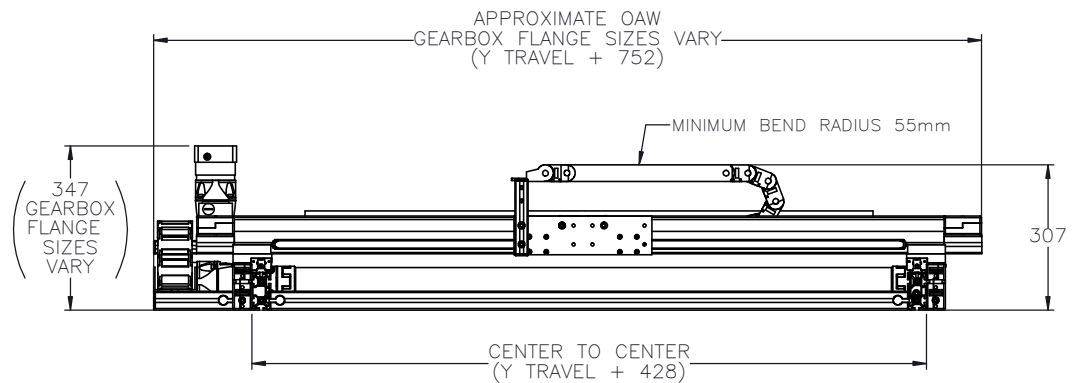
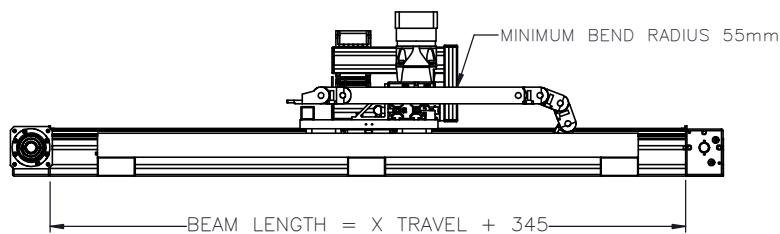
 MACRON DYNAMICS INC	DRAWN BY: PHW DATE: 11/26/2017 CHECKED BY: DATE: DD/MM/YYYY LAST SAVED BY: TH DATE: 10/8/2020	MATERIAL:	TITLE: MACRON R20 XY GANTRY
	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS TOLERANCES UNLESS NOTED OTHERWISE:	FINISH:	
THIS DRAWING IS THE PROPERTY OF MACRON DYNAMICS 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: 1 OF 6 PART NUMBER: MGS-R20-X-X-X	REV: C




