

GEARBOX MODEL (X-AXIS):

MPG-062____
 MRG-062____
 RATIO: _____

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

MOTOR INFORMATION (X-AXIS):

MANUFACTURER: _____
 MODEL: _____

MOTOR INFORMATION (Z-AXIS):

MANUFACTURER: _____
 MODEL: _____
 (*Z AXIS IS DIRECT-DRIVEN)

SENSOR INFORMATION (X-AXIS):

HOME-QTY ___ 244-____-____-____
 EOT-QTY ___ 244-____-____-____

SENSOR INFORMATION (Z-AXIS):

HOME-QTY ___ 244-____-____-____
 EOT-QTY ___ 244-____-____-____

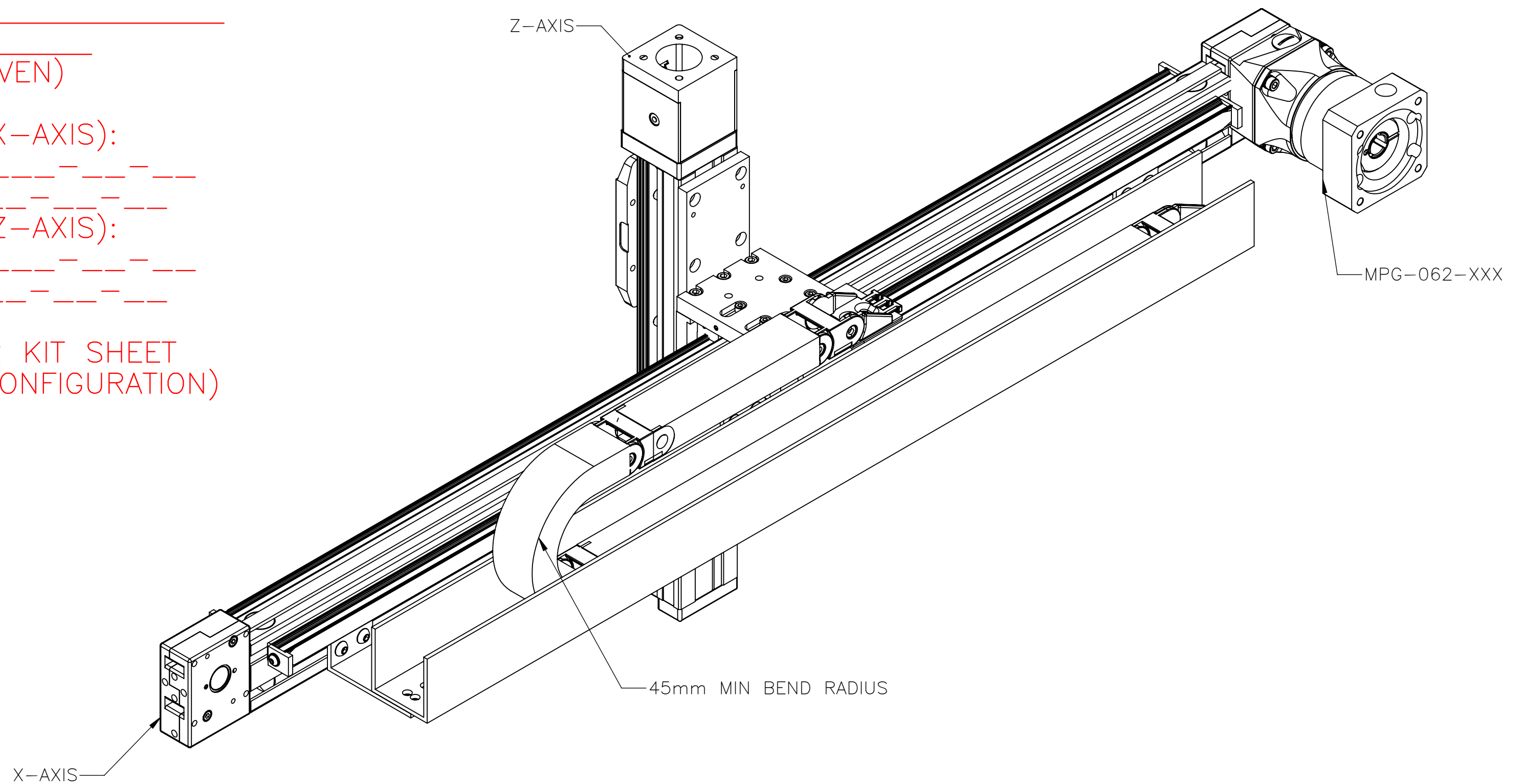
(SEE T-SLOT SENSOR KIT SHEET
 FOR PART NUMBER CONFIGURATION)

MGS-R5D- [] -X-S []

