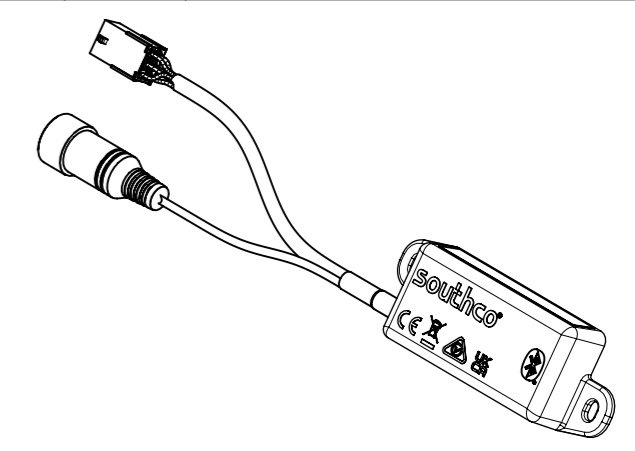


REVISION HISTORY			
REV	DATE	BY	DESCRIPTION
K	29FEB2024	GJL/SAK	PRN: P2024-0288

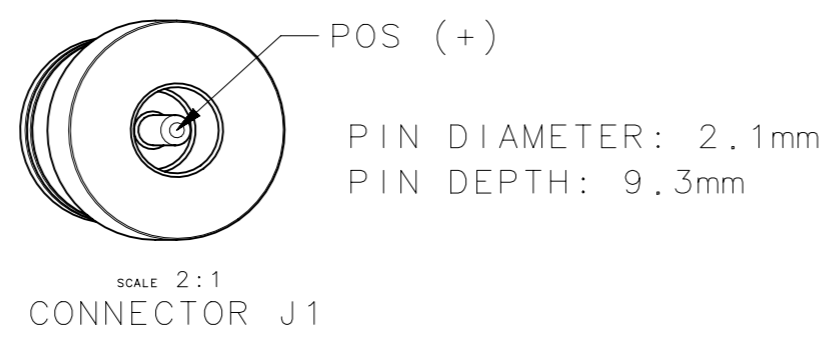
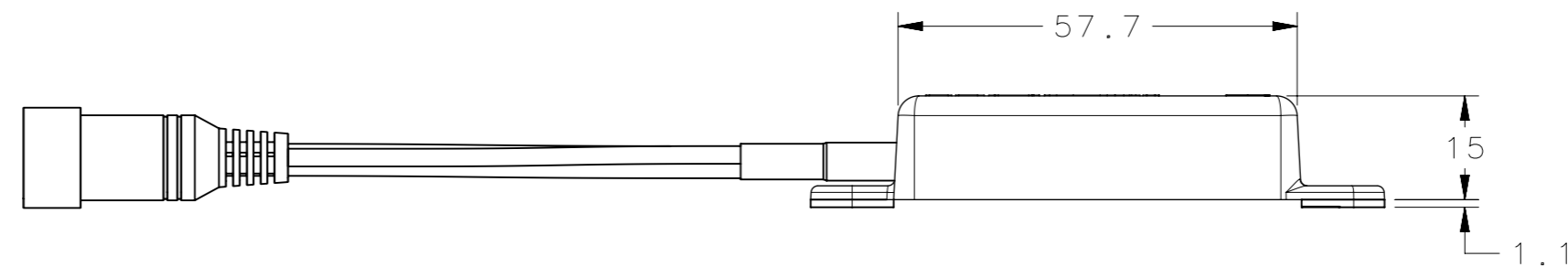
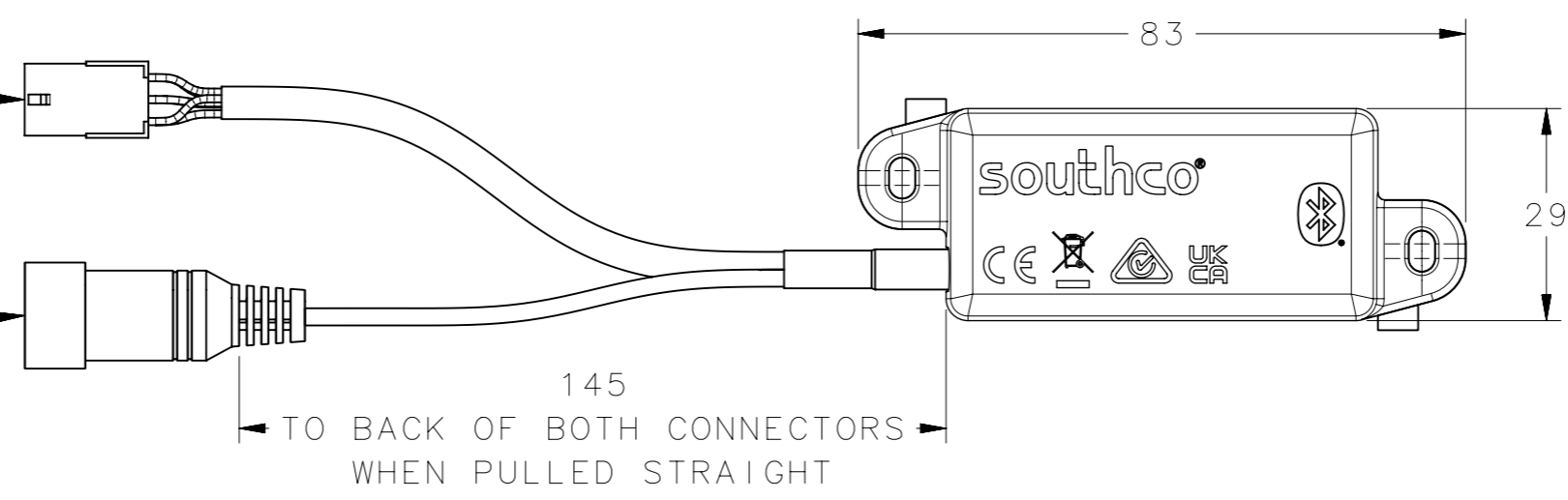
- NOTES:
- A. PRODUCT DESCRIPTION: A DEVICE FOR CONTROLLING ACCESS TO SOUTHCO ELECTRONIC LOCKS AND LATCHES VIA BLUETOOTH®, SEE AP-BT-1-004 OR THE *KEYPANION™* APP. FOR ANY OTHER USE CASE CONTACT SOUTHCO FOR COMPATIBILITY
 - B. MATERIAL:
 - HOUSING: PC/ABS
 - PRESSURE SENSITIVE ADHESIVE: ACRYLIC FOAM CORE
 - WIRE: UL 1007 UNSHIELDED, 24AWG, STRANDED, TINNED COPPER
 - POTTING MATERIAL: SILICONE BASED
 - C. CONNECTOR TYPE
 - CONNECTOR MOLEX: (P1) FEMALE, DUAL ROW, 6 PIN, P/N: 430200601 OR EQUIVALENT
 - CONTACT MOLEX: (P1) MALE, P/N: 430310001 OR EQUIVALENT
 - CONNECTOR (J1) LUNGCHEONG P/N: DC5521 OR EQUIVALENT
 - MATING CONNECTOR AND HARNESSSES NOT INCLUDED
 - SEE PAGES 4 AND 5 FOR MATING WIRE HARNESSSES AND LATCHES
 - D. ENVIRONMENTAL
 - ALL ITEMS COMPLY WITH RoHS DIRECTIVE AND REACH REGULATION
 - IP67 RATED ENCLOSURE