GANTRY FOOTPRINT



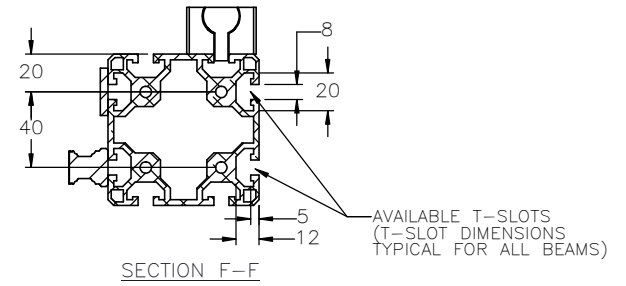
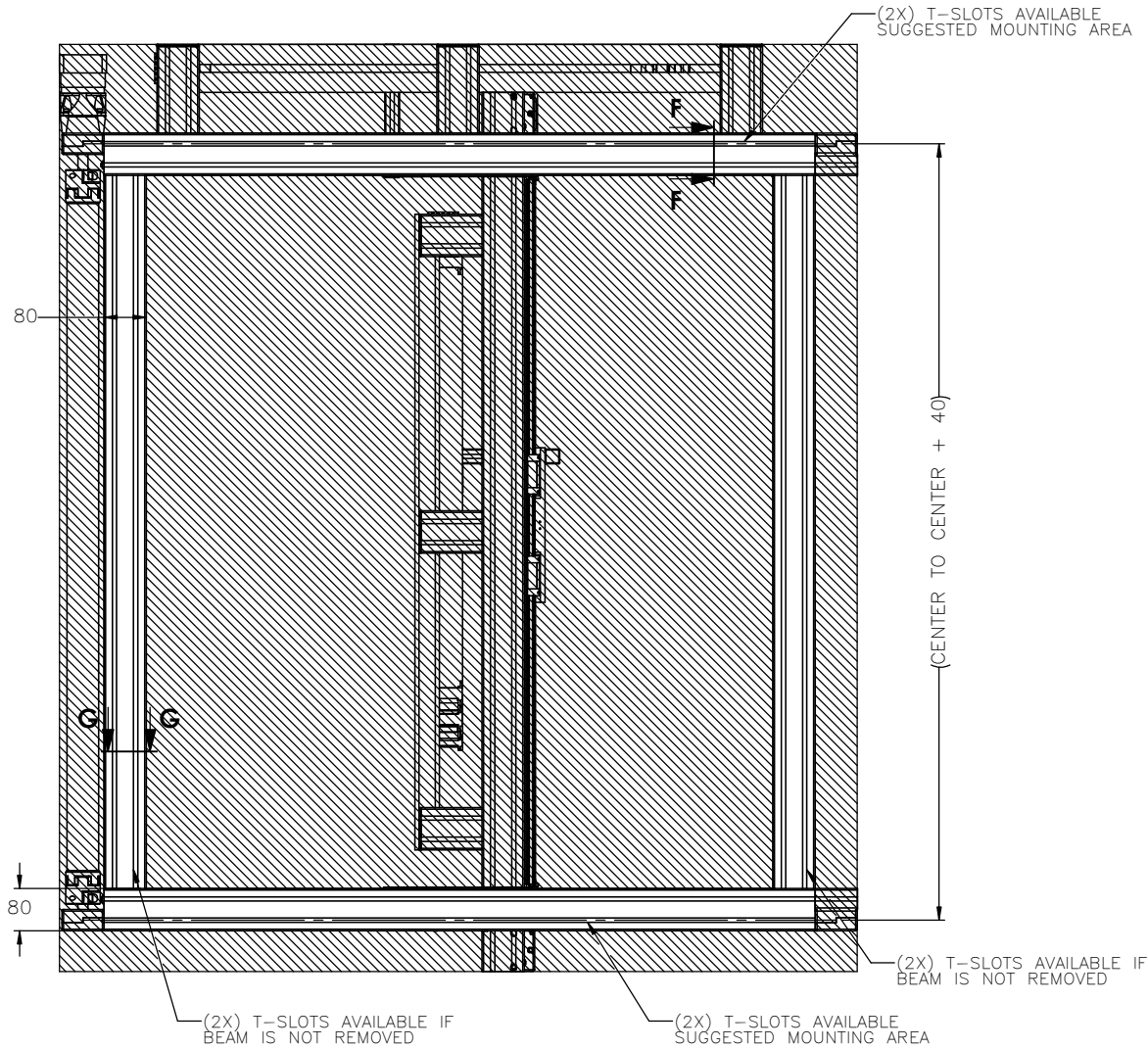
CABLE TRACK CROSS SECTION (SAME FOR BOTH AXES)



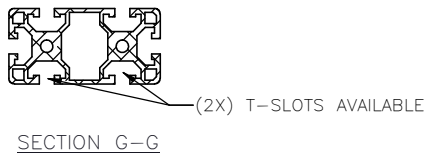
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 MACRON DYNAMICS INC	DRAWN BY: PHW CHECKED BY: LAST SAVED BY: TH	DATE: 11/26/2017 DATE: DD/MM/YYYY DATE: 10/8/2020	MATERIAL: FINISH:	TITLE: MACRON R20 XY GANTRY
	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. TOLERANCES UNLESS NOTED OTHERWISE: .XX ± .254 .XXX ± .127 ANG ± 0°30'		SURFACE FINISH: <input checked="" type="checkbox"/> BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION	SCALE: 1:1 SHEET SIZE: C
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GANTRY MOUNTING FEATURES