ENTER Z-AXIS TRAVEL
 TRAVEL IN INCREMENTS OF 100mm
 TRAVEL LIMITS: 100mm-400mm

ENTER X-AXIS TRAVEL
 TRAVEL IN INCREMENTS OF 25mm
 TRAVEL LIMITS: 150mm-3850mm

*IF TRAVEL IS
 OUTSIDE LIMITS
 LISTED, CONTACT
 MACRON*



APPROVED: _____

DATE: _____

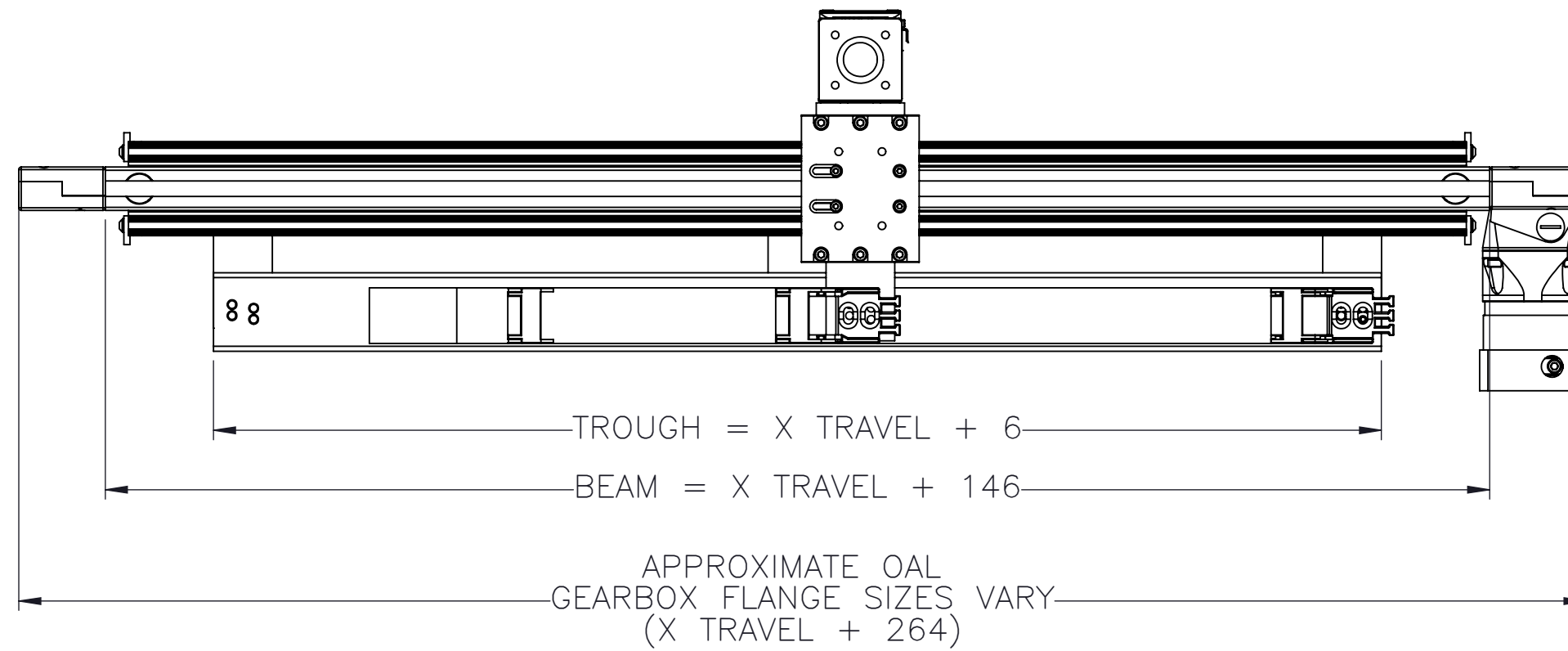
PO:REFERENCE#: _____

	DRAWN BY: AW CHECKED BY: -- LAST SAVED BY: Tim	DATE: 9/20/2023 DATE: DD/MM/YYYY DATE: 10/31/2023	MATERIAL:	TITLE: MACRON R5D XZ GANTRY
	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. TOLERANCES UNLESS NOTED OTHERWISE:		FINISH:	SCALE 1:1 SHEET SIZE C
	SURFACE FINISH \checkmark		SHEET 1 OF 14	PART NUMBER MGS-R5D-XXX-X-SXXX

