

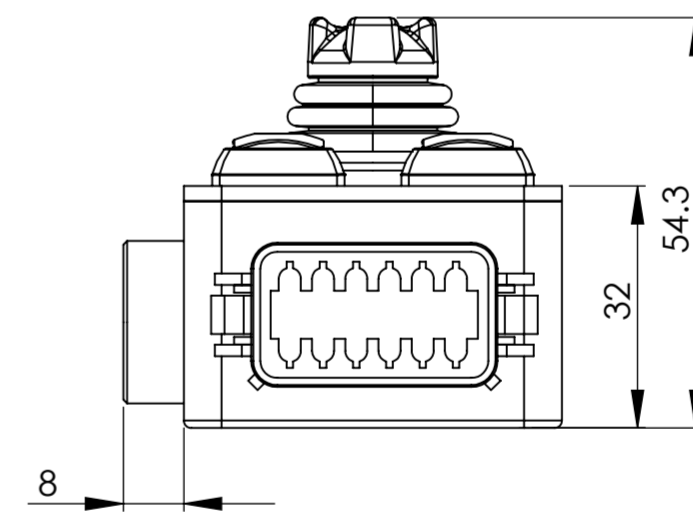
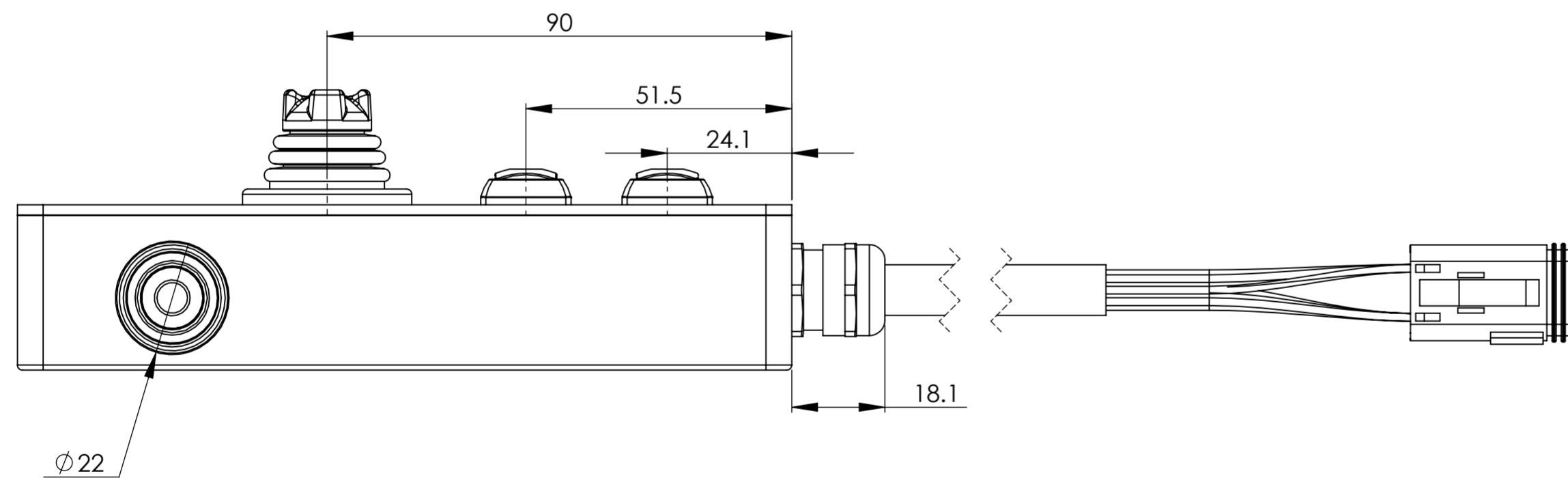