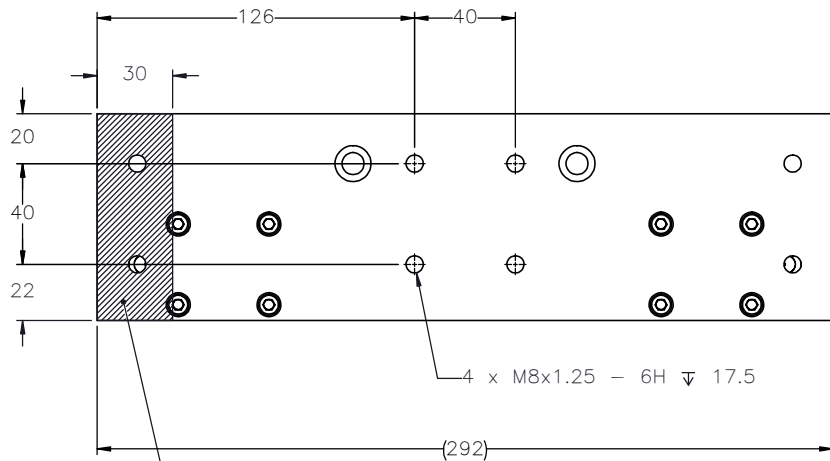
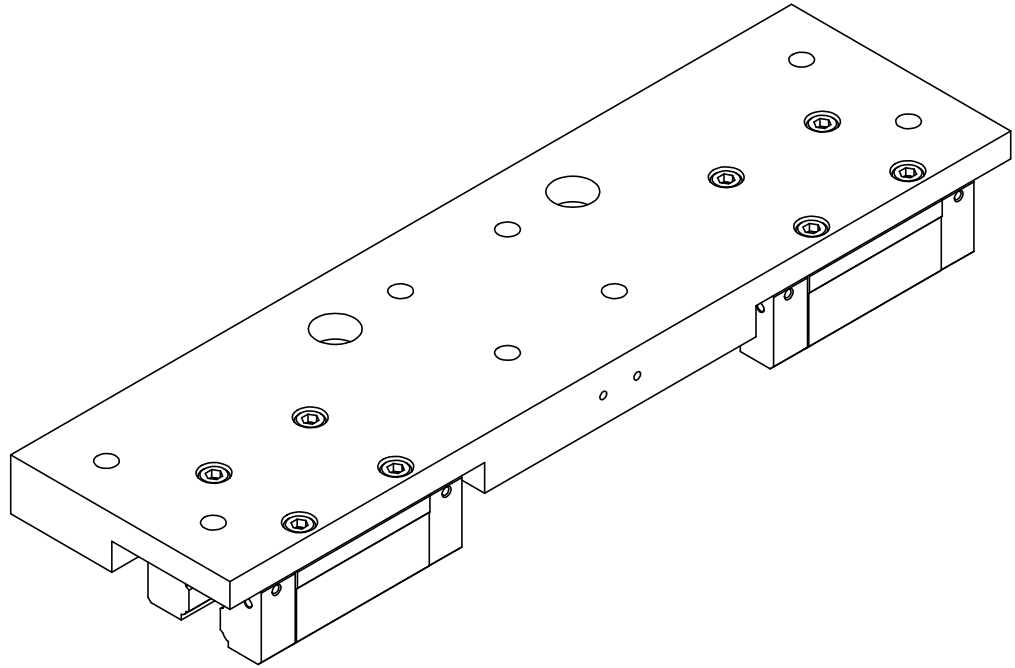
BOTTOM VIEW