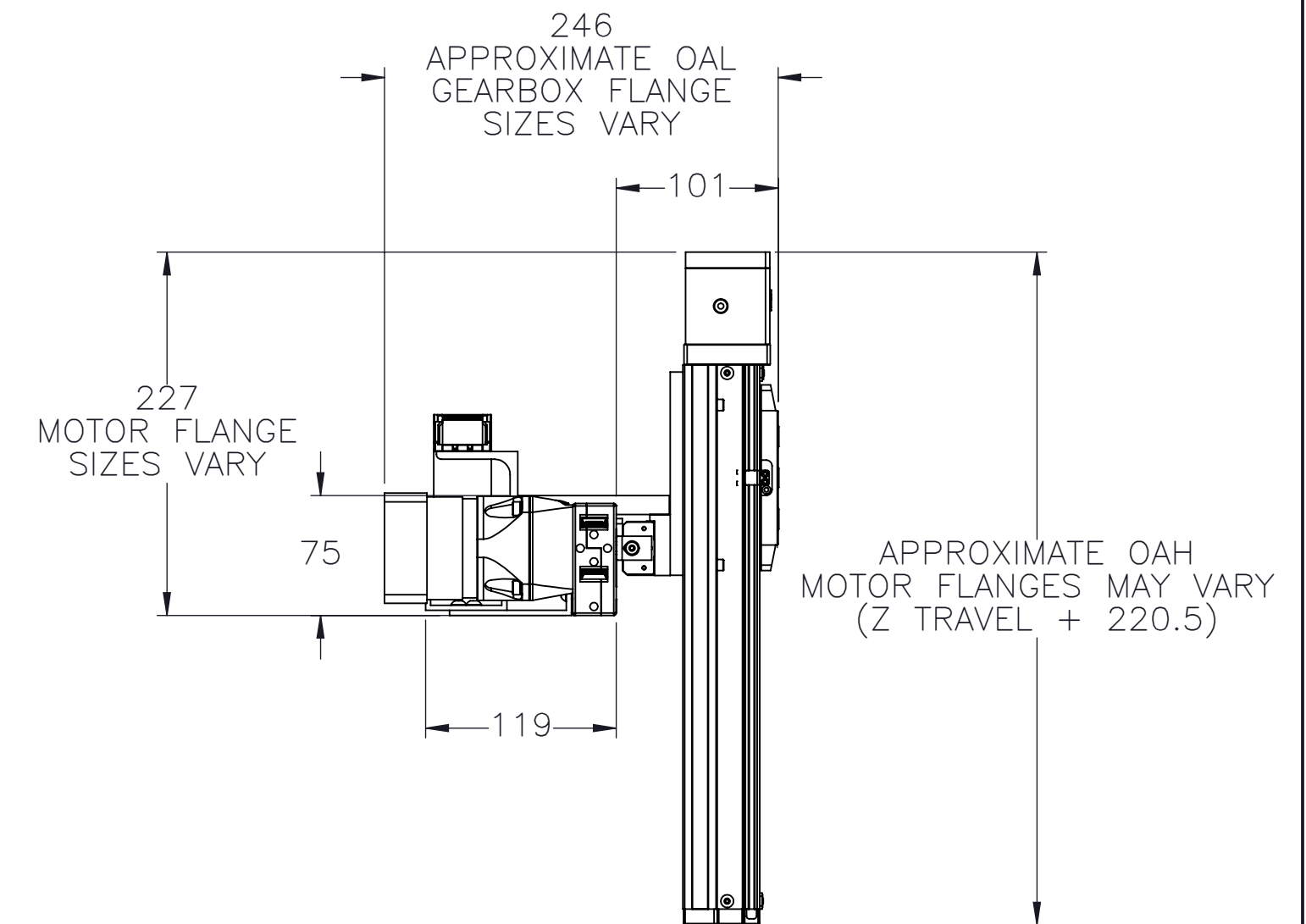
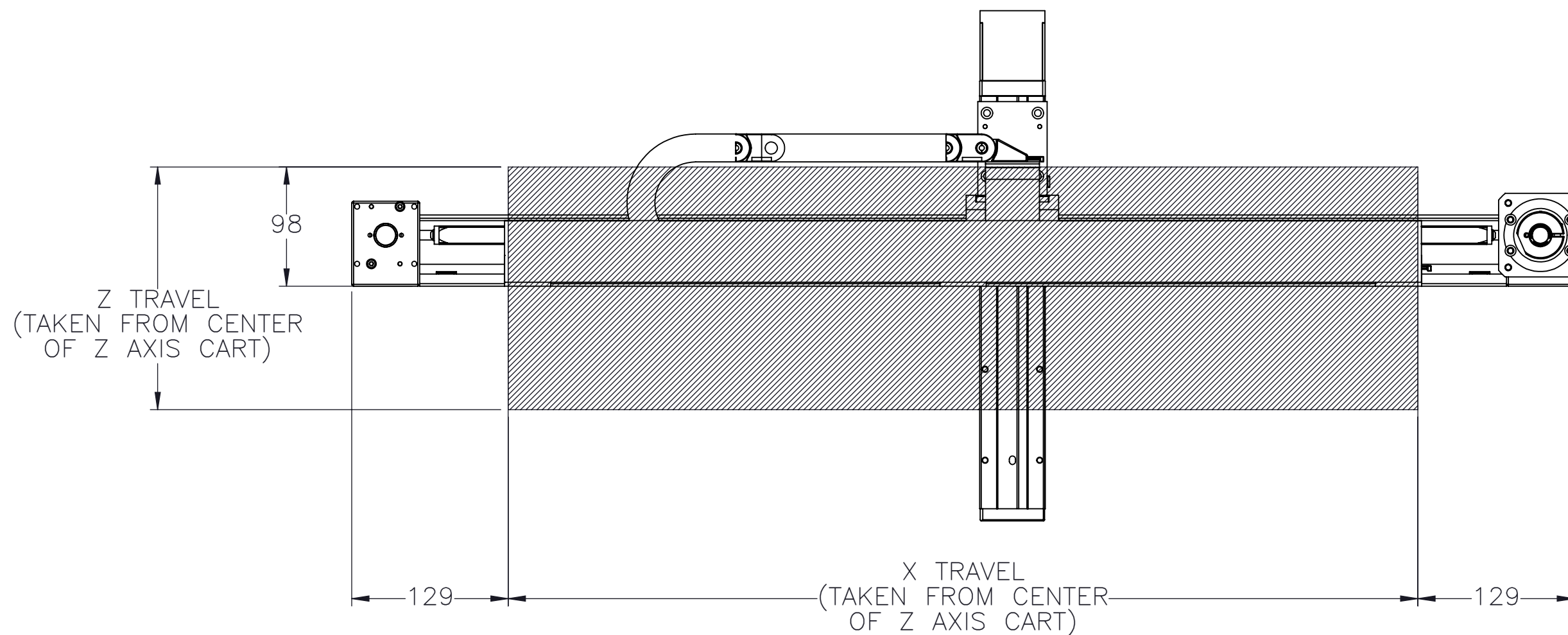
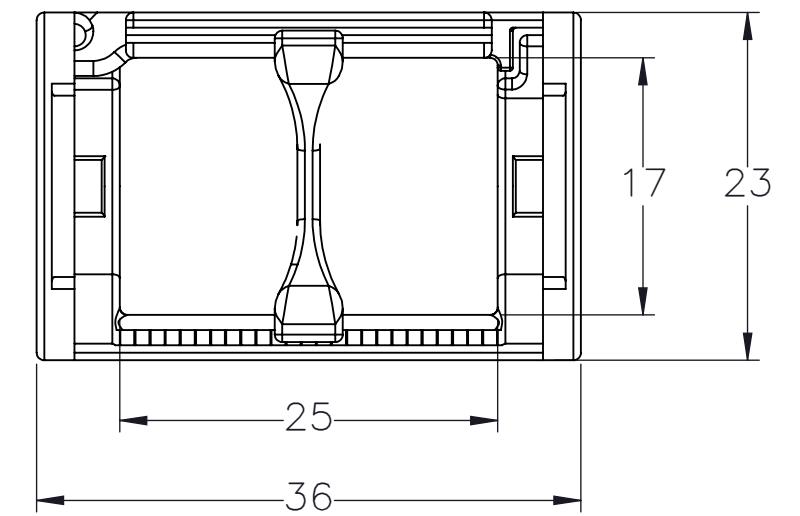
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BREAK ALL SHARP EDGES
 DIMENSIONAL LIMITS APPLY AFTER FINISHING
 THIRD ANGLE PROJECTION