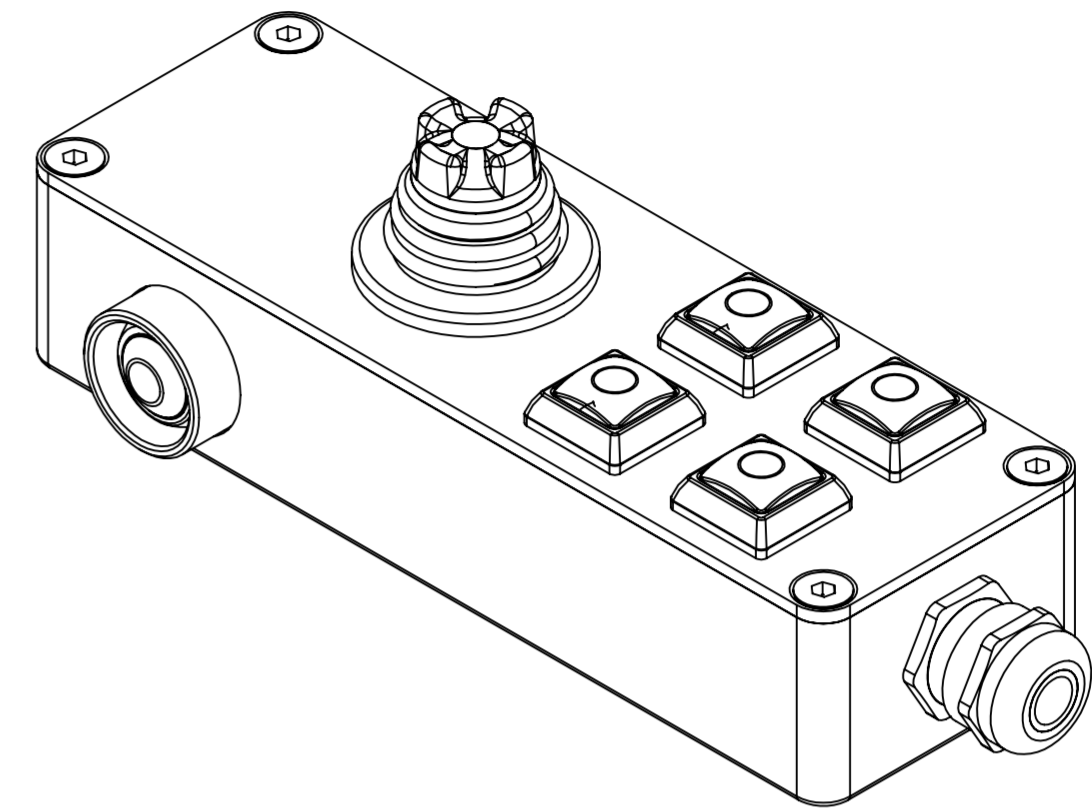
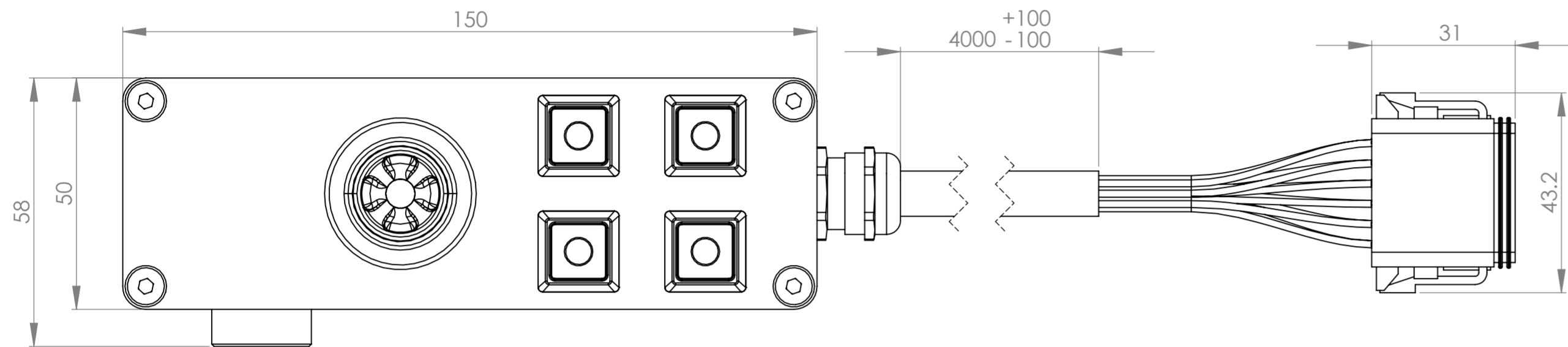
**Drawing Number:** CDG-GEN-0809