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R20 CART MOUNTING FEATURES



*HATCHED AREA IS COVERED BY CABLE TRACK MOUNTING BRACKET

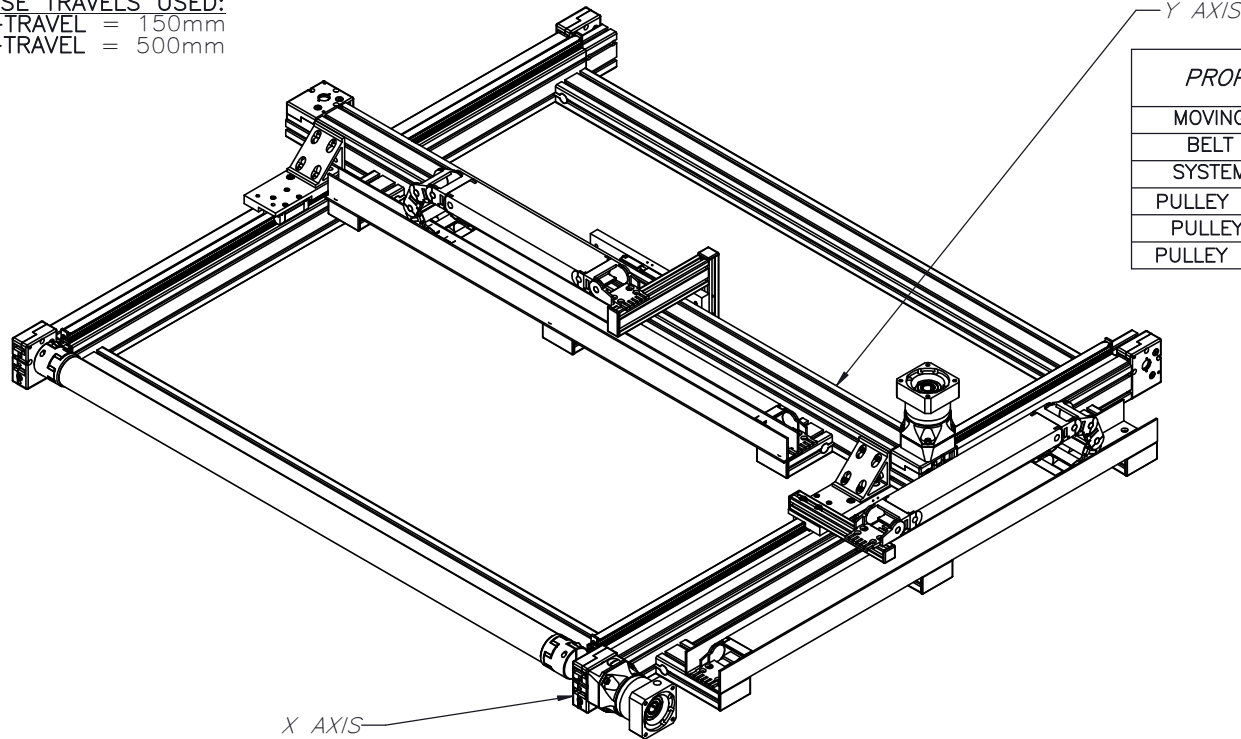
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	CHECKED BY: DATE: DD/MM/YYYY		CSA-R20
	LAST SAVED BY: TH DATE: 10/8/2020	FINISH:	SCALE: 1:1 SHEET SIZE: C
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES: TOLERANCES UNLESS NOTED: OTHERWISE:	.X ± .03 .XX ± .010 .XXX ± .005 ANG ± 0°30'		
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MOTOR SIZING WORKSHEET

(INCREMENTAL ADDERS REFER TO MASS PER TRAVEL LENGTH)

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




PROPERTY	BASE VALUE (T=500mm)
MOVING MASS	3.141(+0.028kg/25mm)
BELT MASS	0.239(+0.006kg/25mm)
SYSTEM MASS	14.595(+0.235kg/25mm)
PULLEY PITCH ϕ	47.75mm (1.88")
PULLEY WIDTH	28.9mm (1.14")
PULLEY MATERIAL	STEEL

