

MGS-R5D- -X-B

GEARBOX MODEL (X-AXIS):
 MPG-062 _____
 MRG-062 _____
 RATIO: _____

ENTER Z-AXIS TRAVEL
 TRAVEL IN INCREMENTS OF 25mm
 TRAVEL LIMITS: 150mm-500mm

GEARBOX MODEL (Z-AXIS):
 MPG-062 _____
 MRG-062 _____
 RATIO: _____

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

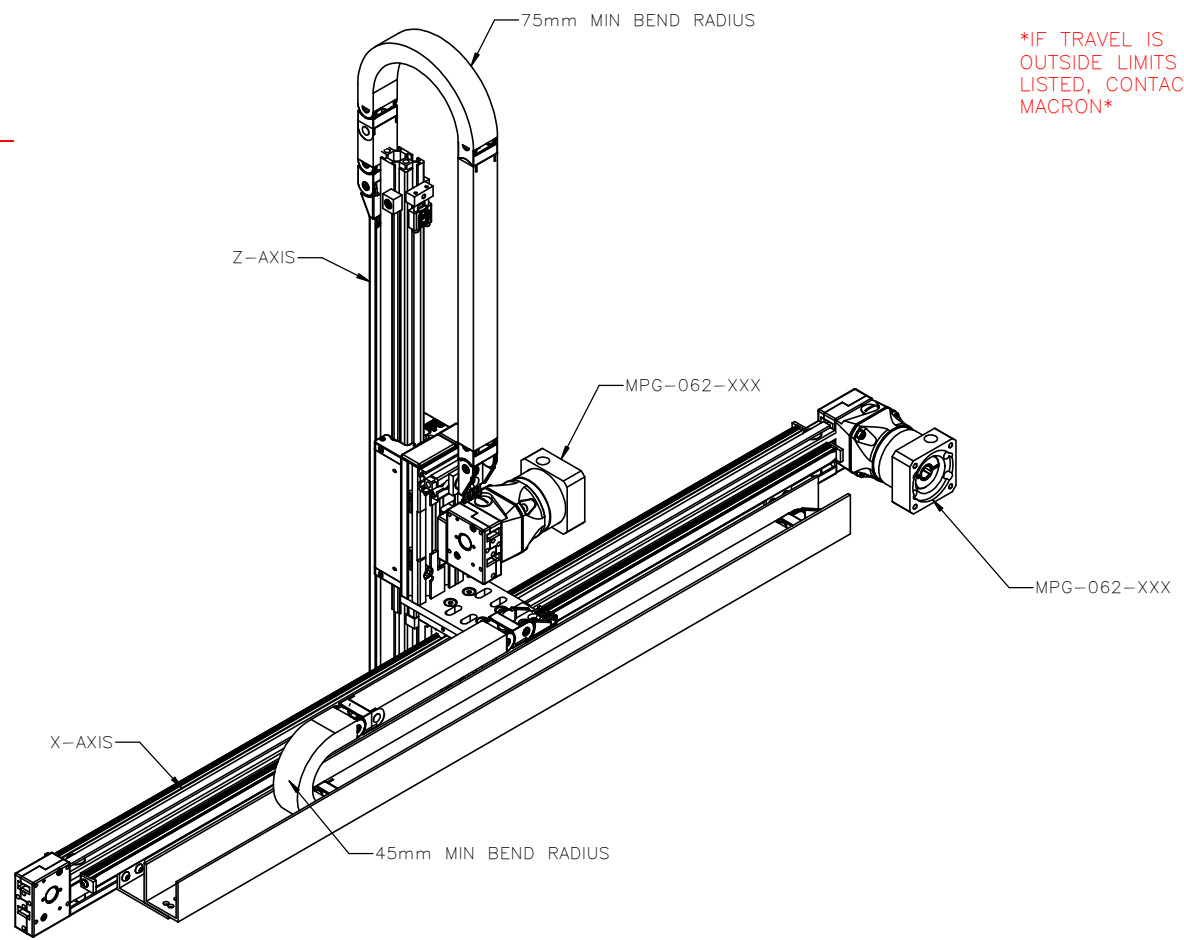
*FOR DIRECT-DRIVE OPTION WITH MMKs
 (NO GEARBOXES) CHECK HERE: _____*

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

MOTOR INFORMATION (Z-AXIS):
