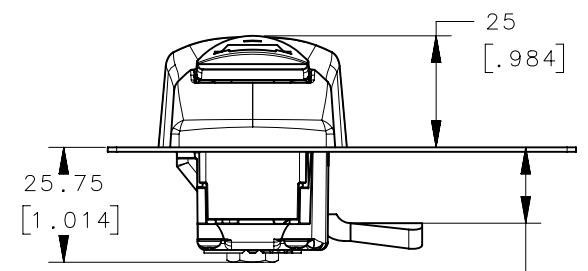
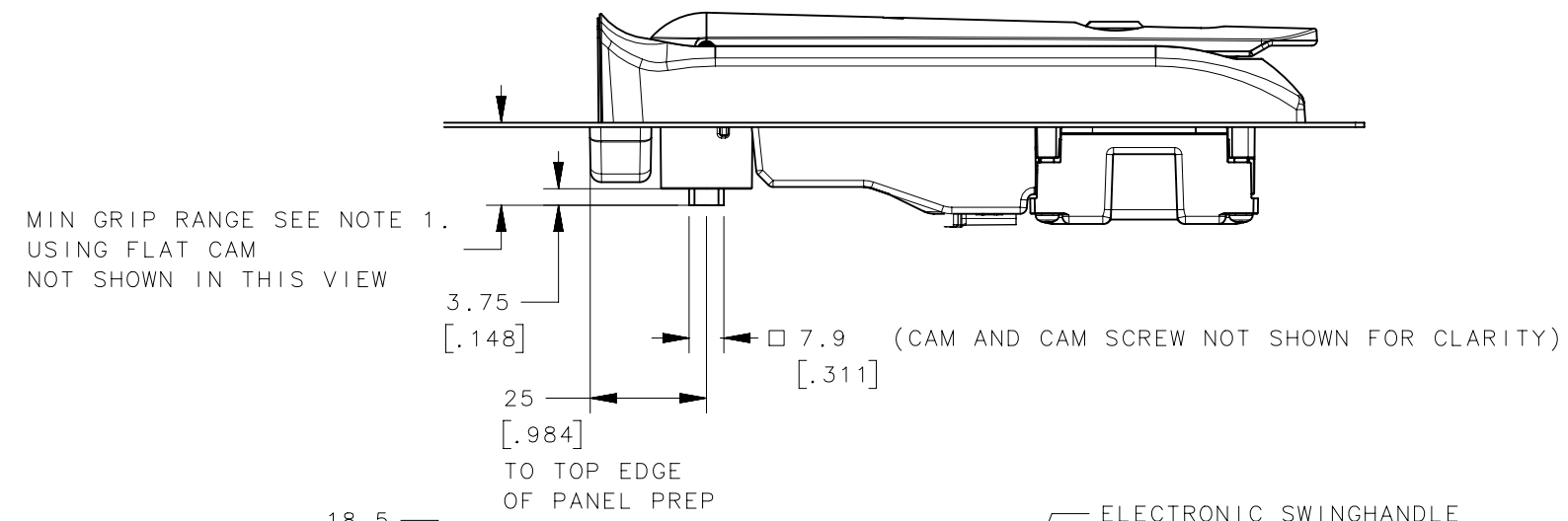
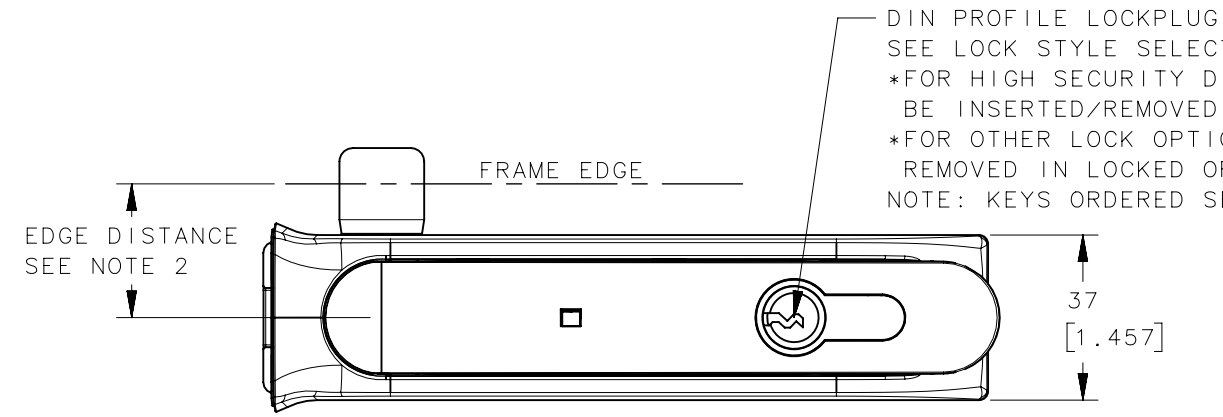