SCALE 1:2

MOLEX CONNECTOR:
P/N: 430200601

LUNGCHEONG CONNECTOR
P/N: DC5521



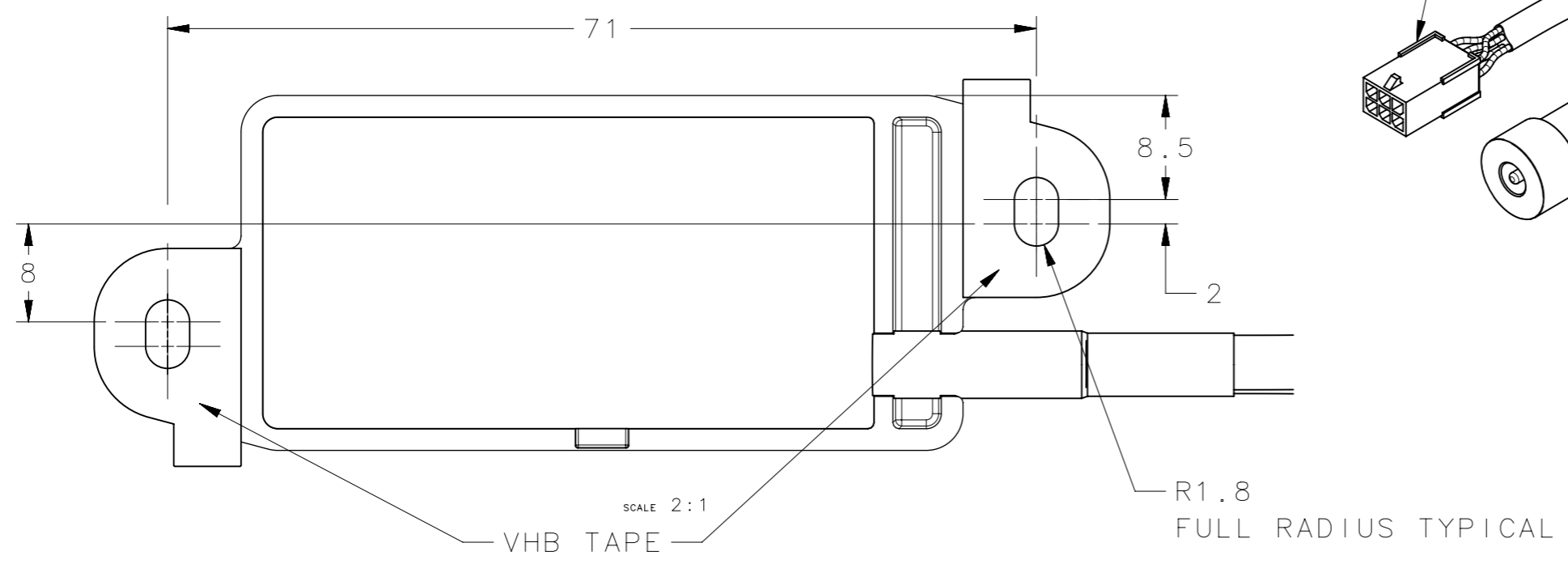
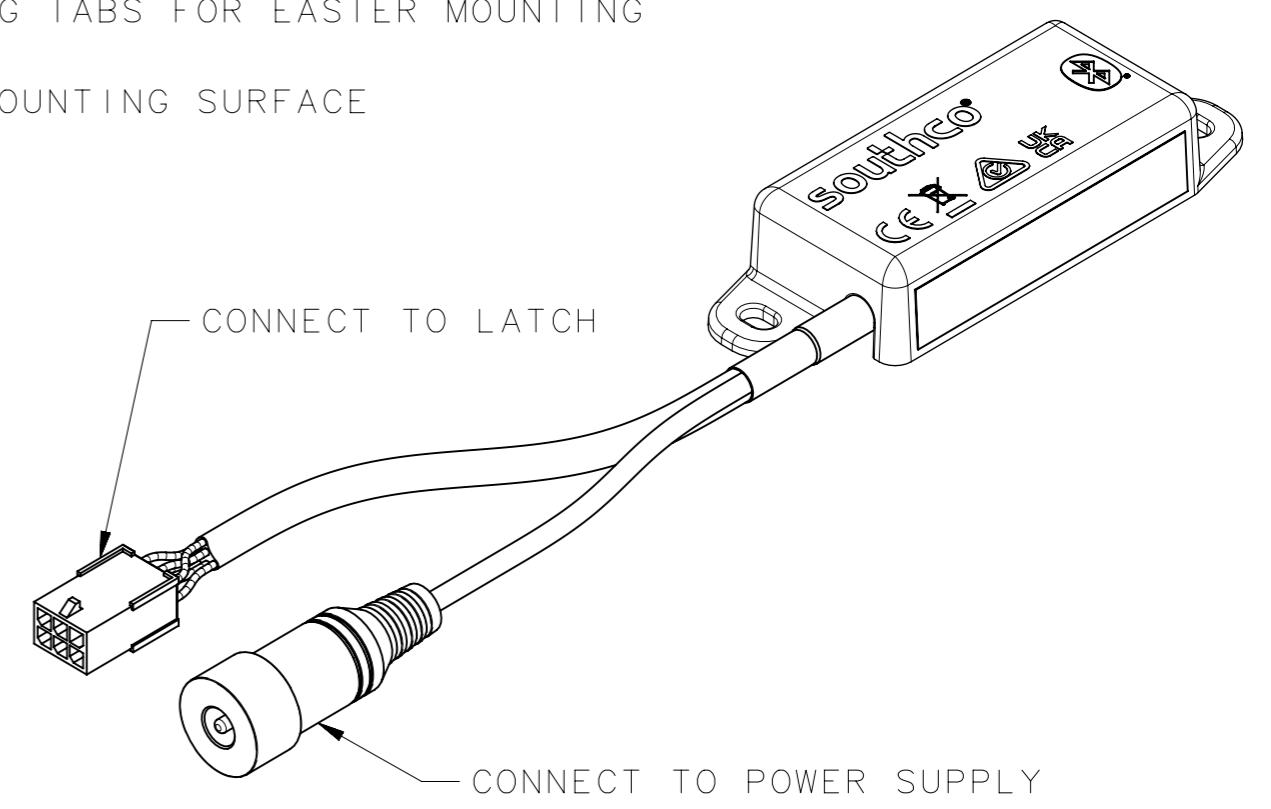
THE BLUETOOTH® WORD MARK AND LOGOS ARE REGISTERED TRADEMARKS OWNED BY BLUETOOTH SIG, INC. AND USE IS UNDER LICENSE

CPB NUMBER 2017-0837	THIRD ANGLE PROJECTION			
SURFACE AREA	MILLIMETERS [IN]			
VOLUME	TOLERANCES UNLESS OTHERWISE NOTED	DESCRIPTION SINGLE OUTPUT BLUETOOTH® CONTROLLER		
PROPRIETARY ITEM	ALL DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY.	SIZE A3	SYSTEM NX	DWG NO. J-EA-BT-4
EXCEPT FOR USES EXPRESSLY GRANTED IN WRITING, INFORMATION DISCLOSED HEREON IS CONFIDENTIAL AND ALL RIGHTS, PATENT AND OTHERWISE, ARE RESERVED BY SOUTHCO, INC.	PER ASME Y14.5M-2009	DRAWN BY ZAM/MLL	DATE 05MAY2021	SCALE NONE
		SHEET		1 OF 5