WORK ENVELOPE AND GANTRY FOOTPRINT

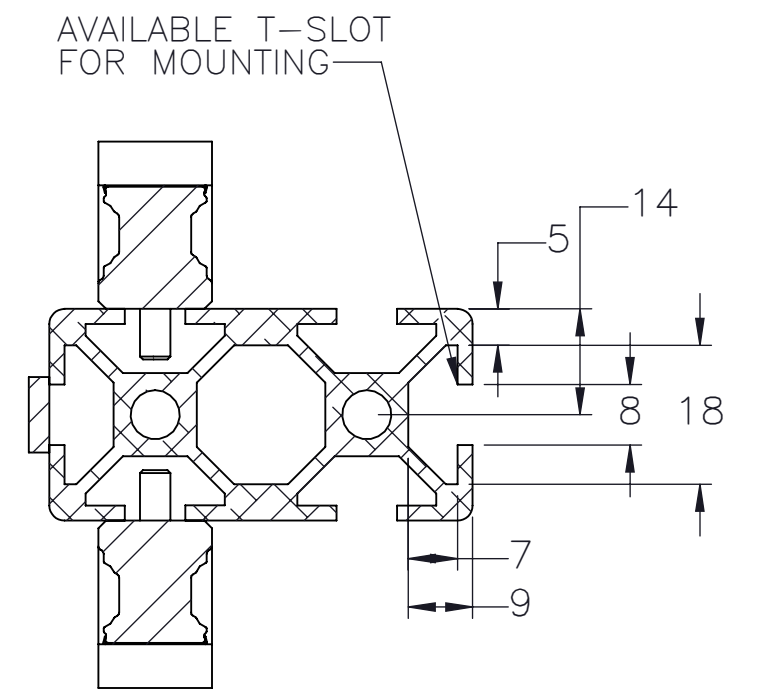
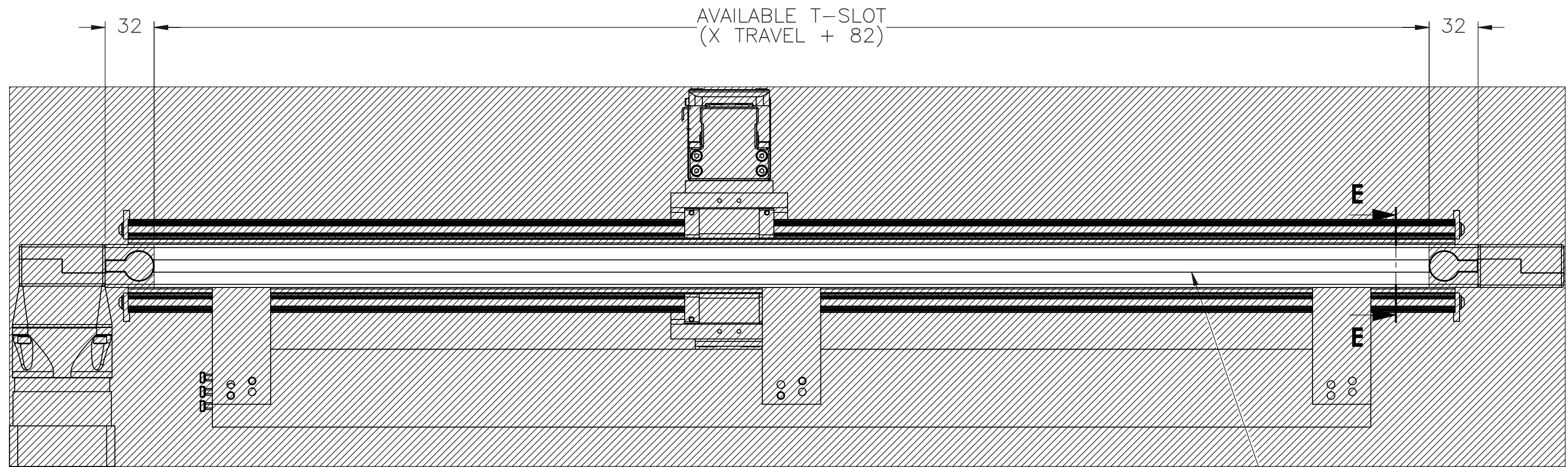