REVISION HISTORY			
REV	DATE	BY	DESCRIPTION
B	05NOV2019	DJG/MLL	PRN: P2019-2773

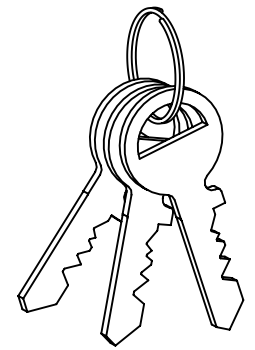
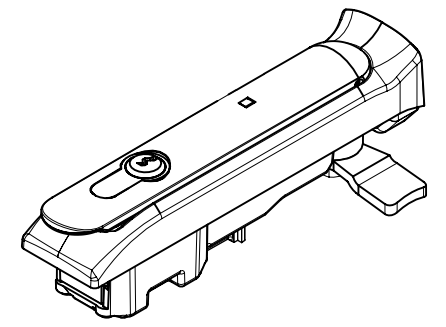
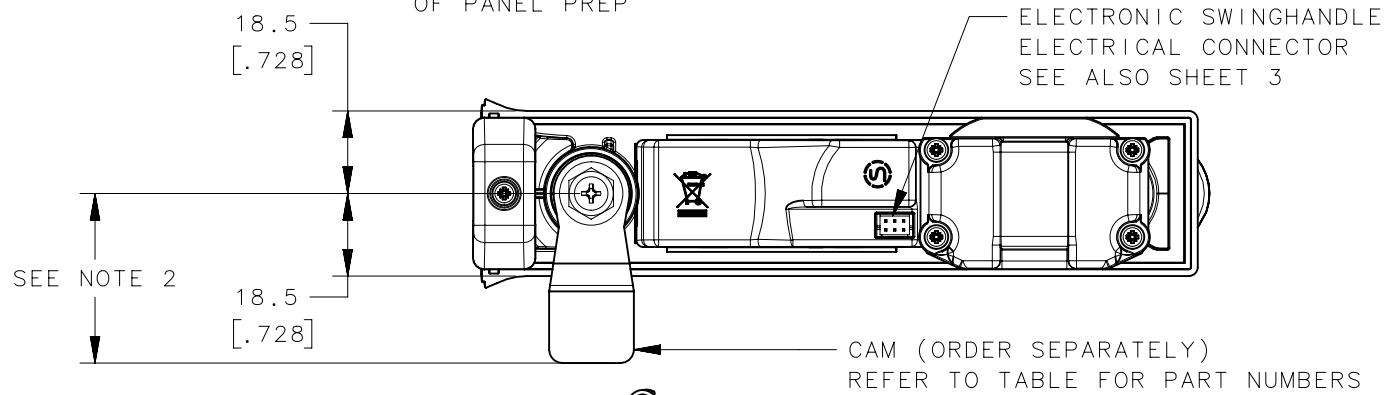
- NOTES:
1. MIN GRIP RANGE WITH FLAT CAM 15.5mm [.61]  
EXAMPLE SHOWN: 2mm OFFSET CAM - GRIP RANGE 17.5mm [.68]
  2. FOR CAM LENGTH 38mm [1.5] -EDGE DISTANCE 30mm [1.18]  
FOR CAM LENGTH 45mm [1.77] -EDGE DISTANCE 37mm [1.46]
  3. SELECT CAM PART NUMBERS ACCORDING TO TABLE TO PROVIDE GRIP REQUIRED.
  4. THE H3-EM-70000-000 IS SHIPPED WITHOUT A LOCKPLUG. THIS PRODUCT MUST BE PAIRED WITH A SOUTHCO APPROVED LOCK TO FUNCTION PROPERLY. USE WITH AN UNAPPROVED LOCK PLUG VOIDS THE PRODUCT WARRANTY.

CAM PART NUMBER (ORDER SEPERATELY)		
GRIP	CAM LENGTH (1) 38 MM [1.5]	CAM LENGTH (2) 45 MM [1.77]
15.5 [.61]	E5-6710	-
17.5 [.68]	E5-6711	-
19.5 [.76]	E5-6712	E5-6112
21.5 [.85]	E5-6713	E5-6113
23.5 [.93]	E5-6714	E5-6114

OTHER ADDITIONAL OFFSETS:  
 (1) SEE SOUTHCO DRAWINGS J-E5-67-A & J-E5-67-B  
 (2) SEE SOUTHCO DRAWINGS J-E5-61-A



GRIP RANGE:  
 (EXAMPLE: GRIP RANGE SHOWN 17.5 [.68] USING OFFSET CAM P/N E5-6711)



KEYS ORDERED SEPARATELY:  
 PART #: PK-99-198-01 FOR HS DIN  
 PART #; PK-10-01 FOR CH-751  
 PART #:PK-10-01-KRXXX FOR RSXXX