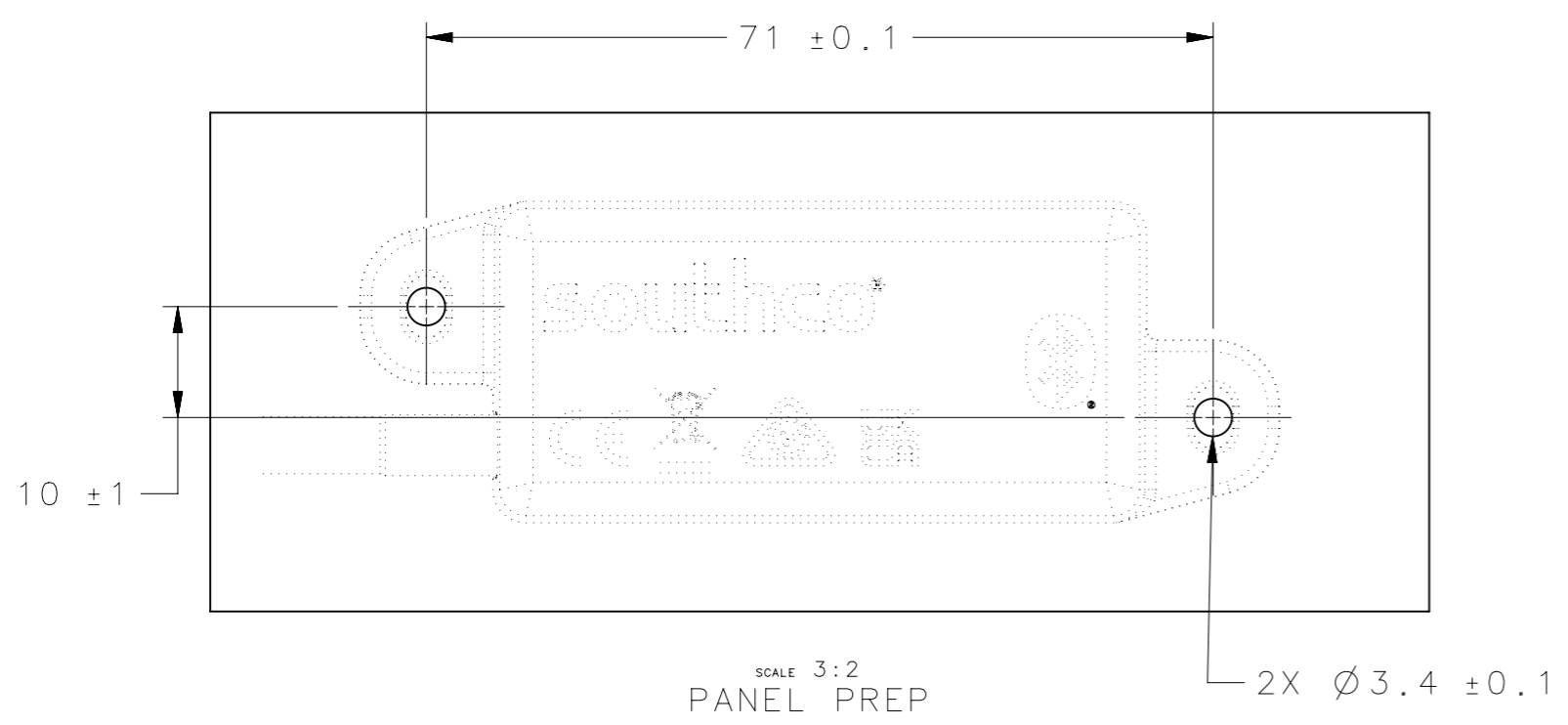
REVISION HISTORY			
REV	DATE	BY	DESCRIPTION
K	29FEB2024	GJL/SAK	PRN: P2024-0288

ASSEMBLY NOTES AND INSTRUCTIONS:

- E. PRESSURE SENSITIVE ADHESIVE IS PRE-INSTALLED ON CONTROLLER MOUNTING TABS FOR EASIER MOUNTING TO APPLICATION SURFACE
- F. ENSURE MOUNTING SURFACE IS CLEAN BEFORE INSTALLING CONTROLLER TO MOUNTING SURFACE
- G. MOUNTING SLOTS CAN BE USED WITH AN M3 OR #4-40 SCREW
- H. REMOVE BACKING FROM TAPE TO EXPOSE ADHESIVE SURFACE
LOCATE UNIT TO DESIRED LOCATION
GENTLY PRESS UNIT WITH EXPOSED TAPE INTO POSITION TO ACTIVATE ADHESIVE
OPTIONALLY INSTALL MOUNTING SCREWS
- I. ANTENNA IS LOCATED UNDERNEATH BLUETOOTH® SYMBOL
SURROUNDING MATERIAL CAN AFFECT SIGNAL RANGE AND QUALITY



SCALE 1:1



NOTE: NO MOUNTING HARDWARE IS PROVIDED
NOTE: ONLY ONE USER CAN BE CONNECTED AT A TIME

CPB NUMBER 2017-0837	THIRD ANGLE PROJECTION		
	MILLIMETERS [IN]		
SURFACE AREA	TOLERANCES UNLESS OTHERWISE NOTED	DESCRIPTION SINGLE OUTPUT BLUETOOTH® CONTROLLER	
VOLUME	ALL DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY.	SIZE A3	SYSTEM NX
PROPRIETARY ITEM	PER ASME Y14.5M-2009	DWG NO. J-EA-BT-4	DATE 07MAY2021
EXCEPT FOR USES EXPRESSLY GRANTED IN WRITING, INFORMATION DISCLOSED HEREON IS CONFIDENTIAL AND ALL RIGHTS, PATENT AND OTHERWISE, ARE RESERVED BY SOUTHCO, INC.		DRAWN BY ZAM/MLL	SCALE NONE
			SHEET 2 OF 5

REVISION HISTORY			
REV	DATE	BY	DESCRIPTION
K	29FEB2024	GJL/SAK	PRN: P2024-0288

NOTES:

- J. POWER SOURCE SHOULD BE SIZED BASED ON THE REQUIREMENTS OF THIS CONTROLLER AND THE CONNECTED LATCH
- K. SEE SOUTHCO P/N EA-A02-002 FOR SUGGESTED POWER SUPPLY

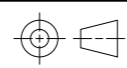
ELECTRICAL SPECIFICATIONS:

TABLE 1: ELECTRICAL AND PERFORMANCE CHARACTERISTICS					
SYMBOL	PARAMETER	MIN	NOM	MAX	UNITS
V_{SUPPLY}	SUPPLY VOLTAGE	8.0	12	13.8	VDC
I_{SUPPLY}	SUPPLY CURRENT - AVERAGE IDLE	-	0.12	-	mA
	SUPPLY CURRENT - OPERATING*	-	2.6	-	
I_{OUTPUT}	STEADY STATE OUTPUT CURRENT	-	-	2.5	A
T	OPERATING TEMPERATURE	-40	-	80	° C
RANGE	SIGNAL RANGE**	-	10	-	m