CABLE TRACK CROSS SECTION




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	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. TOLERANCES UNLESS NOTED OTHERWISE:		FINISH:	SCALE 1:1 SHEET SIZE C	
	SURFACE FINISH \checkmark		BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING		SHEET 2 OF 14 PART NUMBER MGS-R5D-XXX-X-SXXX
	THIRD ANGLE PROJECTION		REV		

GANTRY MOUNTING FOOTPRINT



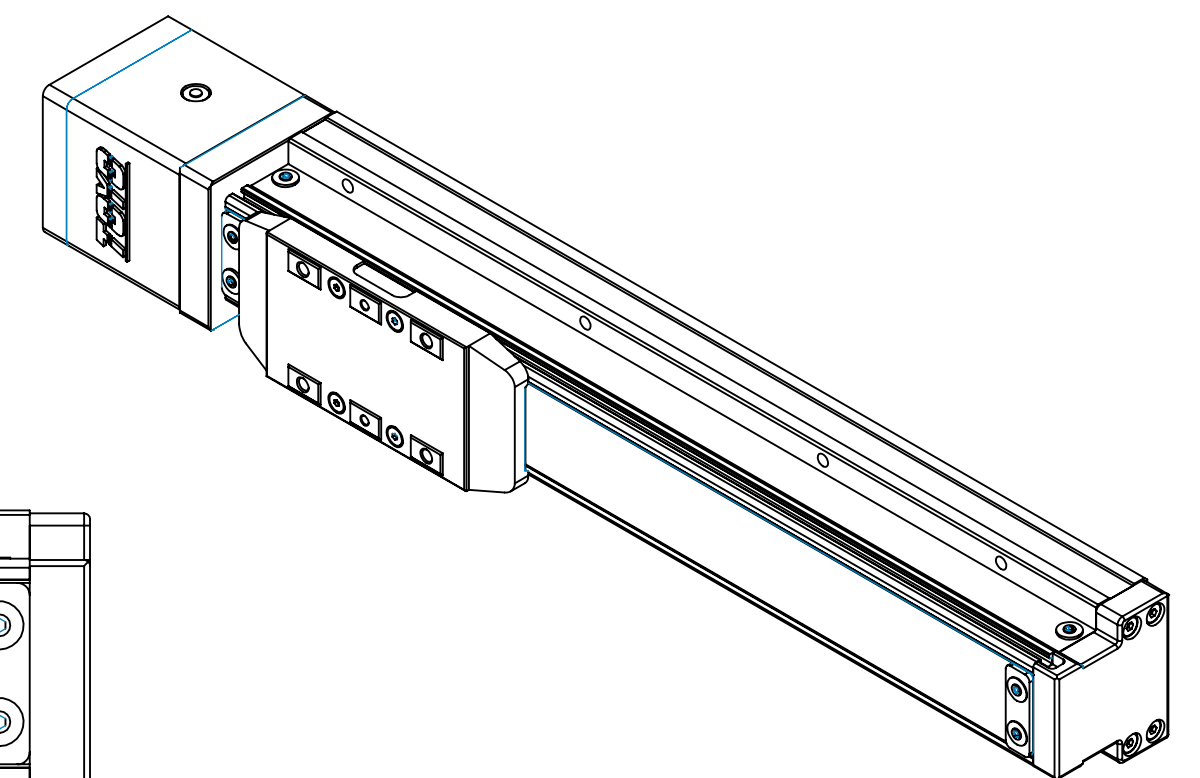
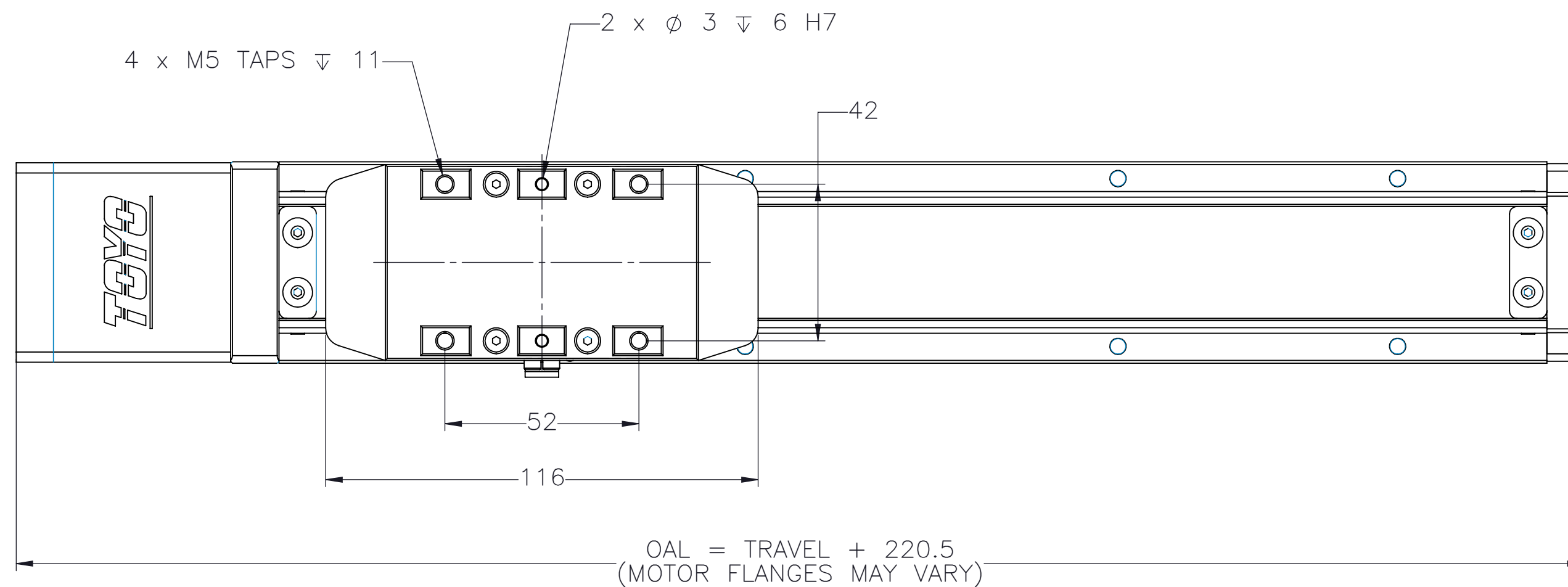
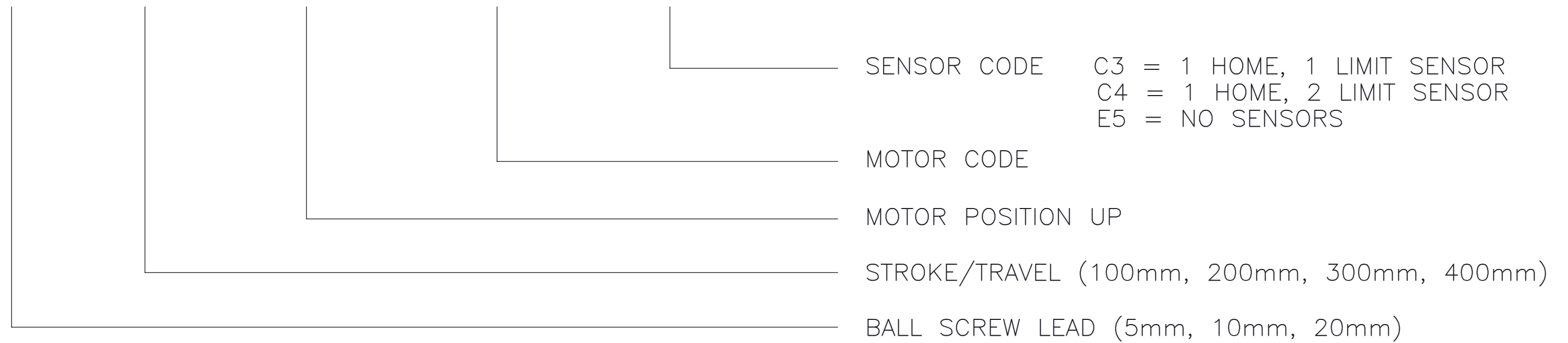
SECTION E-E