### ELECTRONIC SWINGHANDLE PART NUMBER SELECTION H3-EM-70000-LLL

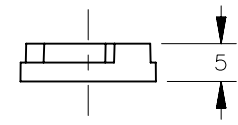
- LLL LOCK STYLE
- 000 NO LOCK OR KEYS
- 001 BLANK LOCKPLUG, BRIGHT CHROME
- 100 HIGH SECURITY DIN LOCK
- 200 KEY CODE CH-751
- 3LL KEY CODE RSXXX
- LL = 00 FOR KEY CODE RS001
- CONTACT SOUTHCO FOR OTHER AVAILABLE KEY CODES

THIRD ANGLE PROJECTION	MILLIMETERS [IN]		 CONNECT · CREATE · INNOVATE		
TOLERANCES UNLESS OTHERWISE NOTED			SIZE A3	SYSTEM NX	DWG NO. J-H3-EM-70000
ALL DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY.			DRAWN BY DJG/MLL	DATE 05NOV2019	SCALE NTS
PER ASME Y14.5M-1994			SHEET 1 OF 5		

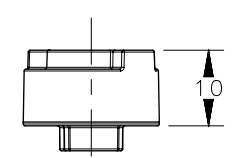
PROPRIETARY ITEM  
 EXCEPT FOR USES EXPRESSLY GRANTED IN WRITING, INFORMATION DISCLOSED HEREON IS CONFIDENTIAL AND ALL RIGHTS, PATENT AND OTHERWISE, ARE RESERVED BY SOUTHCO, INC.

REVISION HISTORY			
REV	DATE	BY	DESCRIPTION
B	05NOV2019	DJG/MLL	PRN: P2019-2773

- NOTES:
1. USE ONLY MOUNTING HARDWARE SUPPLIED.
  2. CAM SCREW INSTALLATION TORQUE 4 Nm MIN [35.4 in lbf].
  3. USE #1 POZIDRIV DRIVER WHEN INSTALLING MOUNTING SCREWS.  
MAXIMUM TIGHTENING TORQUE FOR MOUNTING SCREWS 0.5 Nm [4.4 in lbf].

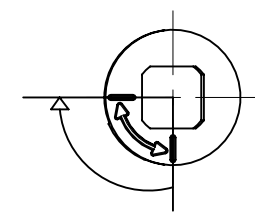


THIN ROTATION LIMITER  
FOR STANDARD APPLICATIONS



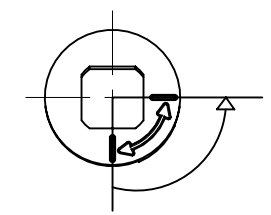
THICK ROTATION LIMITER  
WHEN ADDITIONAL CLEARANCE  
AS REQUIRED IN MULTI-POINT  
SYSTEMS

OPTION 1 FOR INSTALLATION  
OF ROTATION LIMITER  
- VIEWED FROM BACK-



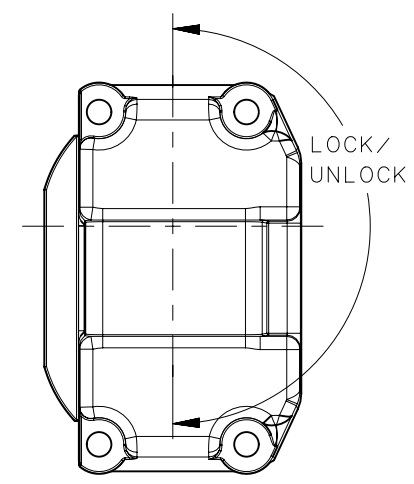
LEFT HAND MOUNTING  
TO OPEN: TURN HANDLE 90°  
COUNTER CLOCKWISE IF VIEWED  
FROM FRONT

OPTION 2 FOR INSTALLATION  
OF ROTATION LIMITER  
- VIEWED FROM BACK-



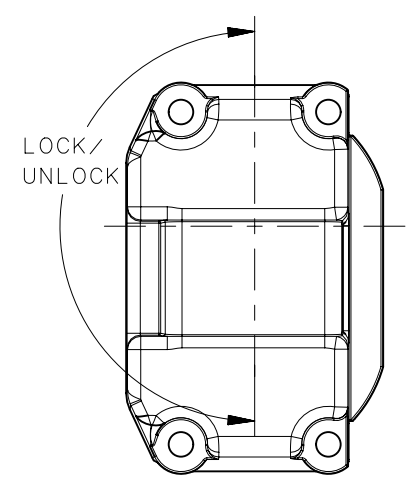
RIGHT HAND MOUNTING  
TO OPEN: TURN HANDLE 90°  
CLOCKWISE IF VIEWED  
FROM FRONT

INSTALLATION OF BOTTOM MOUNTING BRACKET



OPERATION OF LOCK PLUG CORRESPONDS WITH  
ORIENTATION OF BOTTOM MOUNTING BRACKET

LEFT HAND MOUNT  
WHEN H3-61-55-33  
MULTI POINT SYSTEM  
IS USED.