**Current Revision:** 2.0

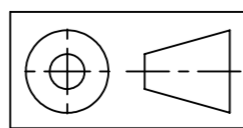
**Date:** 12/08/2015 3:34:51 PM

## RECORD OF ISSUE

REV NO.	CHANGE MADE	PREPARED BY	APPROVED BY	DATE
1.0	<ul style="list-style-type: none"><li>DRAWING CREATED</li></ul>	M DZIDOWSKI	D DELANEY	17/12/2014
2.0	<ul style="list-style-type: none"><li>INLCUDED ELECTRICAL AND DESIGN NOTES</li></ul>	T FLYNN	M DZIDOWSKI	22/06/2015
3.0	<ul style="list-style-type: none"><li>UPDATED SWITCH ANNOTATIONS</li></ul>	T FLYNN	M DZIDOWSKI	12/08/2015

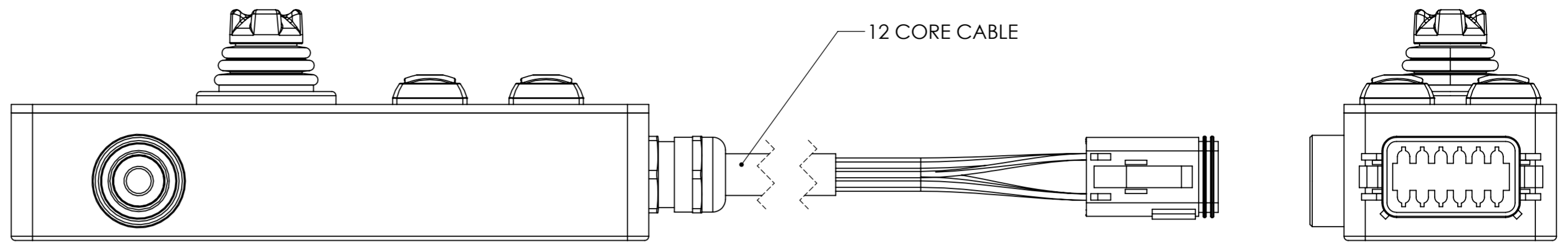
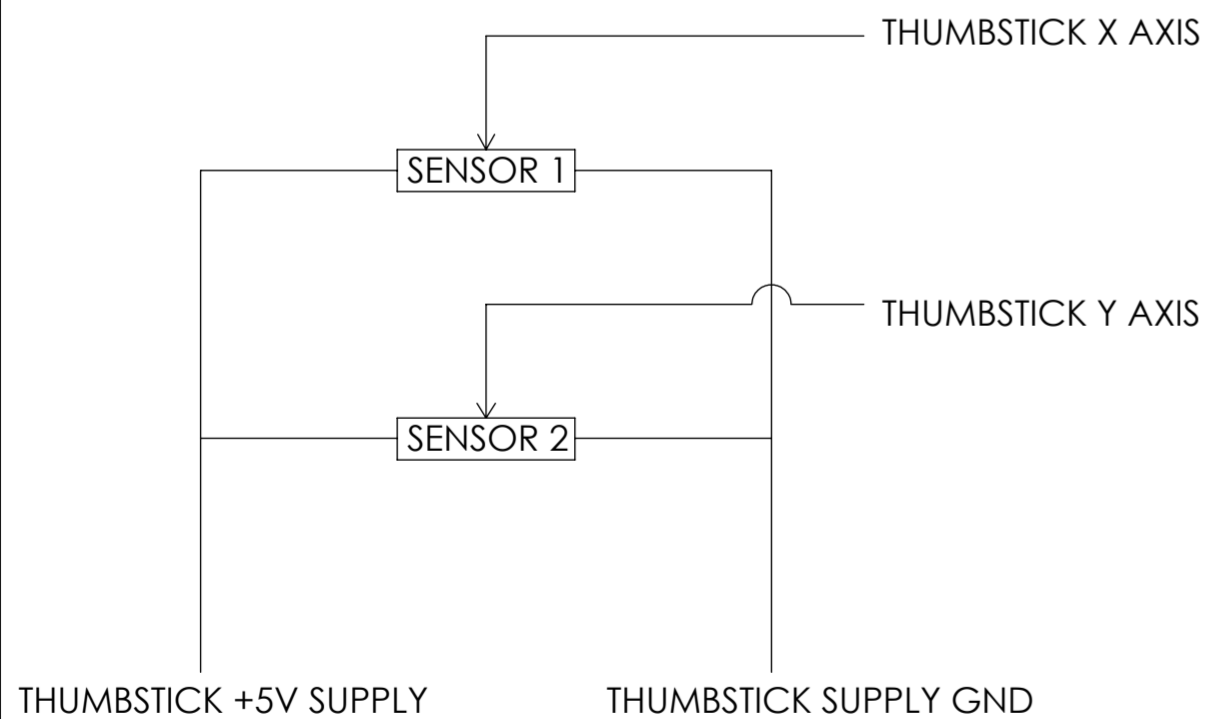
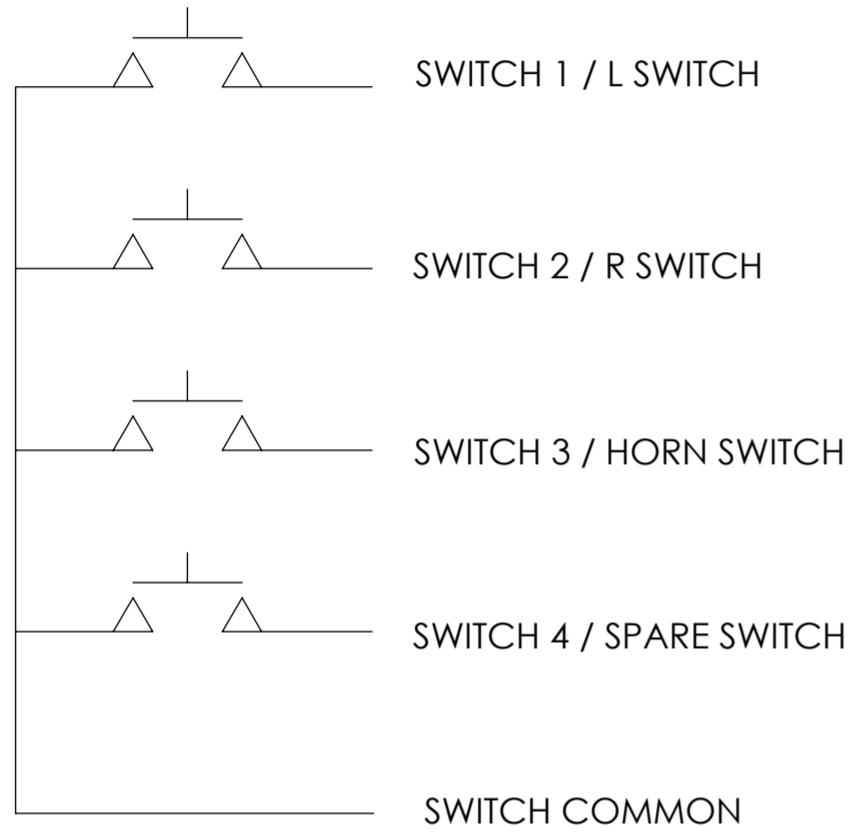
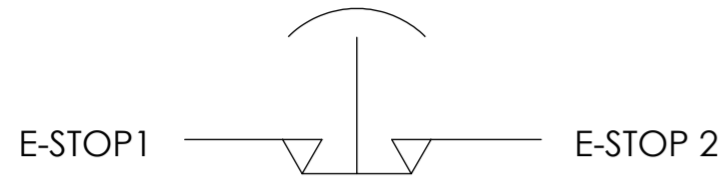