(1x) T-SLOT AVAILABLE
SUGGESTED MOUNTING AREA

 MACRON DYNAMICS INC	DRAWN BY: AW DATE: 9/20/2023	MATERIAL:	TITLE: MACRON R5D XZ GANTRY	
	CHECKED BY: -- DATE: DD/MM/YYYY			FINISH:
	LAST SAVED BY: Tim DATE: 10/31/2023	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS. TOLERANCES UNLESS NOTED OTHERWISE: .X ± .762 .XX ± .254 .XXX ± .127 ANG ± 0°30'		
	SURFACE FINISH 63	SCALE 1:1 SHEET SIZE C		
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Z AXIS SCREW TABLE SELECTION

GTH5-L__-___-BC-M10B___



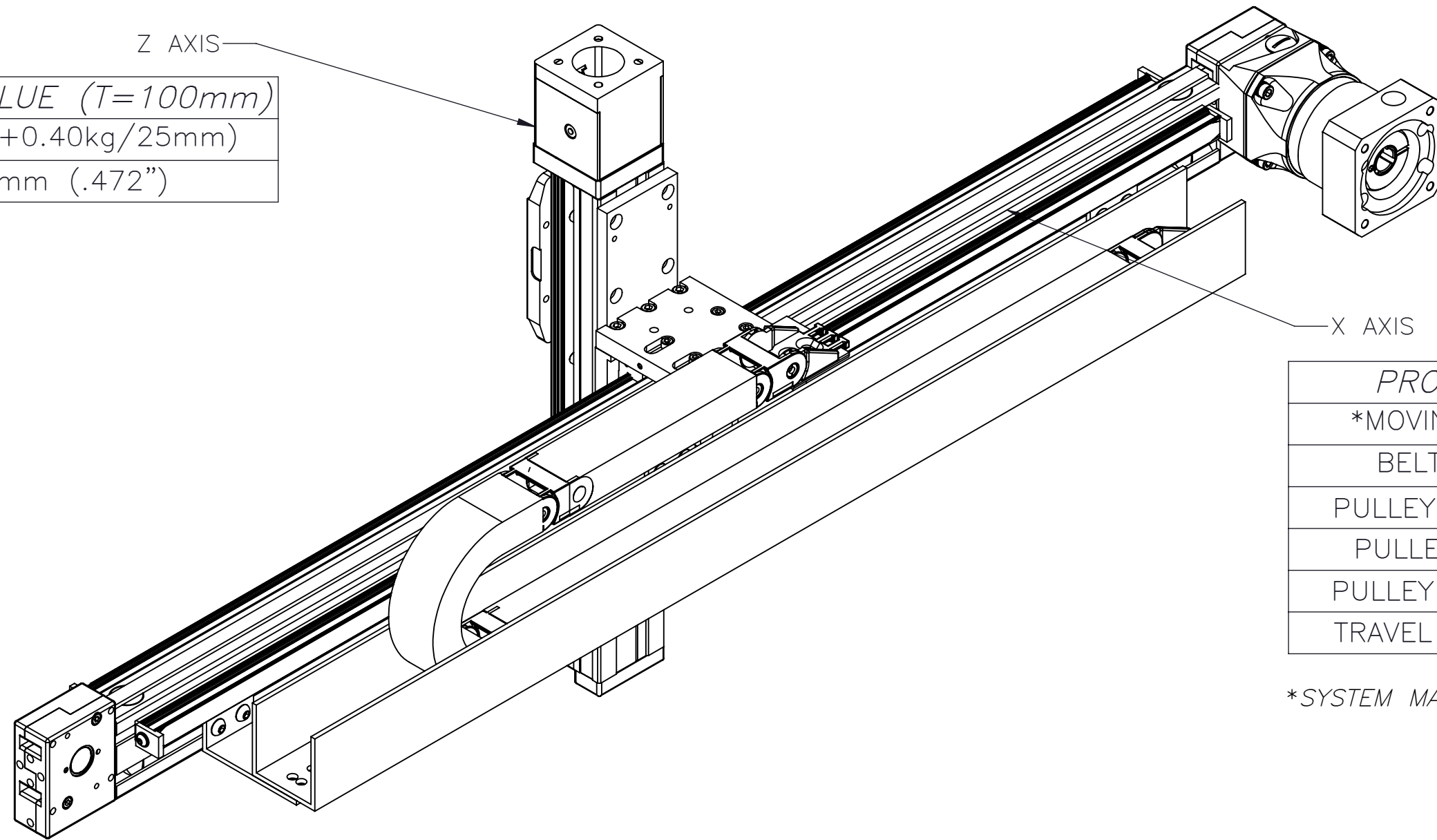
 MACRON DYNAMICS INC	DRAWN BY: AW CHECKED BY: -- LAST SAVED BY: Tim	DATE: 9/20/2023 DATE: DD/MM/YYYY DATE: 10/31/2023	MATERIAL:	TITLE: TOYO 10mm LEAD SCREW TABLE	
	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. TOLERANCES UNLESS NOTED OTHERWISE:		FINISH:	SCALE 1:1 SHEET SIZE C	
	SURFACE FINISH 63		SHEET	PART NUMBER	REV
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MOTOR SIZING INFORMATION

(INCREMENTAL ADDERS REFER TO MASS PER TRAVEL LENGTH)

BASE TRAVELS USED:
X-TRAVEL = 150mm
Z-TRAVEL = 100mm

PROPERTY	BASE VALUE (T=100mm)
SYSTEM MASS	2.42kg(+0.40kg/25mm)