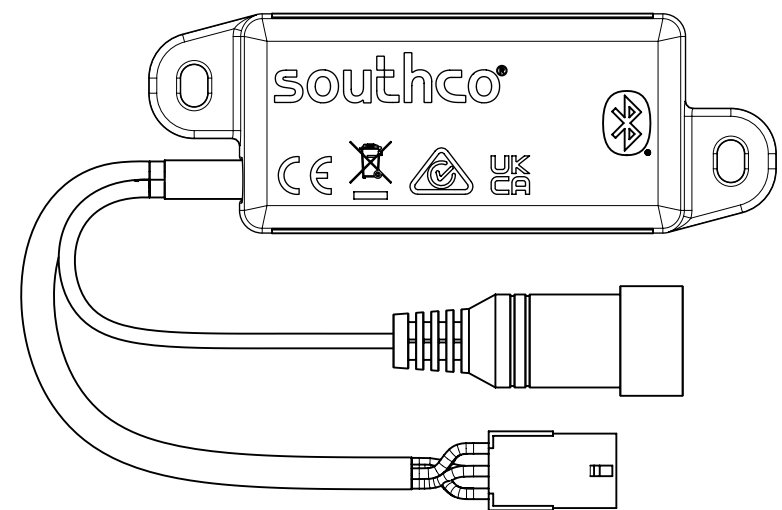
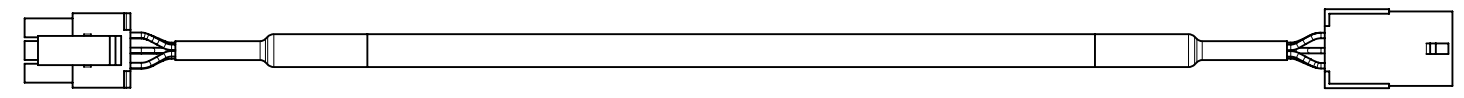
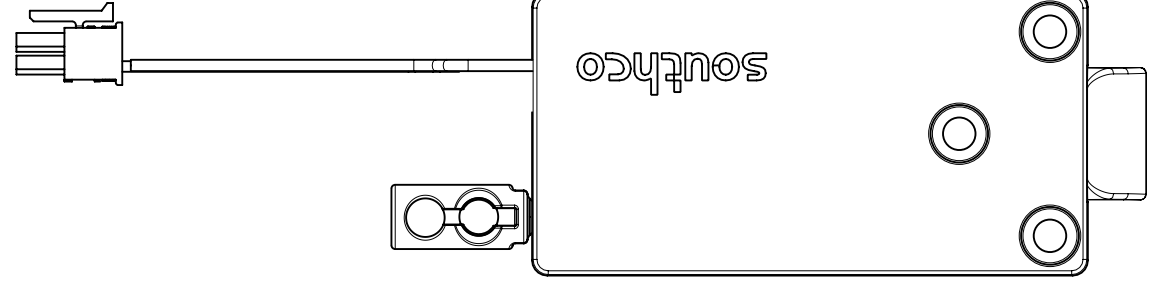
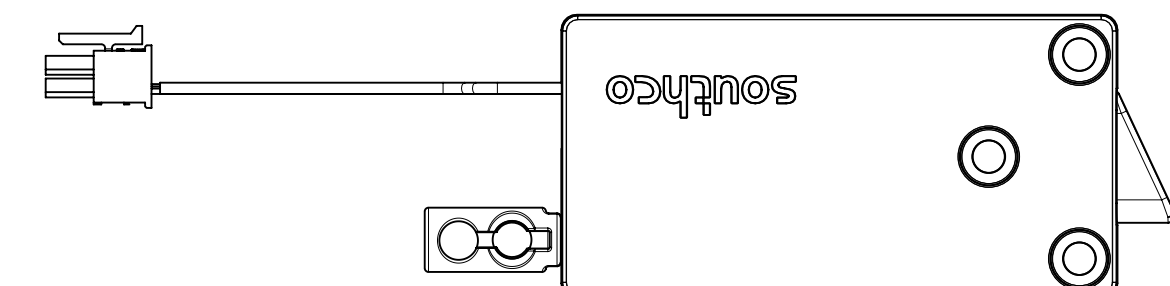
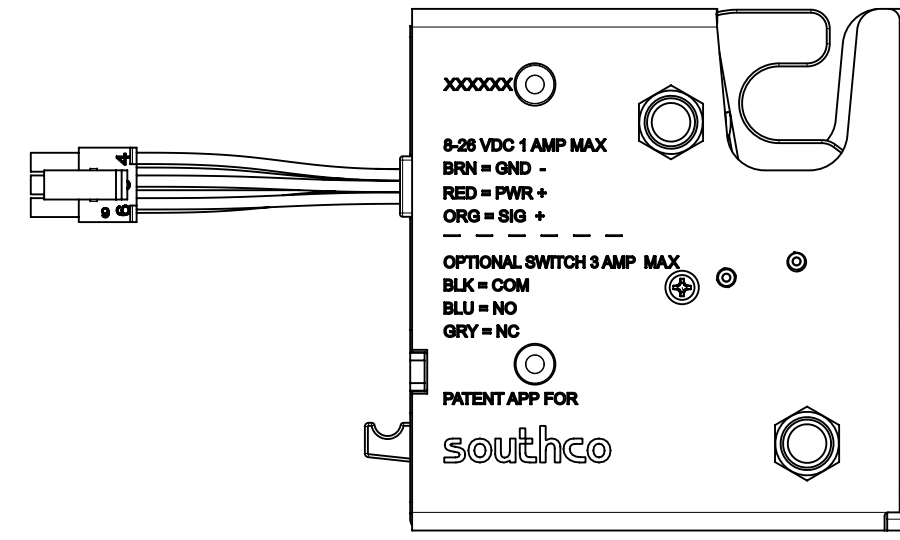
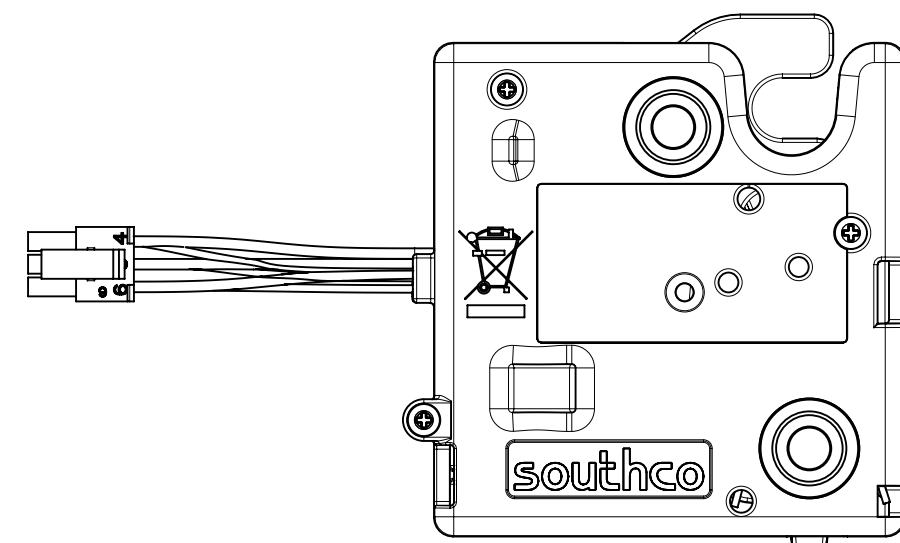
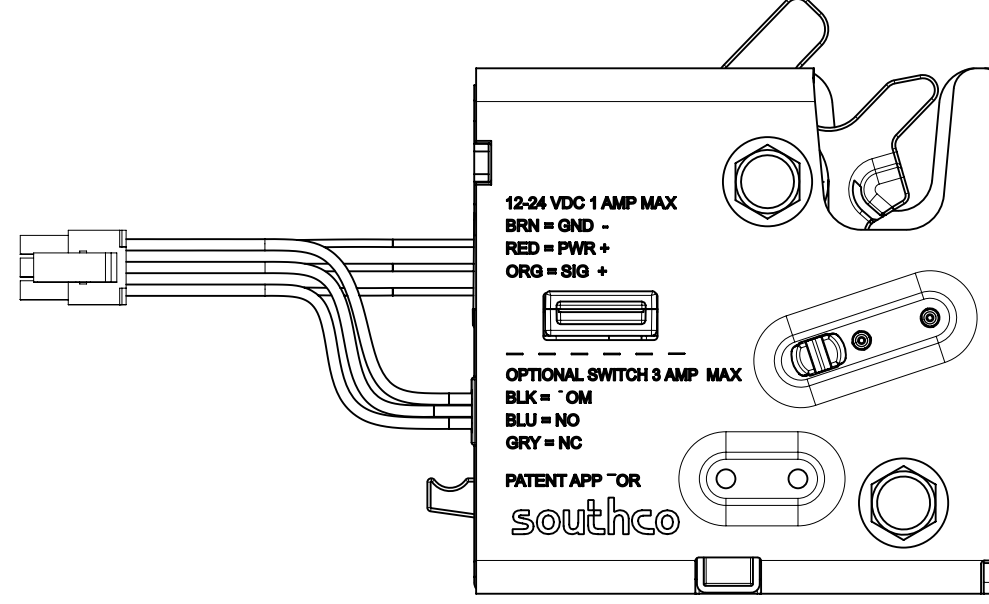
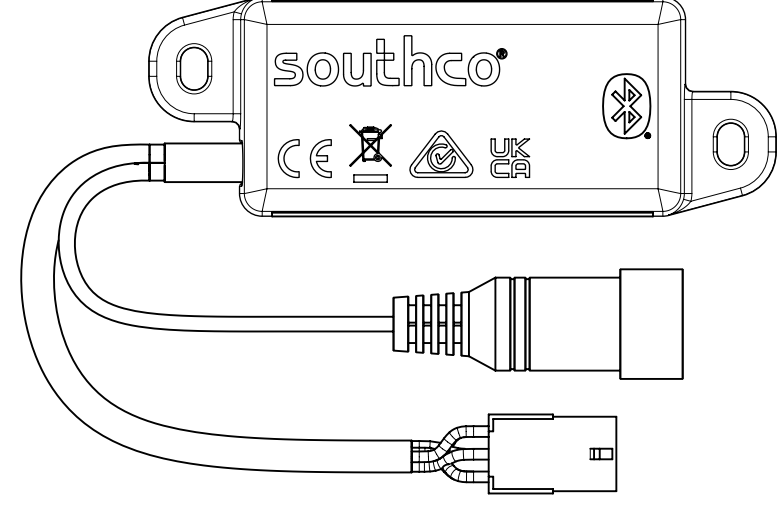
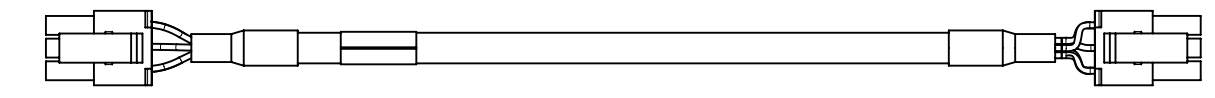
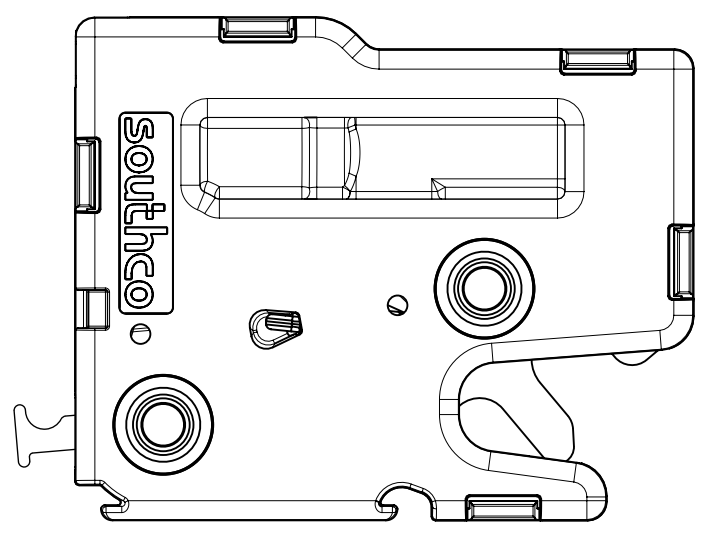
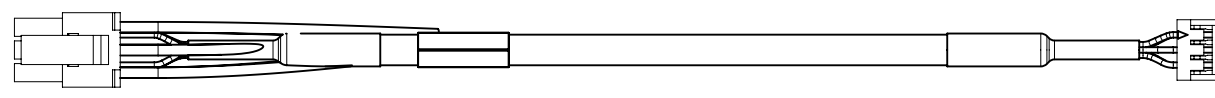
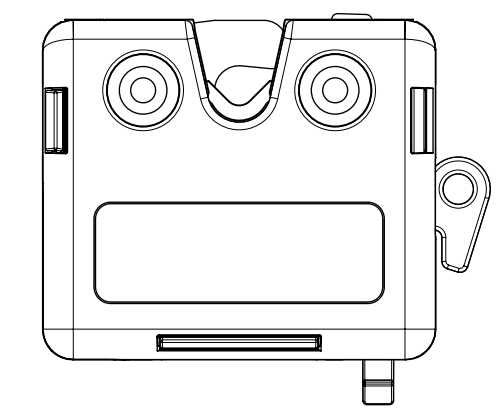
EA-BT-4043-10-BB