RIGHT HAND MOUNT  
WHEN H3-61-56-33  
MULTI POINT SYSTEM  
IS USED.

CAUTION: SECURE WIRES SUCH THAT THEY DO NOT  
INTERFERE WITH LATCH CAM AND LOCK PLUG

CHECK THAT THE WIRES ARE NOT PINCHED  
BETWEEN THE LATCH HOUSING, PANEL AND  
TOP MOUNTING BRACKET

ROTATION LIMITER: (LEFT HAND MOUNTING SHOWN)  
ORIENTATION ACCORDING TO REQUIRED HANDLE OPERATION  
(LEFT OR RIGHT HANDED MOUNTING)

TOP MOUNTING BRACKET

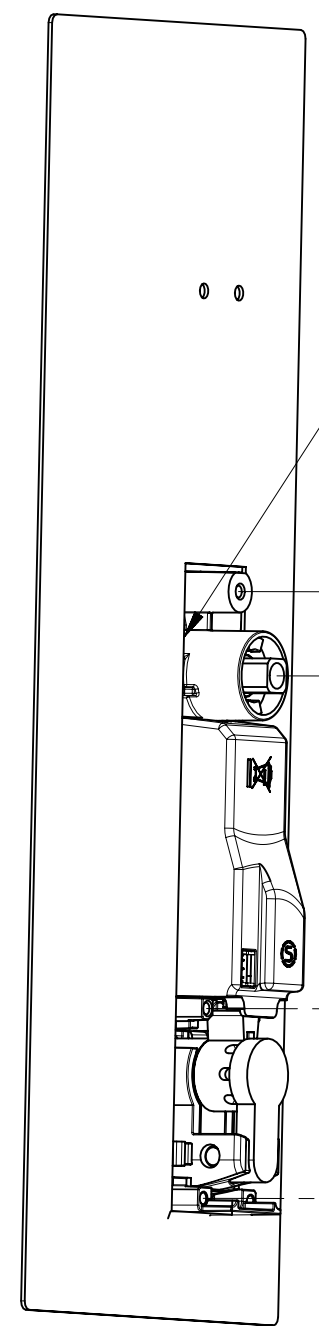
POZIDRIV MOUNTING SCREW 14 LONG  
(SEE NOTE 3)

CAM SCREW  
(SEE NOTE 2)

CAM (ORDERED SEPARATELY):  
ORIENTATION ACCORDING TO  
REQUIRED HANDLE OPERATION  
(LEFT OR RIGHT HANDED MOUNTING)  
(LEFT HAND MOUNTING SHOWN)

POZIDRIV 4 x MOUNTING  
SCREW 25 LONG  
(SEE NOTE 3)

BOTTOM MOUNTING BRACKET:  
ORIENTATION ACCORDING TO  
REQUIRED LOCK PLUG OPERATION  
(LEFT OR RIGHT HANDED MOUNTING)



THIRD ANGLE PROJECTION				 CONNECT • CREATE • INNOVATE		
TOLERANCES UNLESS OTHERWISE NOTED			DESCRIPTION			
ALL DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY.			H3-EM-7 SERIES MODULAR LATCH			
PROPRIETARY ITEM EXCEPT FOR USES EXPRESSLY GRANTED IN WRITING, INFORMATION DISCLOSED HEREON IS CONFIDENTIAL AND ALL RIGHTS, PATENT AND OTHERWISE, ARE RESERVED BY SOUTHCO, INC.		SIZE A3	SYSTEM NX	DWG NO. J-H3-EM-70000		
PER ASME Y14.5M-1994			DRAWN BY DJG/MLL	DATE 05NOV2019	SCALE NTS	SHEET 2 OF 5