BALL SCREW DIAMETER	12mm (.472")



PROPERTY	BASE VALUE (T=150mm)
*MOVING MASS	.922kg(+0.012kg/25mm)
BELT MASS	0.100kg(+0.001kg/25mm)
PULLEY PITCH ϕ	33.42mm (1.32")
PULLEY WIDTH	16.3mm (0.64")
PULLEY MATERIAL	STEEL
TRAVEL PER REV	105mm

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


X-TRAVEL = _____ mm

Z-TRAVEL = _____ mm

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

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

TOTAL SYSTEM MASS	$(X \text{ TRAVEL} \times .0061) + (Z \text{ TRAVEL} \times .004) + 3.62 = \text{kg}$
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 MACRON DYNAMICS INC	DRAWN BY: AW CHECKED BY: -- LAST SAVED BY: Tim	DATE: 9/20/2023 DATE: DD/MM/YYYY DATE: 10/31/2023	MATERIAL:	TITLE:
	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS. TOLERANCES UNLESS NOTED OTHERWISE:		FINISH:	SCALE 1:1 SHEET SIZE C
	SURFACE FINISH 63		SHEET 5 OF 14	PART NUMBER MGS-R5D

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

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

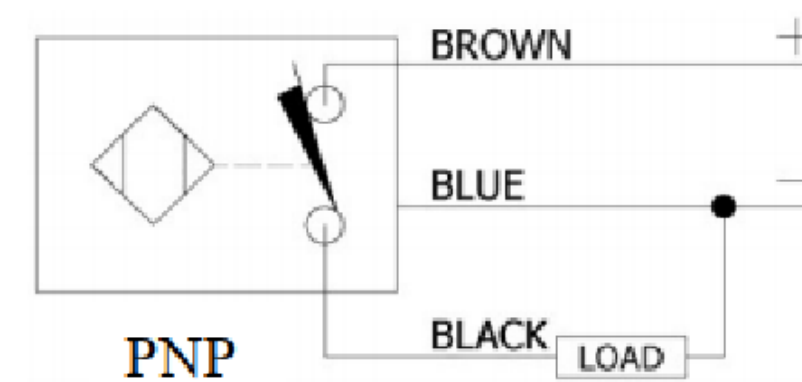
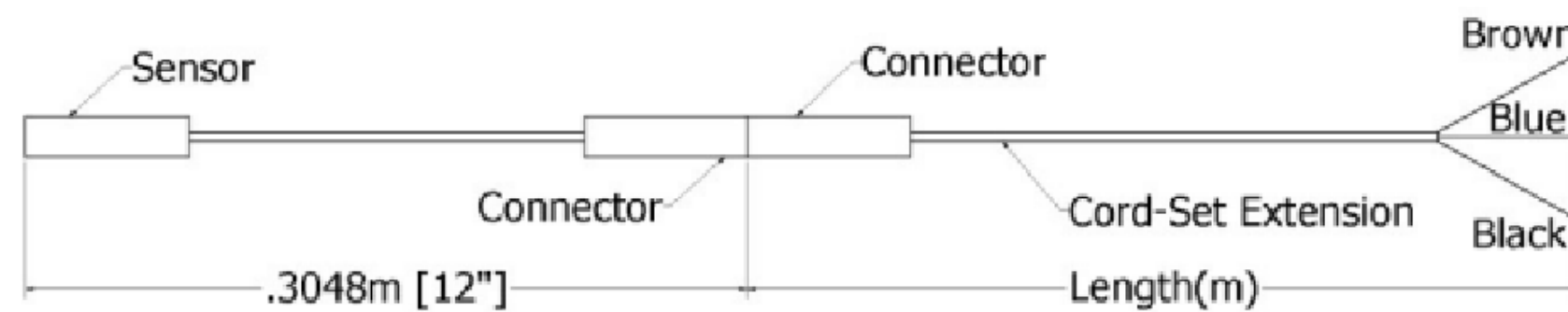
Part Number Configuration