"BB" DENOTES LATCH CONFIGURATIONS					
CONFIGURATION	LATCH SERIES				
A1	R4-EM-2	R4-EM-6	R4-EM-7	EM-05-1	EM-05-2
B1	R4-EM-9D	R4-EM-9P	R4-EM-05		
C1	H3-EM-60	H3-EM-80	EM-10-XX-310	EM-10-XX-410	
D1	R4-EM-8 DOOR AND LATCH SENSOR VERSIONS				
E1	R4-50				
F1	R4-25				
F2	AC-EM-102-1042				

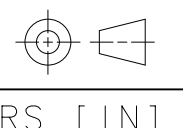
NOTE:
 *WHEN THE OUTPUTS ARE BEING DRIVEN HIGH BUT NO LATCH IS CONNECTED
 ** IN OPEN AIR

CPB NUMBER 2017-0837	THIRD ANGLE PROJECTION 	southco [®] CONNECT • CREATE • INNOVATE
	MILLIMETERS [IN]	
SURFACE AREA	TOLERANCES UNLESS OTHERWISE NOTED	DESCRIPTION SINGLE OUTPUT BLUETOOTH [®] CONTROLLER
VOLUME	ALL DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY.	SIZE A3 SYSTEM NX DWG NO. J-EA-BT-4
PROPRIETARY ITEM <small>EXCEPT FOR USES EXPRESSLY GRANTED IN WRITING, INFORMATION DISCLOSED HEREON IS CONFIDENTIAL AND ALL RIGHTS, PATENT AND OTHERWISE, ARE RESERVED BY SOUTHCO, INC.</small>	PER ASME Y14.5M-2009	DRAWN BY ZAM/MLL DATE 07MAY2021 SCALE 1:1 SHEET 3 OF 5