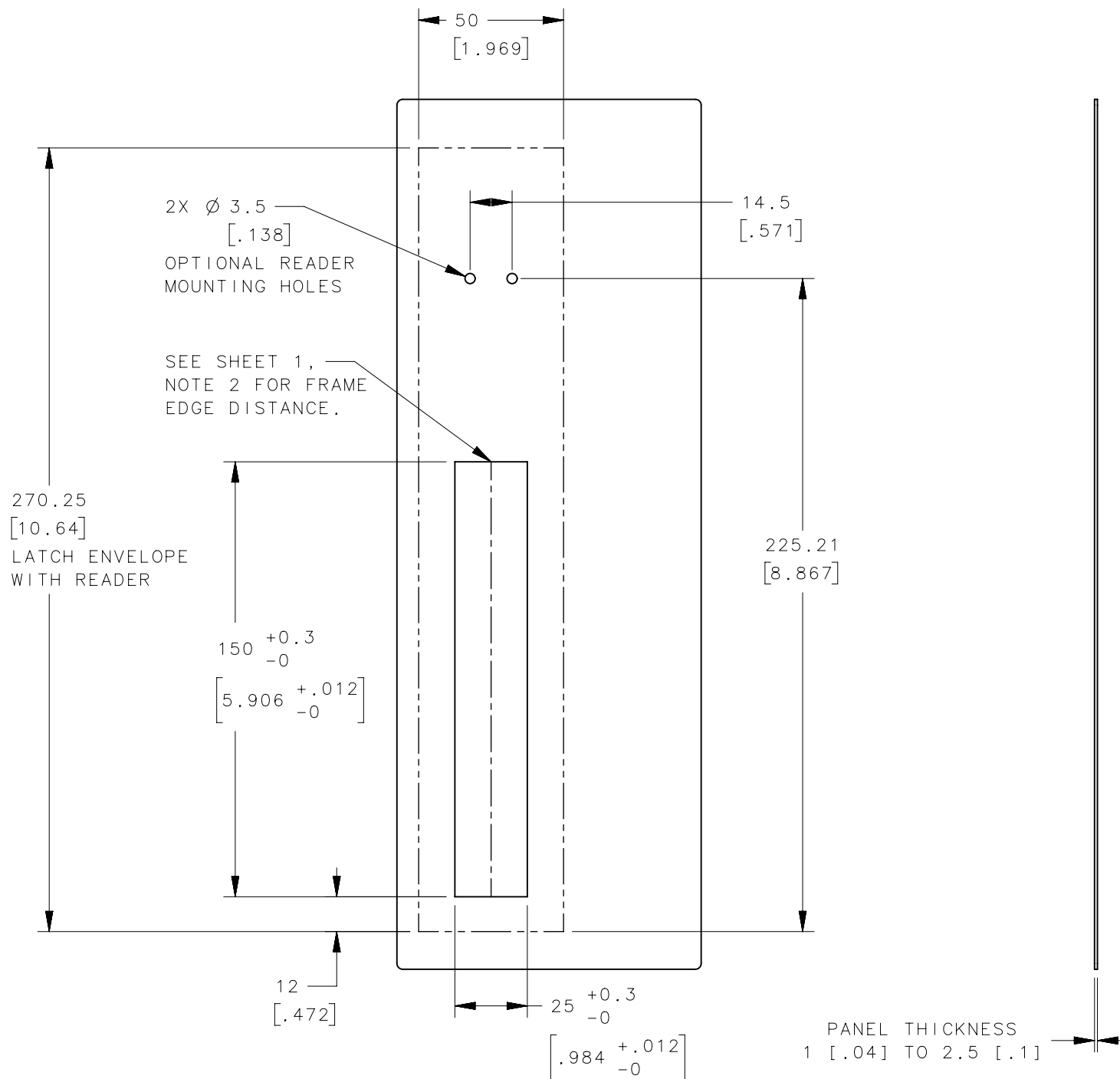
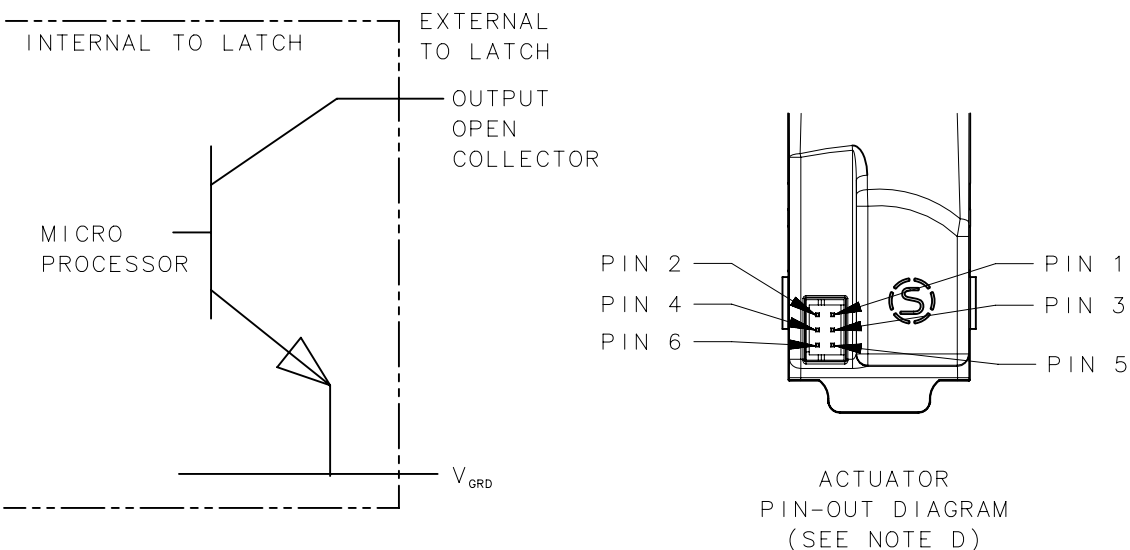
ACTUATOR MODULE