 MANUFACTURER: _____
 MODEL: _____

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)*




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

APPROVED: _____

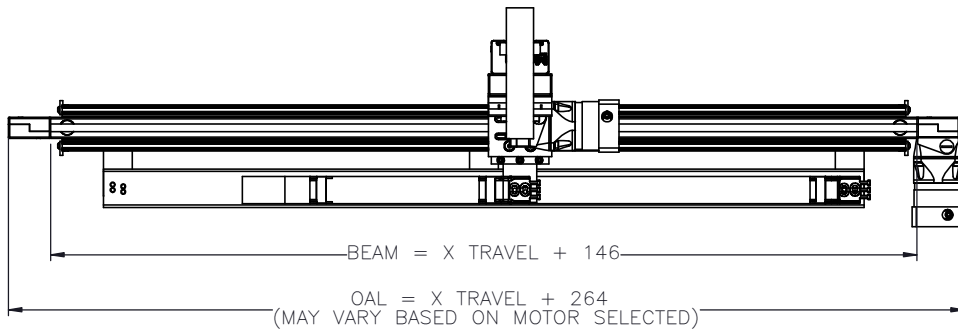
DATE: _____

PO:REFERENCE#: _____

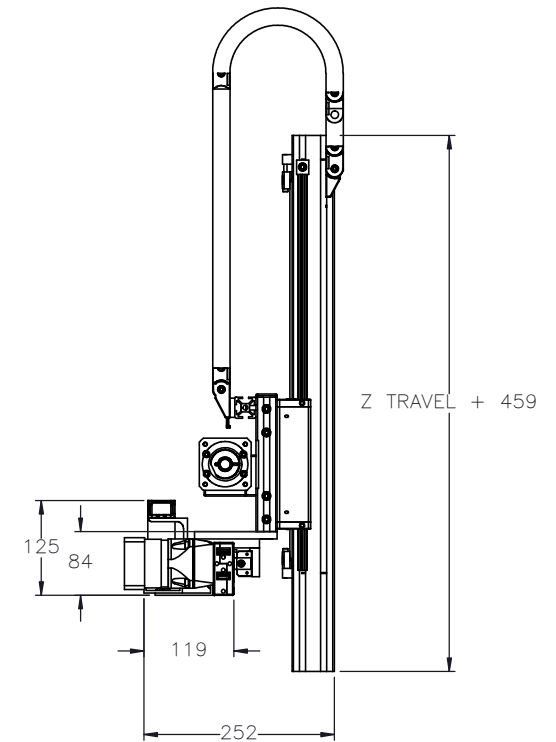
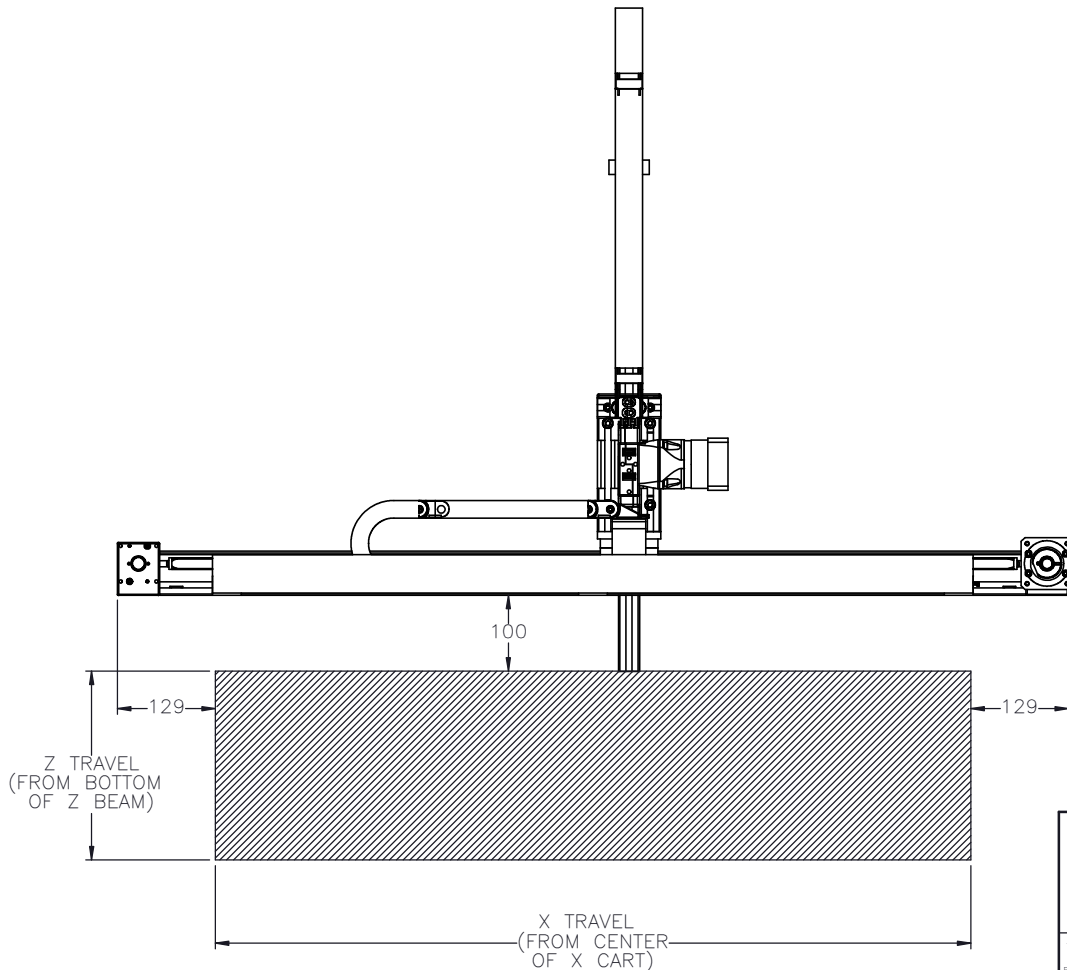
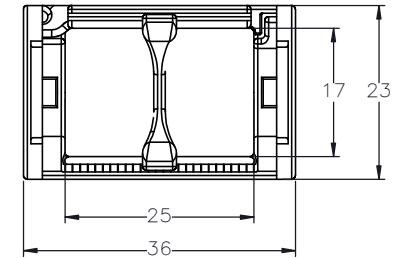
 MACRON DYNAMICS INC	DRAWN BY: JA DATE: 3/9/2020	MATERIAL:	TITLE: MACRON R5D XZ GANTRY	
	CHECKED BY: -- DATE: DD/MM/YYYY	FINISH:		
	LAST SAVED BY: awong DATE: 1/27/2023	UNLESS OTHERWISE SPECIFIED: .X ± .762 DIMENSIONS ARE IN MILLIMETERS: .XX ± .254 TOLERANCES UNLESS NOTED: .XXX ± .127 OTHERWISE: ANG ± 0°30'	SCALE: 1:1	SHEET SIZE: C
	SURFACE FINISH: <input checked="" type="checkbox"/>	BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION	SHEET: 1 OF 13 PART NUMBER: MGS-R5D-XXX-X-BXXX	REV: C


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 CONTAINED HEREIN IS PROPRIETARY AND CONFIDENTIAL.