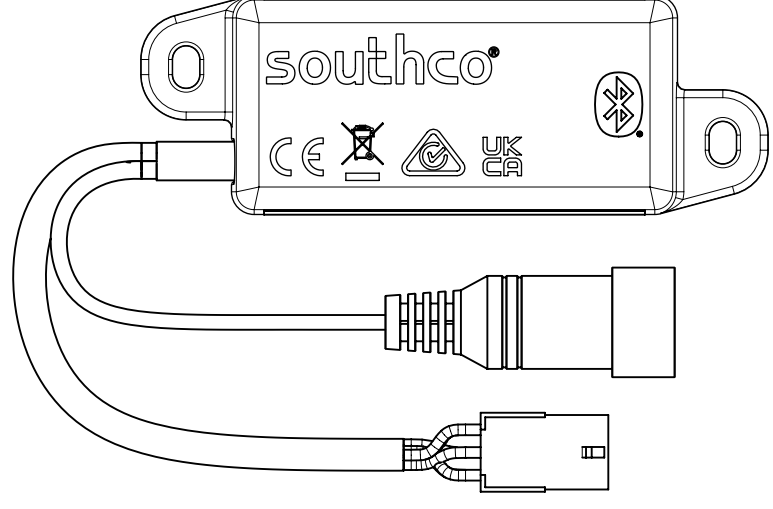
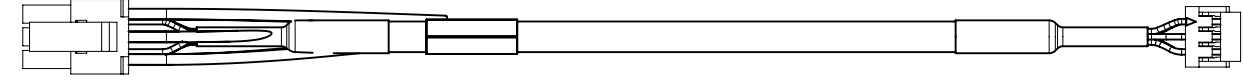
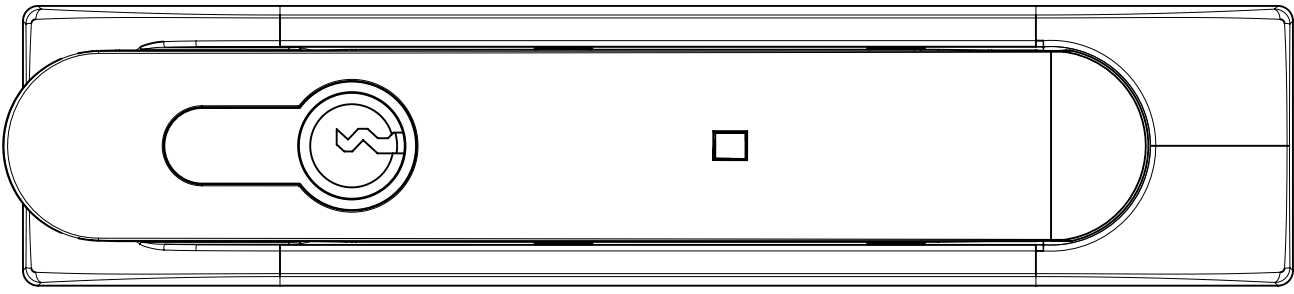
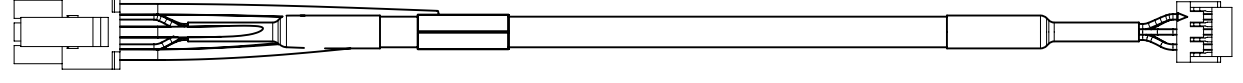
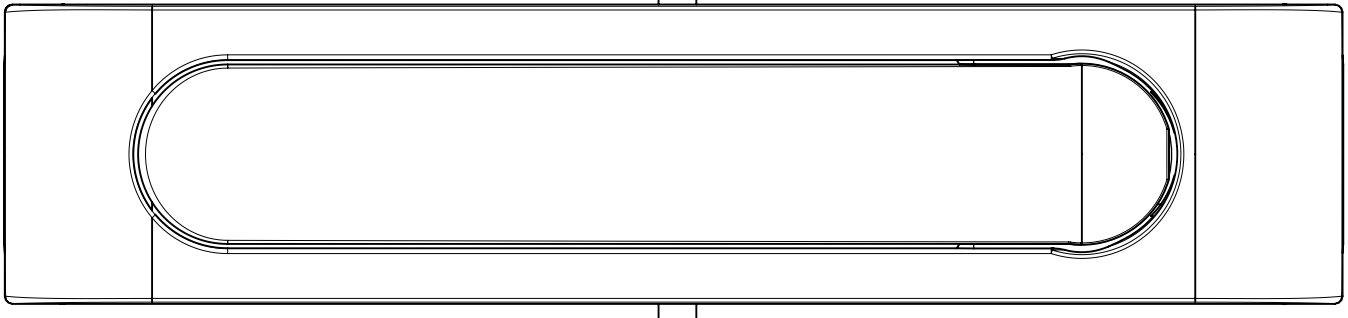
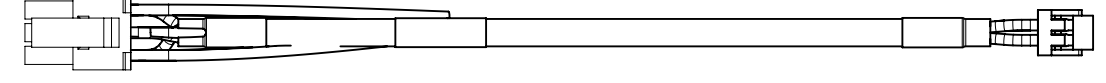
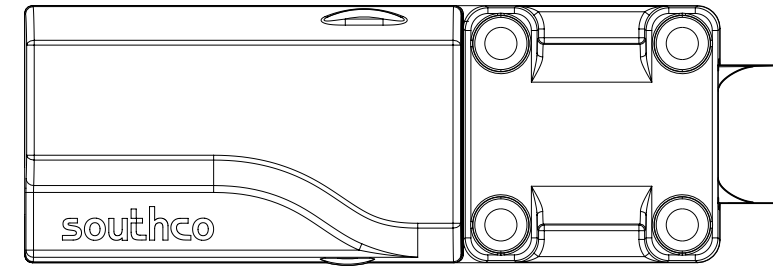
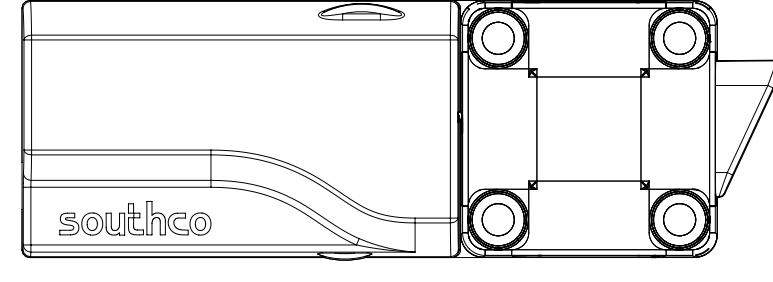
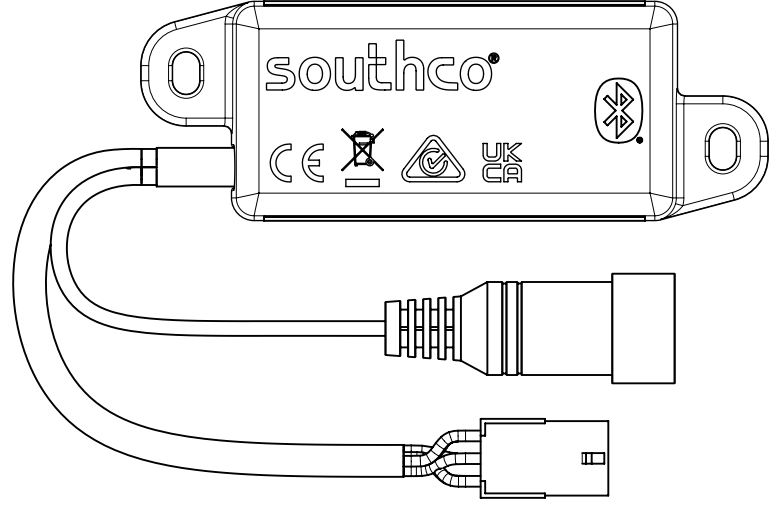
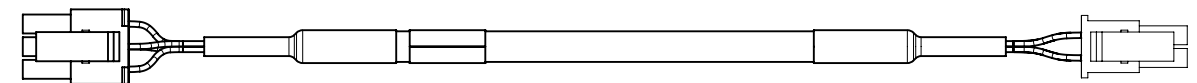