ELECTRICAL SPECIFICATION:

1. POWER: 12V TO 24V
  - OPERATING CURRENT: LESS THAN 200mA AT 12VDC WITH NO EXTERNAL MECHANICAL LOAD APPLIED TO HANDLE.
  - MAX CURRENT WITH STALLED ACTUATOR: 1A MAX AT 12VDC (STALL LIMITED TO 2 SECONDS)
  - STANDBY CURRENT: 25mA TYPICAL.
2. CONTROL INPUT:
  - TO UNLOCK: SUPPLY 9VDC MINIMUM (DO NOT EXCEED SUPPLY VOLTAGE) FOR A MINIMUM OF 100 MILLISECONDS. THE LATCH WILL REMAIN UNLOCKED FOR AS LONG AS THE SIGNAL IS PRESENT OR A MINIMUM OF 3 SECONDS.
3. OUTPUT:
  - OPEN COLLECTOR OUTPUT. RATING 9 TO 24VDC. 100mA MAX LOAD
  - CAUTION! TO PREVENT DAMAGE TO THE PRODUCT DO NOT EXCEED MAXIMUM LOADS STATED AND FOLLOW WIRING DIRECTIVES.
  - FOR OUTPUT SIGNAL DETAILS AND LED SEQUENCE SEE TRUTH TABLE.
4. CONNECTIONS:
  - SIX POSITION CONNECTOR
  - HIROSE ELECTRIC CO LTD. PART NUMBER DF11-6DP-2DSA.
  - SEE PIN-OUT TABLE.

PIN	DESCRIPTION	NOTE
1	VGND	GROUND (MUST BE SAME AS RFID READER MODULE)
2	VSUPPLY	12 TO 24 VDC POWER SUPPLY INPUT
3	N/C	NO CONNECT
4	CONTROL SIGNAL	COMMAND INPUT (9VDC UP TO SUPPLY VOLTAGE, 100 MILLISECONDS MINIMUM)
5	ELECTRONIC LOCK STATUS	OPEN COLLECTOR OUTPUT (RATED FOR VSUPPLY, 100mA MAX. LOAD)
6	MECHANICAL LOCK STATUS	OPEN COLLECTOR OUTPUT (RATED FOR VSUPPLY 100mA MAX. LOAD)

5. ACTUATOR MODULE WIRE HARNESS (NOT INCLUDED)  
SOUTHCO P/N: EA-W01-100 \*, SEE ALSO J-EA-W01 FROM ACTUATOR MODULE TO STRIPPED AND TINNED END LENGTH 1000MM  
\*CONTACT SOUTHCO FOR OTHER LENGTHS



PANEL PREPARATION  
NOTE: THERE MUST BE 127mm [5"] OF SPACE BETWEEN LATCHES TO OPERATE CORRECTLY

REVISION HISTORY			
REV	DATE	BY	DESCRIPTION
B	05NOV2019	DJG/MLL	PRN: P2019-2773

THIRD ANGLE PROJECTION						
MILLIMETERS [IN]		DESCRIPTION				
TOLERANCES UNLESS OTHERWISE NOTED		H3-EM-7 SERIES MODULAR LATCH				
ALL DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY.		SIZE	SYSTEM	DWG NO.		
PROPRIETARY ITEM		A3	NX	J-H3-EM-70000		
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PER ASME Y14.5M-1994		DJG/MLL	05NOV2019	NTS	3 OF 5	

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## LATCH STATUS DEFINITION

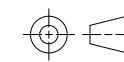
## REVISION HISTORY

REV	DATE	BY	DESCRIPTION
B	05NOV2019	DJG/MLL	PRN: P2019-2773

LATCH STATUS	LATCH LED	PIN 6 OUTPUT HANDLE LOCK	PIN 5 OUTPUT ELECTRONIC LOCK	PIN 4 CONTROL INPUT	NOTE
SECURED	BLUE	OPEN COLLECTOR	OPEN COLLECTOR	GND	ENCLOSURE SECURED- ACCESS DENIED
ELECTRONICALLY RELEASED	BLUE / MAGENTA FLASHING	OPEN COLLECTOR	LOW	V <sub>SS</sub>	ENCLOSURE READY FOR ACCESS
MECHANICALLY RELEASED	BLUE FLASHING LOW	LOW	LOW	V <sub>SS</sub>	ACCESS GAINED - HANDLE LIFTED OR MECHANICALLY UNLOCKED
		LOW	OPEN COLLECTOR	GND	ACCESS GAINED - HANDLE LIFTED - ELECTRONIC LOCK CLOSED
HANDLE NOT FULLY CLOSED	BLUE / RED FLASHING	OPEN COLLECTOR	LOW	GND	INTERIM STATES ONLY DURING CLOSING OF HANDLE
		LOW	LOW	GND	