DRAWN TO AS1100 DIMENSIONS ARE IN MILLIMETERS

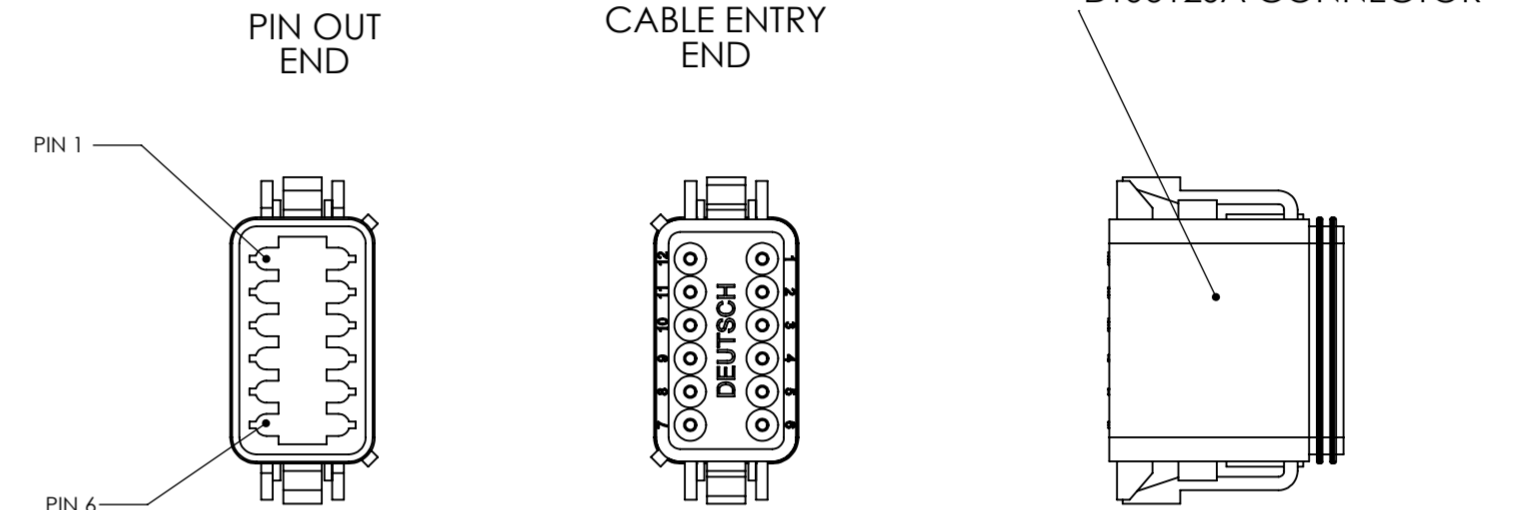


DATE DRAWN 17/12/2014	DATE MODIFIED 12/08/2015	REVISION NO. 2.0	<b>Control Devices</b> <b>ENGINEERING</b>		Unit 5, 79 Bourke Road Alexandria NSW 2015 AUSTRALIA Phone: +61 2 9330 1700 Fax: +61 2 8338 9001E-mail: sales@controldevices.net	
DRAWN BY M DZIDOWSKI		CHECKED BY J BOSENBERG		TITLE <b>CUSTOM PENDANT CONTROLLER</b>		
TOLERANCES LINEAR: $\pm 1.0\text{mm}$ ANGULAR: $\pm 1.0^\circ$ OR AS SHOWN		TYPE <b>PROJECTION</b> PRINTED COPIES ARE UNCONTROLLED		CODE INDENT NO. CDG-GEN-0809	DRAWING NO. CDG-GEN-0809	SHEET SIZE <b>A2</b>
SCALE: 1:1 OR AS SHOWN		SHEET 2 OF 4		WEIGHT: N/A		DO NOT SCALE