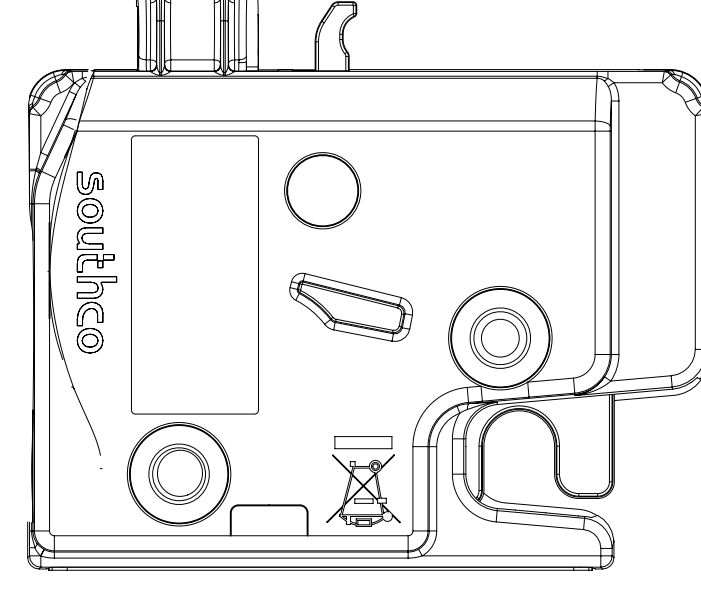
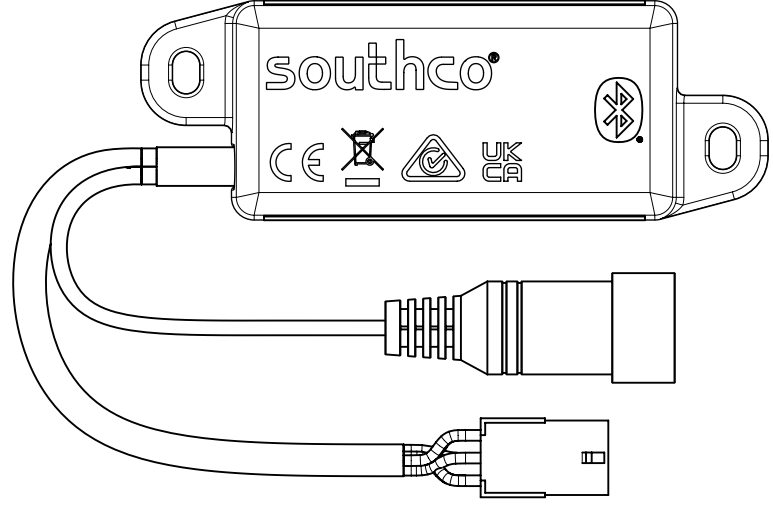
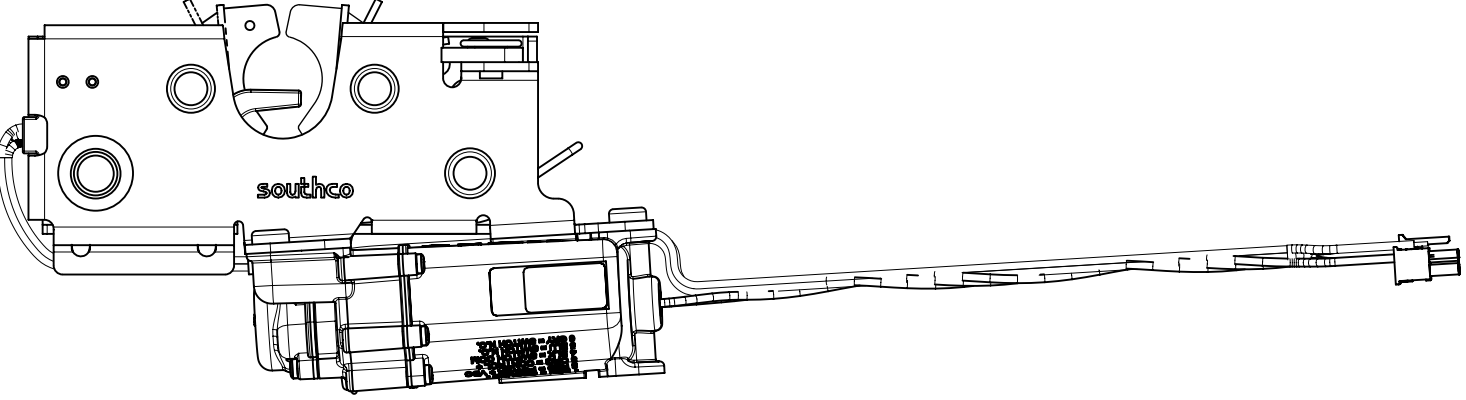
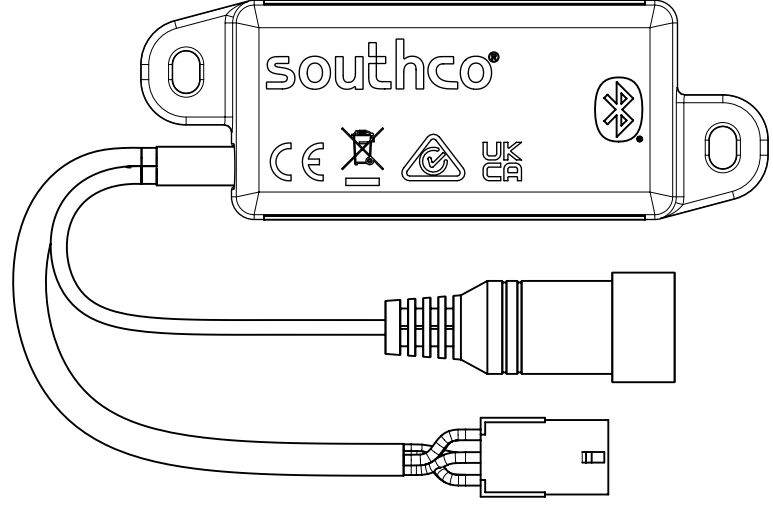
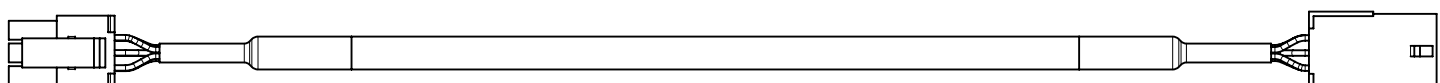
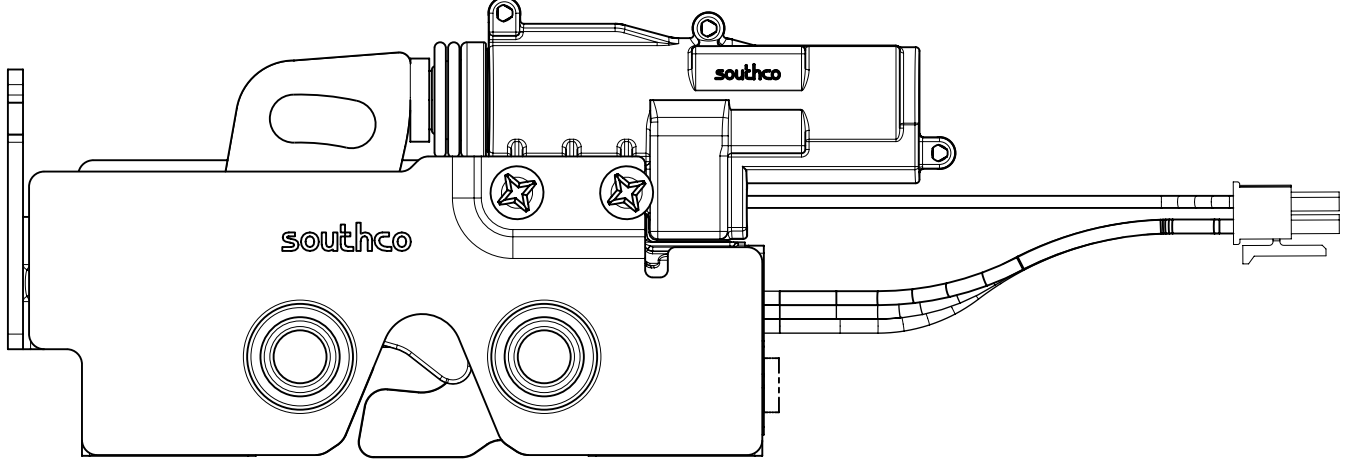
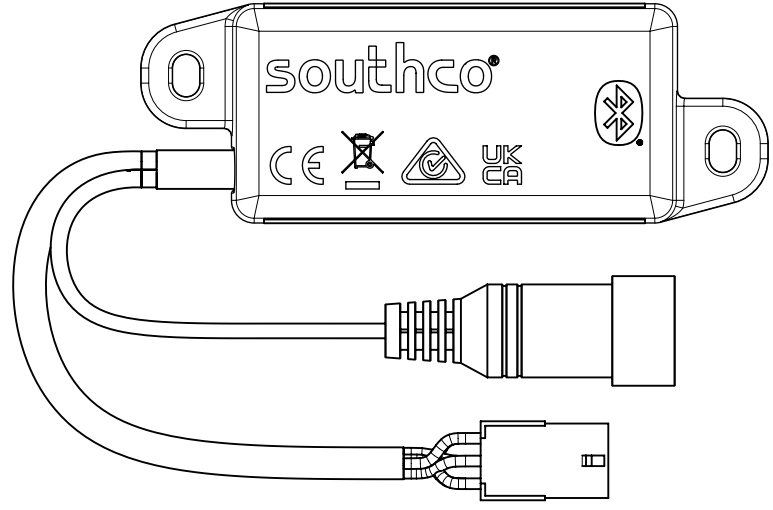
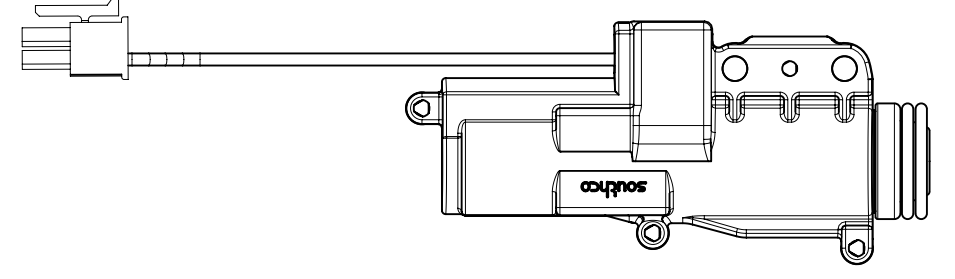
REVISION HISTORY			
REV	DATE	BY	DESCRIPTION
K	29FEB2024	GJL/SAK	PRN: P2024-0288