## ELECTRONIC SWINGHANDLE MATERIALS

H3-EM-70000-LLL			
COMPONENT	MATERIAL	FINISH	NOTE
CIRCUIT BOARD	DETAILS ON REQUEST	DETAILS ON REQUEST	
MOTOR	DETAILS ON REQUEST	DETAILS ON REQUEST	
GEAR SHAFT	STAINLESS STEEL	NATURAL	
WORM GEAR	PA66 1300S	NATURAL	
PINION GEAR	POM M90-44	BLACK	
SPUR GEAR	POM M90-44	BLACK	
GEAR RETAINER	PC (LEXAN V0)	CLEAR	
MOTOR COVER	PC ABS (UL94- V0)	BLACK	
LATCH BODY	30% GF NYLON (UL94- V0)	BLACK (A&B SURFACES VD136)	
HANDLE MOULDING	30% GF NYLON (UL94- V0)	BLACK (A&B SURFACES VD136)	
LIGHT PIPE	PC (LEXAN V0)	WHITE	
BOTTOM MOUNTING BRACKET	30% GF NYLON (UL94- V0)	BLACK	
SLIDE	30% GF NYLON (UL94- V0)	WHITE	
HANDLE SHAFT	DIE CAST ZINC	ZINC PLATE BRIGHT CHROMATE	
ROTATION LIMITER	DIE CAST ZINC	ZINC PLATE BRIGHT CHROMATE	
TOP MOUNTING BRACKET	30% GF NYLON (UL94- V0)	BLACK	
MOUNTING SCREW 25 LONG	STEEL	ZINC PLATE + BRIGHT CHROMATE	INSTALL WITH #1 POZIDRIV DRIVER
MOUNTING SCREW 14 LONG	STEEL	ZINC PLATE + BRIGHT CHROMATE	INSTALL WITH #1 POZIDRIV DRIVER
OUTPUT GEAR MOULDING	POM M90-44	BLACK	
REFLECTOR	POM M90-44	OPAQUE WHITE	
CONNECTING LEAD	DETAILS ON REQUEST	DETAILS ON REQUEST	ORDER SEPARATELY
DIN LOCKPLUG	DETAILS ON REQUEST	DETAILS ON REQUEST	OPTIONAL WITHOUT LOCKPLUG
LOCK PLUG RETAINING SCREW	STEEL	ZINC PLATE + BRIGHT CHROMATE + SEALER	
SHAFT PIN	SAE 30302/30304	PLAIN, OILED	
O-RING	BLACK NBR RUBBER	GREASED	
CAM SCREW	STEEL	ZINC PLATE + BRIGHT CHROMATE	
CAM	STEEL	ZINC PLATE + BRIGHT CHROMATE	ORDER SEPARATELY
BLANK LOCKPLUG	DIE CAST ZINC	CHROME PLATE	OPTIONAL
SLIDE SPRING	302 STAINLESS STEEL	NATURAL	
KEYS	COPPER	NICKEL PLATED	ORDER SEPARATELY

THIRD ANGLE  
PROJECTION

MILLIMETERS [IN]