PENDANT FUNCTIONS



12 WAY DEUTSCH CONNECTOR	
PIN	DESCRIPTION
1	THUMBSTICK +5v SUPPLY
2	THUMBSTICK SUPPLY GND
3	APEM THUMBSTICK X AXIS OUTPUT
4	APEM THUMBSTICK Y AXIS OUTPUT
5	L SWITCH
6	R SWITCH
7	HORN SWITCH
8	SPARE SWITCH
9	SWITCH COMMON
10	E-STOP 1
11	E-STOP 2
12	NOT CONNECTED



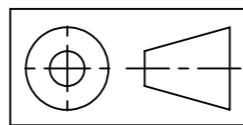
ELECTRICAL SPECIFICATIONS - SWITCHES

- Max. current/voltage rating with resistive load (gold plated silver contacts):  
 5A 28VDC, 70.000 cycles  
 0,2A 48VDC, 500.000 cycles  
 0,5A 48VAC, 500.000 cycles
- Initial contact resistance : 100 mΩ max.
- Insulation resistance : 1 GΩ min. at 500VDC
- Dielectric strength : 1.500 Vrms
- Contact bounce : 10 ms

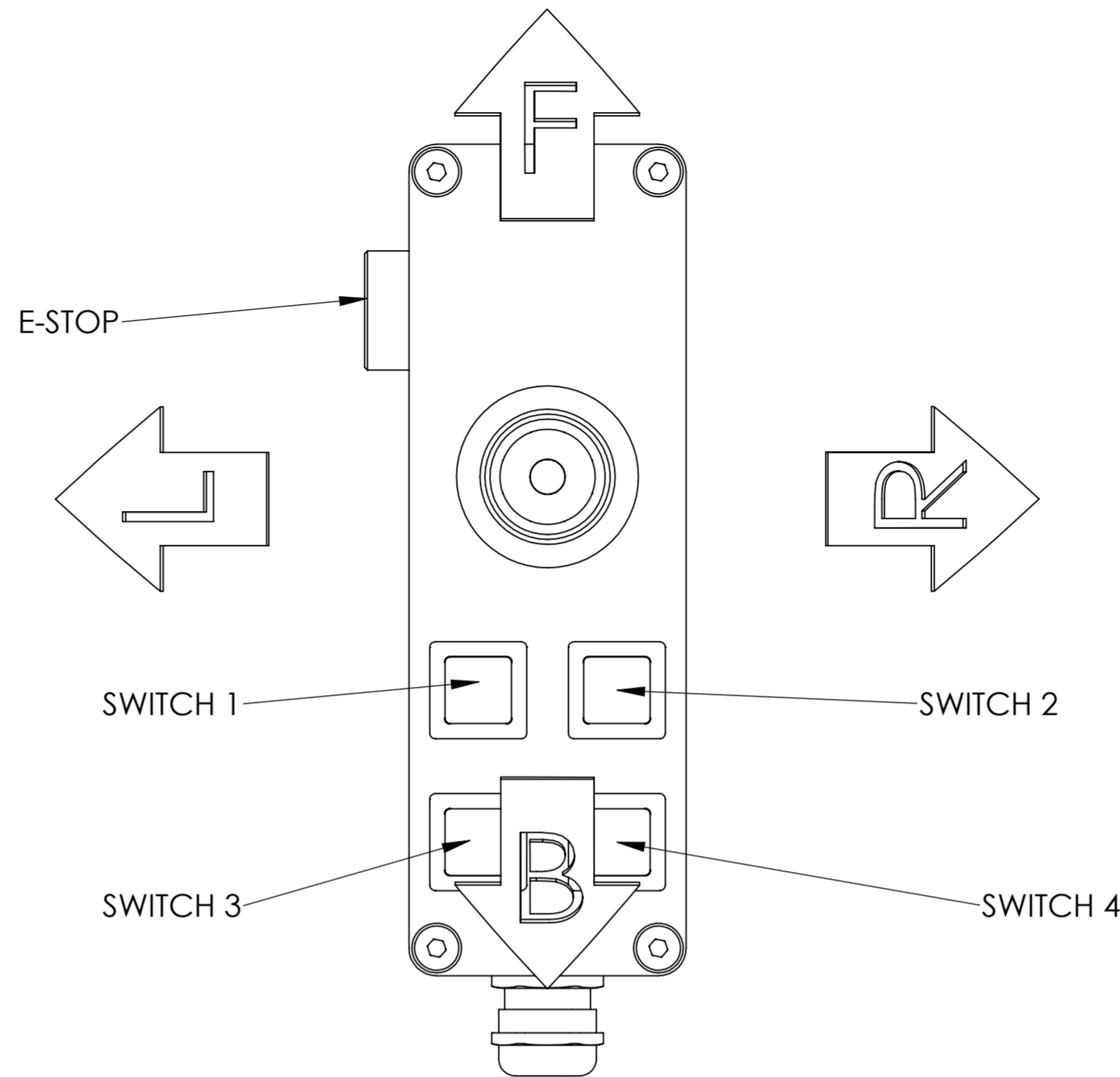
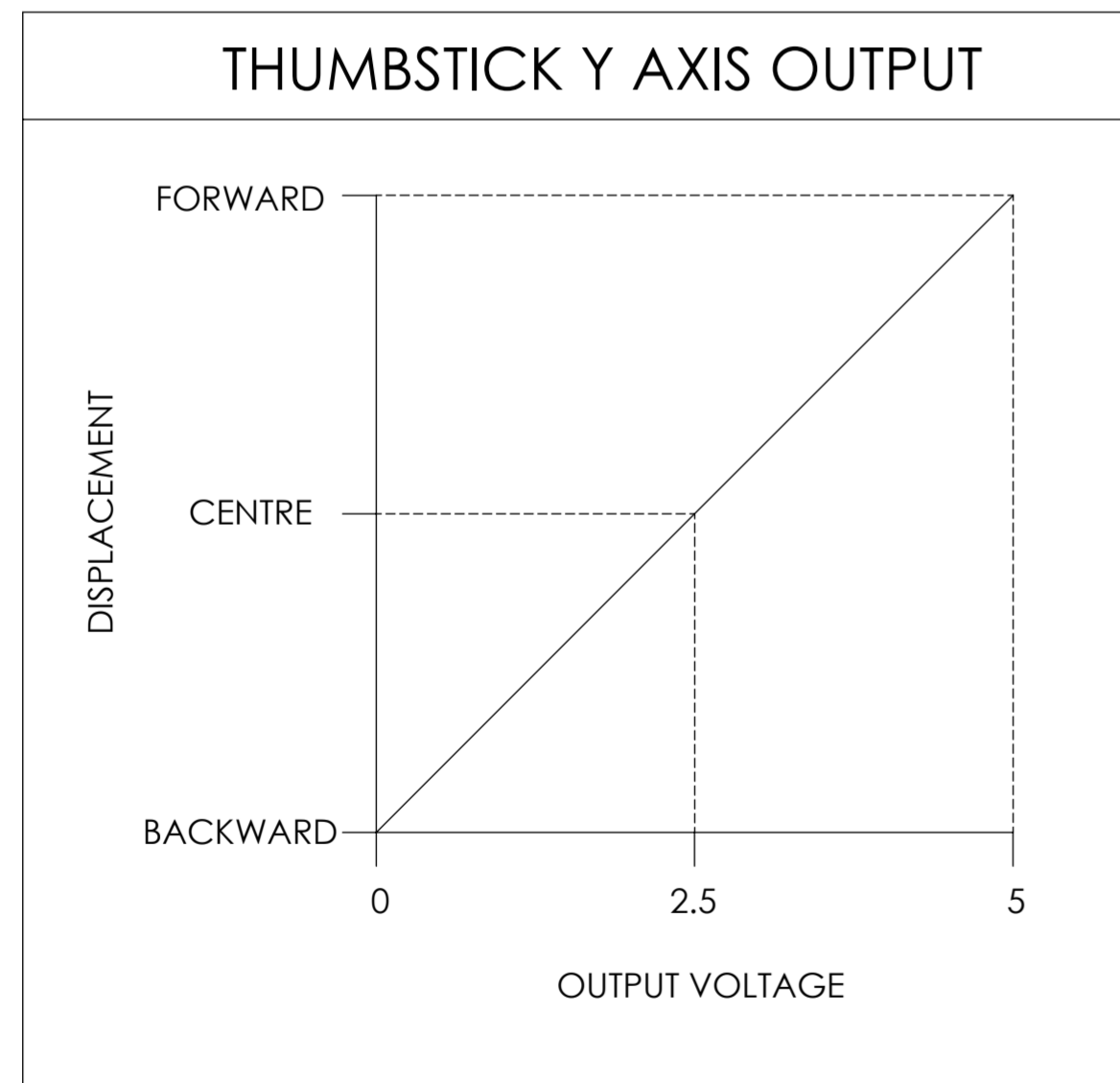
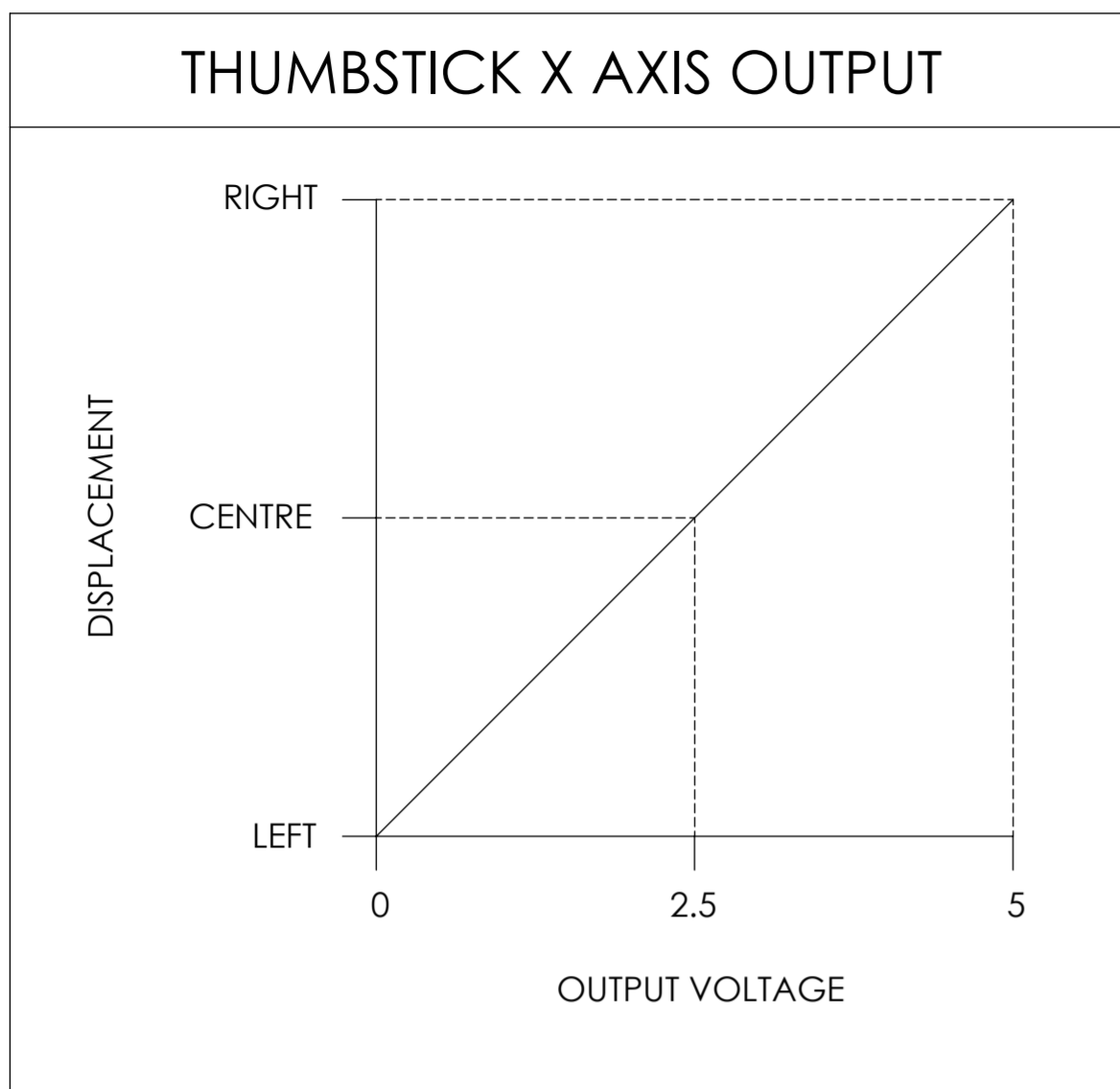
ELECTRICAL SPECIFICATIONS - THUMBSTICK