WORK ENVELOPE AND GANTRY FOOTPRINT

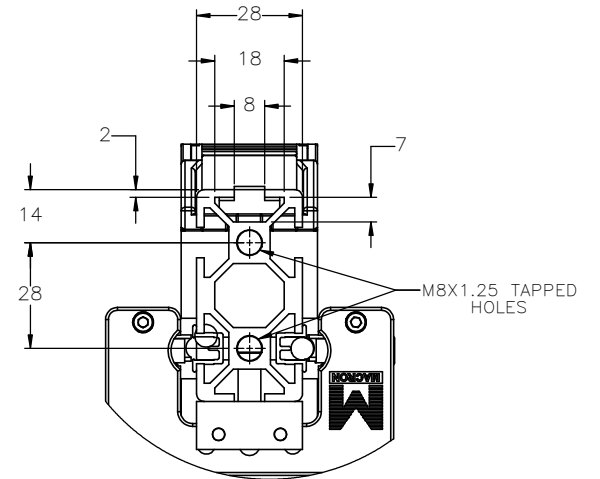
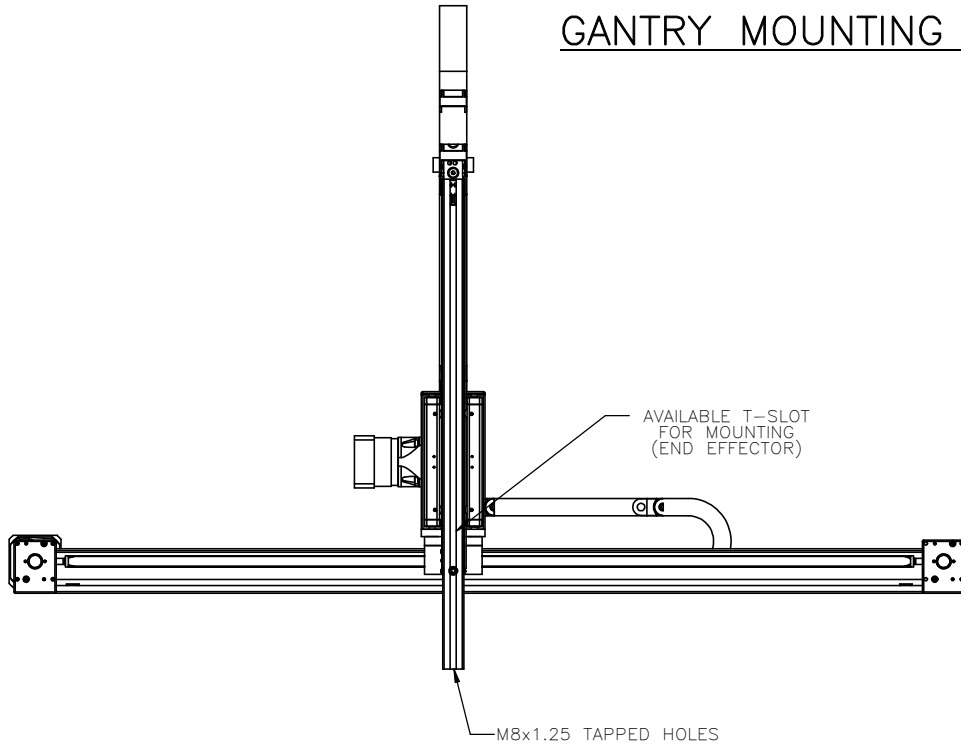


CABLE TRACK CROSS SECTION
(SAME FOR ALL AXES)

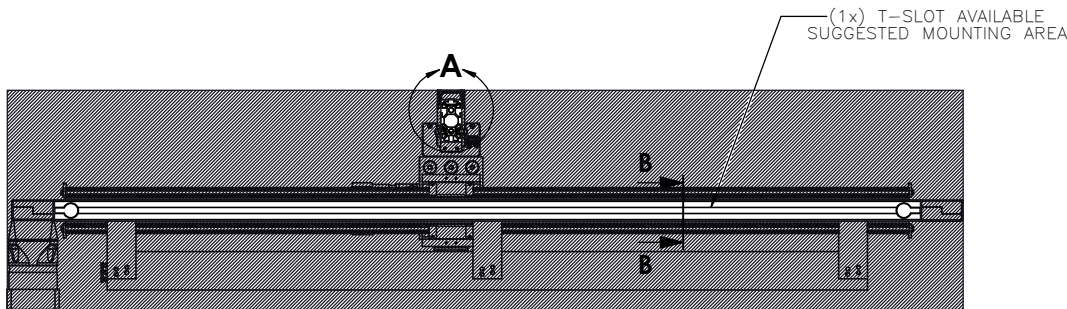


 MACRON DYNAMICS INC	DRAWN BY: JA DATE: 3/9/2020	MATERIAL:	TITLE: MACRON R5D XZ GANTRY
	CHECKED BY: -- DATE: DD/MM/YYYY	FINISH:	
	LAST SAVED BY: awong DATE: 1/27/2023	UNLESS OTHERWISE SPECIFIED: .XX ± .254 DIMENSIONS ARE IN MILLIMETERS: .XXX ± .127 TOLERANCES UNLESS NOTED: .XXX ± .127 OTHERWISE: ANG ± 0°30'	
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SCALE: 1:1 SHEET SIZE: C		REV	