244-_-_-_-_-_-

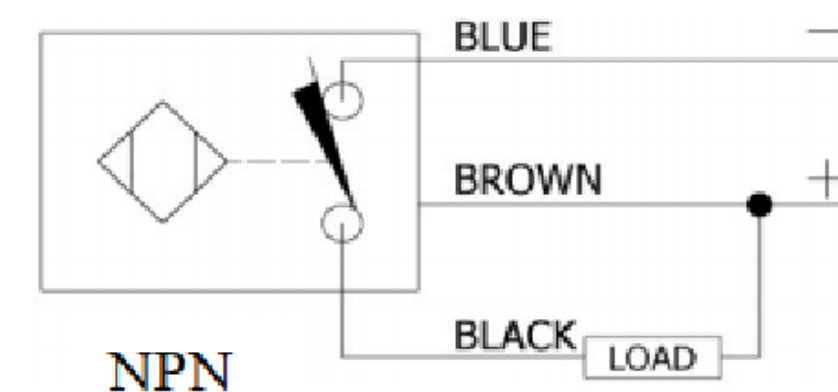
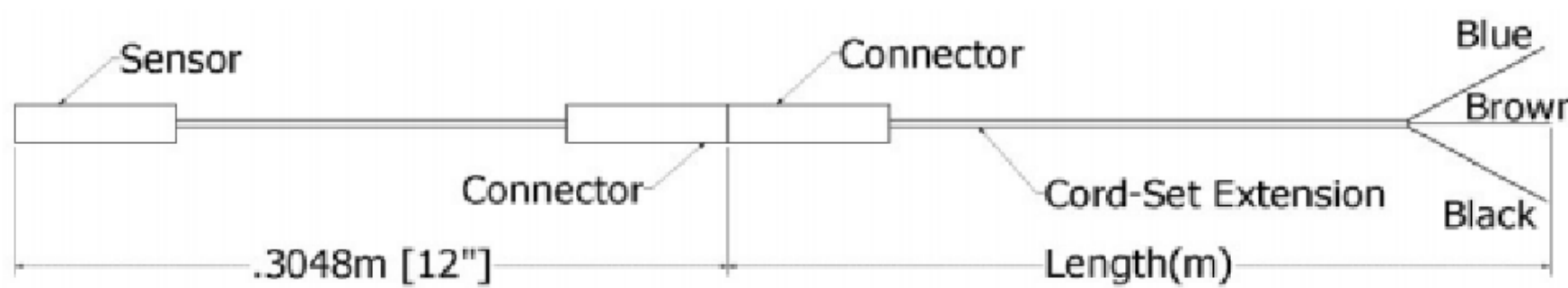
PNP or NPN	NC or NO	02	Meters
PNP or NPN	NC or NO	06	Meters
PNP or NPN	NC or NO	12	Meters

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

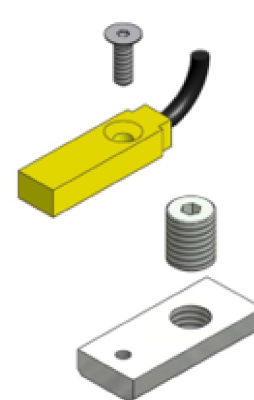
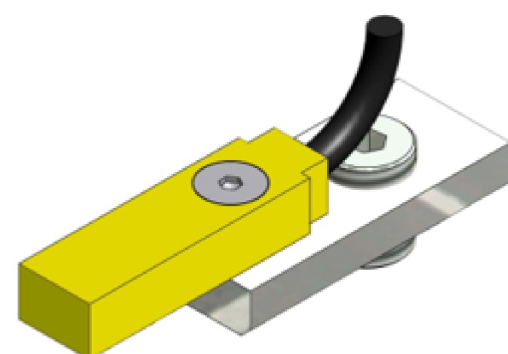
PNP Diagrams



NPN Diagrams



KIT INCLUDES – SENSOR, CORDSET EXTENSION, AND MOUNTING HARDWARE



	DRAWN BY: AW CHECKED BY: -- LAST SAVED BY: Paul	DATE: 9/20/2023 DATE: DD/MM/YYYY DATE: 10/31/2023	MATERIAL:	TITLE: T-SLOT SENSOR KIT
	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
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