PARAMETER	SPECIFICATION
RESOLUTION	1.22 mV
SUPPLY VOLTAGE RANGE	5.00V <sub>+0.01V</sub>
REVERSE POLARITY MAX.	-10V
OVERVOLTAGE MAX.	20V
OUTPUT IMPEDANCE	2 ohm
RETURN TO CENTRE VOLTAGE TOLERANCE	+200mV initial

DRAWN TO AS1100 DIMENSIONS ARE IN MILLIMETERS

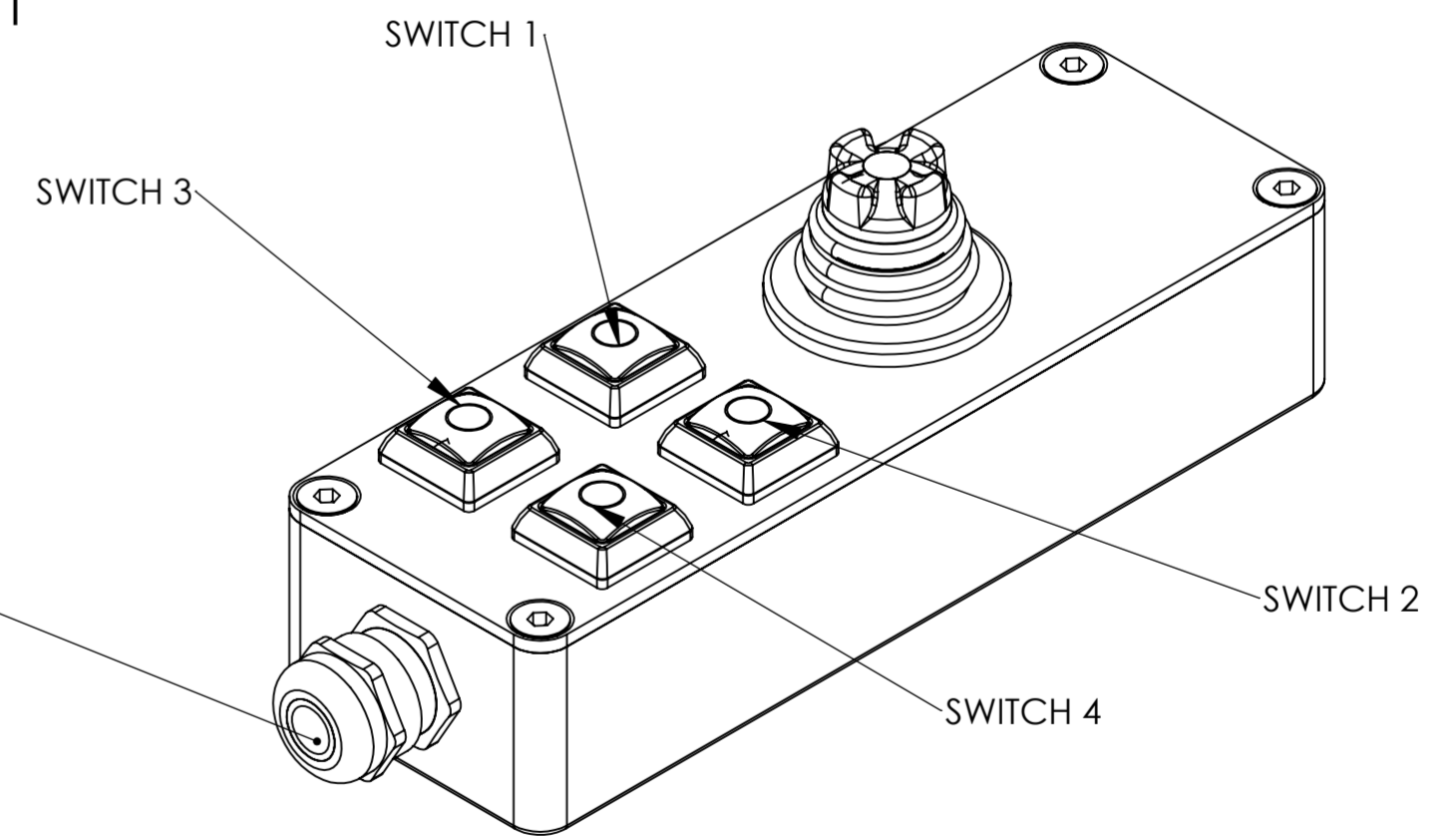


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DRAWN BY M DZIDOWSKI		CHECKED BY J BOSENBERG		TITLE <b>CUSTOM PENDANT CONTROLLER</b>	
TOLERANCES LINEAR: ± 1.0mm ANGULAR: ± 1.0° OR AS SHOWN		TYPE <b>ELECTRICAL</b>		CODE INDENT NO. CDG-GEN-0809	DRAWING NO. CDG-GEN-0809
PRINTED COPIES ARE UNCONTROLLED		SCALE:1:1 OR AS SHOWN	SHEET 3 OF 4	WEIGHT: N/A	DO NOT SCALE
					SHEET SIZE <b>A2</b>

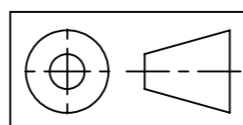


THUMBSTICK DIRECTION NOTATION - SCALE 1:1

GLAND CABLE EXIT,  
4M LONG MULTICORE CABLE  
WIRED IN ACCORDANCE WITH  
IPC-7711/7721 and IPC/WHMA-A-620



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DRAWN BY M DZIDOWSKI		CHECKED BY J BOSENBERG		TITLE <b>CUSTOM PENDANT CONTROLLER</b>	
TOLERANCES LINEAR: ± 1.0mm ANGULAR: ± 1.0° OR AS SHOWN		TYPE <b>DESIGN NOTES</b> PRINTED COPIES ARE UNCONTROLLED		CODE INDENT NO. CDG-GEN-0809	DRAWING NO. CDG-GEN-0809
SCALE:1:2 OR AS SHOWN		SHEET 4 OF 4		WEIGHT: N/A	DO NOT SCALE
					SHEET SIZE <b>A2</b>