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PER ASME Y14.5M-1994

**southco**<sup>®</sup>  
CONNECT • CREATE • INNOVATE

DESCRIPTION  
H3-EM-7 SERIES MODULAR LATCH

SIZE A3	SYSTEM NX	DWG NO. J-H3-EM-70000
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DRAWN BY DJG/MLL	DATE 05NOV2019	SCALE NTS	SHEET 4 OF 5
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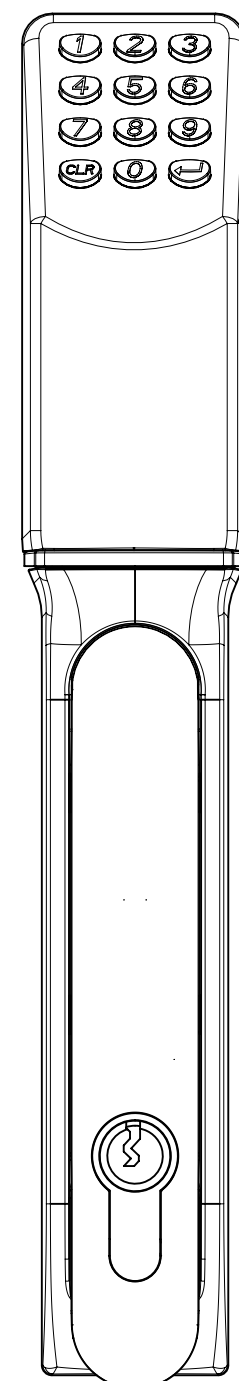
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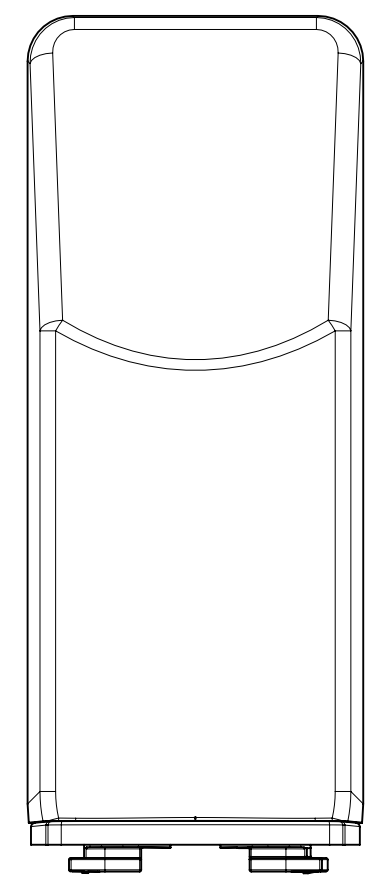
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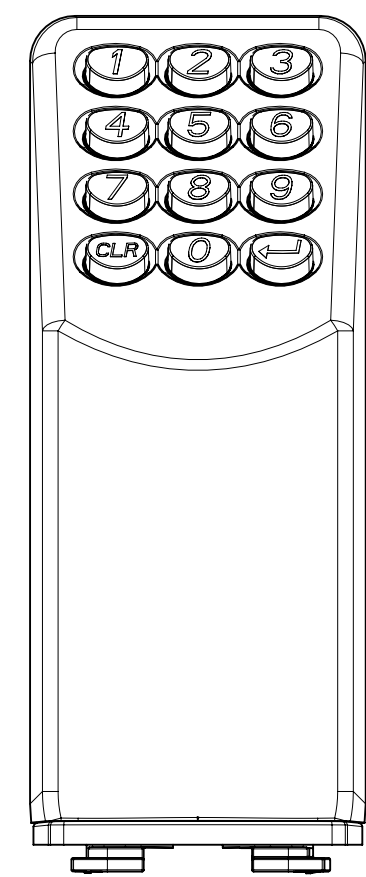
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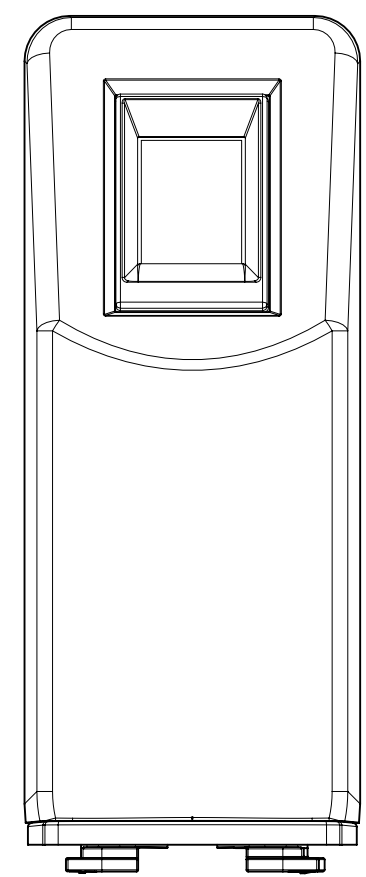
EA-P5-31104 SHOWN  
SEE J-EA-P5-3-1 AND J-EA-P5-3-2.



RFID READER SHOWN  
 - EA-P5-31100 HI FREQ.  
 - EA-P5-30200 HI/LO FREQ.  
 - EA-P5-30600 HI FREQ.  
 - EA-P5-30800 LO FREQ.



RFID AND KEYPAD SHOWN  
 - EA-P5-31004 HI/LO FREQ.



RFID AND FINGERPRINT READER SHOWN  
 - EA-P5-31105 HI FREQ.

MODULAR LATCH WITH  
OPTIONAL READER

THIRD ANGLE PROJECTION	 CONNECT • CREATE • INNOVATE		
TOLERANCES UNLESS OTHERWISE NOTED	DESCRIPTION H3-EM-7 SERIES MODULAR LATCH		
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>	SIZE A3	SYSTEM NX	DWG NO. J-H3-EM-70000
	PER ASME Y14.5M-1994	DRAWN BY DJG/MLL	DATE 05NOV2019
	SCALE NTS	SHEET 5 OF 5	