PROPERTY	BASE VALUE (T=150mm)
*MOVING MASS	5.101kg(+.0341kg/25mm)
BELT MASS	0.310kg(.012kg/25mm)
PULLEY PITCH ϕ	47.75mm (1.88")
PULLEY WIDTH	28.9mm (1.14")
PULLEY MATERIAL	STEEL
**TORQUE TUBE LENGTH	889mm
TORQUE TUBE ϕ	60mm
**TORQUE TUBE MASS	2.081kg(+.036kg/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-064		1.0kg
MPG-084		2.3kg
MPG-114		5.8kg
MRG-064		3.0kg
MRG-084		5.6kg
MRG-114		15.0kg

TOTAL SYSTEM MASS	$(X-TRAVEL \times .0163) + (Y-TRAVEL \times .0148) + 31.62 = \text{kg}$		
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	CHECKED BY:	DATE: DD/MM/YYYY	FINISH:
	LAST SAVED BY: TH	DATE: 10/8/2020	
	<small>UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. TOLERANCES UNLESS NOTED OTHERWISE:</small> .X \pm .762 .XX \pm .254 .XXX \pm .127 ANG \pm 0°30'		
	SURFACE FINISH	<input checked="" type="checkbox"/>	
	BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING		
	THIRD ANGLE PROJECTION		
	SHEET	PART NUMBER	SCALE 1:1 SHEET SIZE C
	5 OF 6	MGS-R20-X-X-X	REV

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

**BASE VALUE AT Y TRAVEL = 500mm

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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

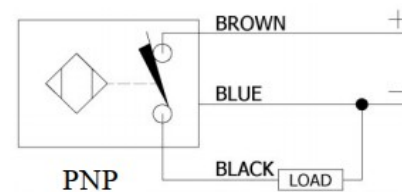
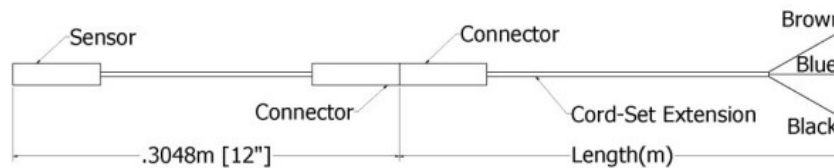
Part Number Configuration

244- _ _ _ - _ _ _

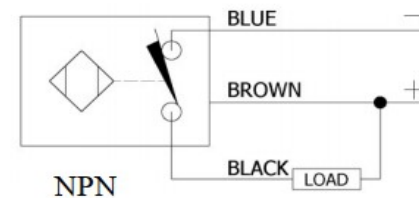
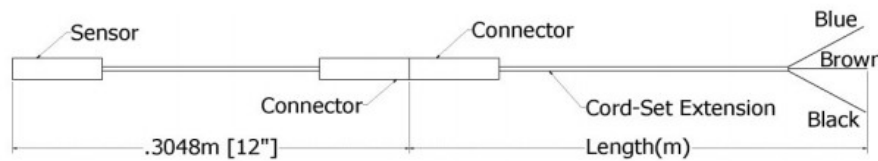
PNP or NPN	NC or NO	02	Meters
PNP or NPN	NC or NO	06	Meters
PNP or NPN	NC or NO	12	Meters

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

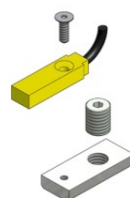
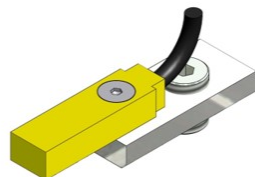
PNP Diagrams




NPN Diagrams



KIT INCLUDES – SENSOR, CORDSET EXTENSION, AND MOUNTING HARDWARE



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	SURFACE FINISH <input checked="" type="checkbox"/>	BREAK ALL SHARP EDGES	SCALE 1:1	SHEET SIZE C
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