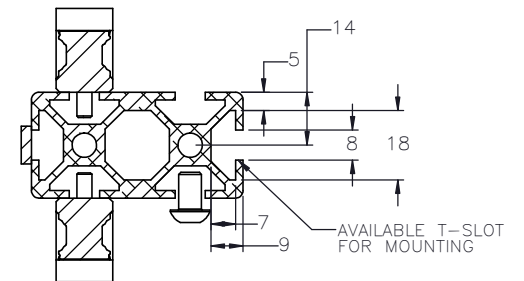
GANTRY MOUNTING FOOTPRINT




DETAIL A
SCALE 1 : 1



BOTTOM VIEW



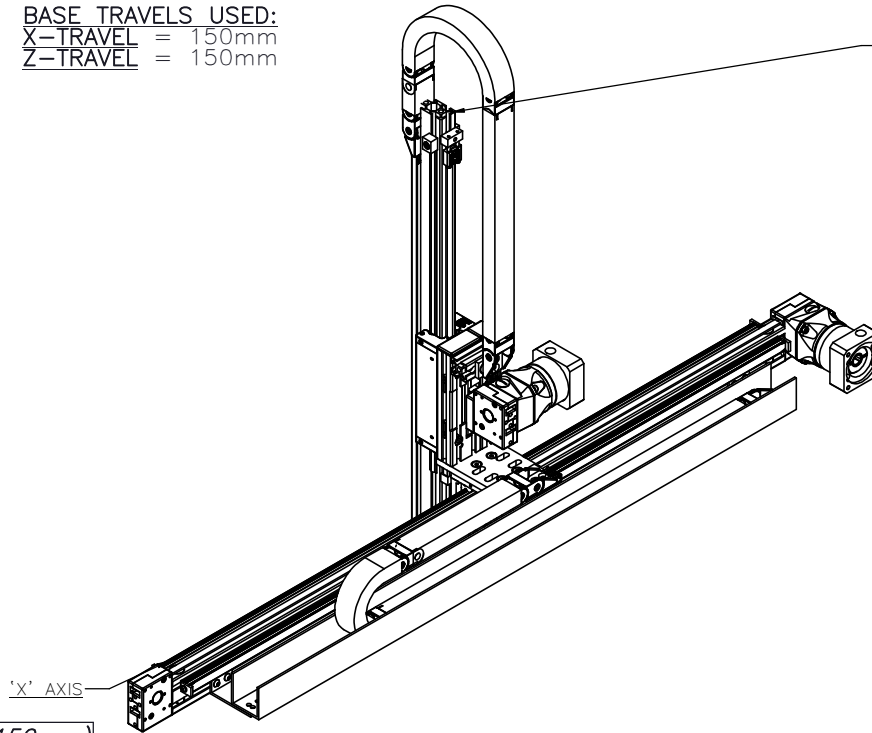
SECTION B-B

 MACRON DYNAMICS INC	DRAWN BY: JA DATE: 3/9/2020	MATERIAL:	TITLE: MACRON R5D XZ GANTRY
	CHECKED BY: -- DATE: DD/MM/YYYY	FINISH:	
	LAST SAVED BY: awong DATE: 1/27/2023	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES: .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 THIRD ANGLE PROJECTION	SHEET: 3 OF 13 PART NUMBER: MGS-R5D-XXX-X-BXXX

MOTOR SIZING INFORMATION

(INCREMENTAL ADDERS REFER TO MASS PER TRAVEL LENGTH)