BLUETOOTH CONTROLLER	WIRE HARNESS PART NUMBER SEE TABLE	SOUTHCO LATCH SERIES
 <p>EA-BT-4043-10-A1 OPTIMIZED FOR BATTERY USAGE</p>	 <p>EA-W20-X01-21 (OPTIONAL - EXTENSION ONLY)</p>	 <p>EM-05-11</p>
		 <p>EM-05-21</p>
		 <p>R4-EM-2</p>
		 <p>R4-EM-6</p>
		 <p>R4-EM-7</p>
 <p>EA-BT-4043-10-B1 NOT RECOMMENDED FOR USE WITH BATTERIES</p>	<p>EA-W21-X25-21</p> 	 <p>R4-EM-9 DOOR & LATCH SENSOR VERSIONS</p>
	<p>EA-W01-X17-21</p> 	 <p>R4-EM-05 DOOR & LATCH SENSOR</p>

WIRE LENGTH TABLE	
"X"	WIRE LENGTH (mm)
A	150
1	1000
2	2000

CFB NUMBER 2017-0837	THIRD ANGLE PROJECTION		southco CONNECT • CREATE • INNOVATE
SURFACE AREA	MILLIMETERS [IN]	TOLERANCES UNLESS OTHERWISE NOTED	DESCRIPTION SINGLE OUTPUT BLUETOOTH® CONTROLLER
VOLUME	ALL DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY.	A/D SYSTEM NX	DRAW NO. J-EA-BT-4
PROPRIETARY ITEM <small> EXCEPT FOR REPRODUCED CONTENTS THIS DRAWING IS UNCLASSIFIED AND NOT SUBJECT TO EXPORT CONTROL RESTRICTIONS UNLESS INDICATED OTHERWISE </small>	PER ASME Y14.5M-2009	DRAWN BY ZAM/MLL	DATE 31MAY2022
		SCALE 1:1	SHEET 4 OF 5

REVISION HISTORY			
REV	DATE	BY	DESCRIPTION
K	29FEB2024	GJL/SAK	PRN: P2024-0288

BLUETOOTH CONTROLLER	WIRE HARNESS PART NUMBER SEE TABLE	SOUTHCO LATCH SERIES
 <p>EA-BT-4043-10-C1 NOT RECOMMENDED FOR USE WITH BATTERIES</p>	EA-W01-X23-21 	 H3-EM-60 SERIES
	EA-W01-X17-21 	 H3-EM-80 SERIES
	EA-W21-X03-02 	EM-10-1X-310 AND EM-10-1X-410 
EM-10-2X-310, EM-10-3X-310, EM-10-2X-410, EM-10-3X-410 		
 <p>EA-BT-4043-10-D1 OPTIMIZED FOR BATTERY USAGE</p>	EA-W24-X03-21 	 R4-EM-8
 <p>EA-BT-4043-10-E1 NOT RECOMMENDED FOR USE WITH BATTERIES</p>	EA-W20-X01-21 (OPTIONAL - EXTENSION ONLY)	 R4-50
 <p>EA-BT-4043-10-F1 OPTIMIZED FOR BATTERY USAGE</p>		 R4-25
 <p>EA-BT-4043-10-F2 OPTIMIZED FOR BATTERY USAGE</p>	EA-W20-X01-21 (OPTIONAL - EXTENSION ONLY)	 AC-EM-102-1042

WIRE LENGTH TABLE	
"X"	WIRE LENGTH (mm)
A	150
1	1000
2	2000

CFB NUMBER 2017-0837 SURFACE AREA VOLUME PROPRIETARY ITEM FIRST FOR REPRODUCTION WITHOUT THE WRITTEN PERMISSION OF SOUTHCO	THIRD ANGLE PROJECTION MILLIMETERS [IN] TOLERANCES UNLESS OTHERWISE NOTED ALL DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY. PER ASME Y14.5M-2009	DESCRIPTION SINGLE OUTPUT BLUETOOTH® CONTROLLER J-EA-BT-4 DRAWN BY ZAM/MLL DATE 31MAY2022 SCALE 1:1 SHEET 5 OF 5
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