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



PROPERTY	BASE VALUE (T=150mm)
MOVING MASS	1.213kg(+0.044kg/25mm)
BELT MASS	0.025kg(+0.001kg/25mm)
SYSTEM MASS	3.061kg(+0.65kg/25mm)
PULLEY PITCH ϕ	33.42mm (1.32")
PULLEY WIDTH	16.3mm (0.64")
PULLEY MATERIAL	STEEL
TRAVEL PER REV	105mm

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)	MPG-062	1.0kg
	MRG-062	3.0kg

TOTAL SYSTEM MASS	$(X \text{ TRAVEL} \times .0061) + (Z \text{ TRAVEL} \times .0021) + 5.17 = \text{kg}$
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 MACRON DYNAMICS INC	DRAWN BY: PHW DATE: 11/26/2017 CHECKED BY: -- DATE: DD/MM/YYYY LAST SAVED BY: awong DATE: 1/27/2023	MATERIAL:	TITLE:	
	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES. TOLERANCES UNLESS NOTED OTHERWISE: .X ± .762 .XX ± .254 .XXX ± .127 ANG ± 0°30'	FINISH:	SCALE 1:1	SHEET SIZE C
	SURFACE FINISH 63 BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION	SHEET 4 OF 13 PART NUMBER MGS-R5D	REV	

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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

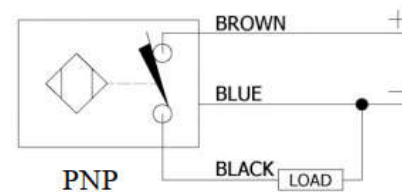
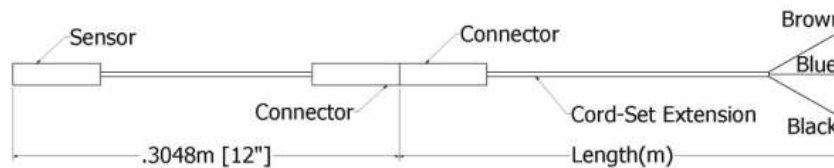
Part Number Configuration

244- _ _ _ - _ _ _

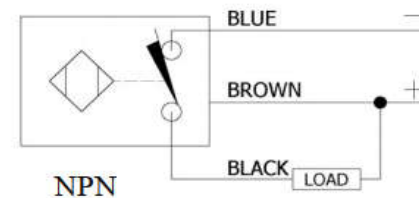
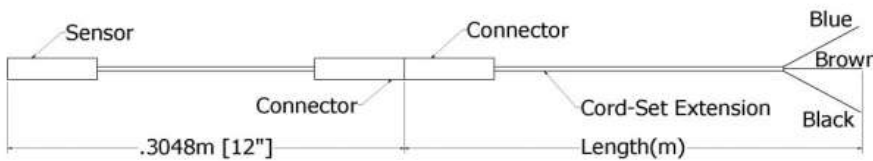
PNP or NPN	NC or NO	02	Meters
PNP or NPN	NC or NO	06	Meters
PNP or NPN	NC or NO	12	Meters

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

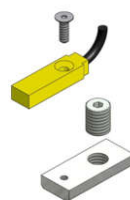
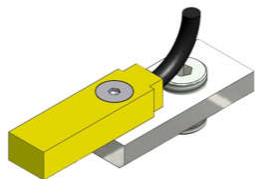
PNP Diagrams



NPN Diagrams



KIT INCLUDES – SENSOR, CORDSET EXTENSION, AND MOUNTING HARDWARE



	DRAWN BY: PHW DATE: 11/26/2017 CHECKED BY: -- DATE: DD/MM/YYYY LAST SAVED BY: Paul DATE: 1/27/2023	MATERIAL:	TITLE:
	UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS TOLERANCES UNLESS NOTED OTHERWISE:	FINISH:	T-SLOT SENSOR KIT
	SURFACE FINISH ✓ BREAK ALL SHARP EDGES DIMENSIONAL LIMITS APPLY AFTER FINISHING THIRD ANGLE PROJECTION	SHEET: 5 OF 13 PART NUMBER: SENSOR CALLOUT	SCALE: 1:1 SHEET SIZE: C
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