

REVISION HISTORY			
REV	DATE	BY	DESCRIPTION
M	14OCT2024	GJL/SAK	PRN: P2024-1739

# LATCH ASSEMBLY PART NUMBER: R4-25-2 I0-500 B-MM

## I MOUNTING STYLE

- 0 SIDE MOUNT  $\varnothing 6.7$  (.263) THRU HOLE
- 1 SIDE MOUNT 1/4-20 THREAD
- 2 SIDE MOUNT M6X1 THREAD
- 3 FRONT MOUNT (M6X1) WITH  $\varnothing 6.7$  (.263) SIDE MOUNT

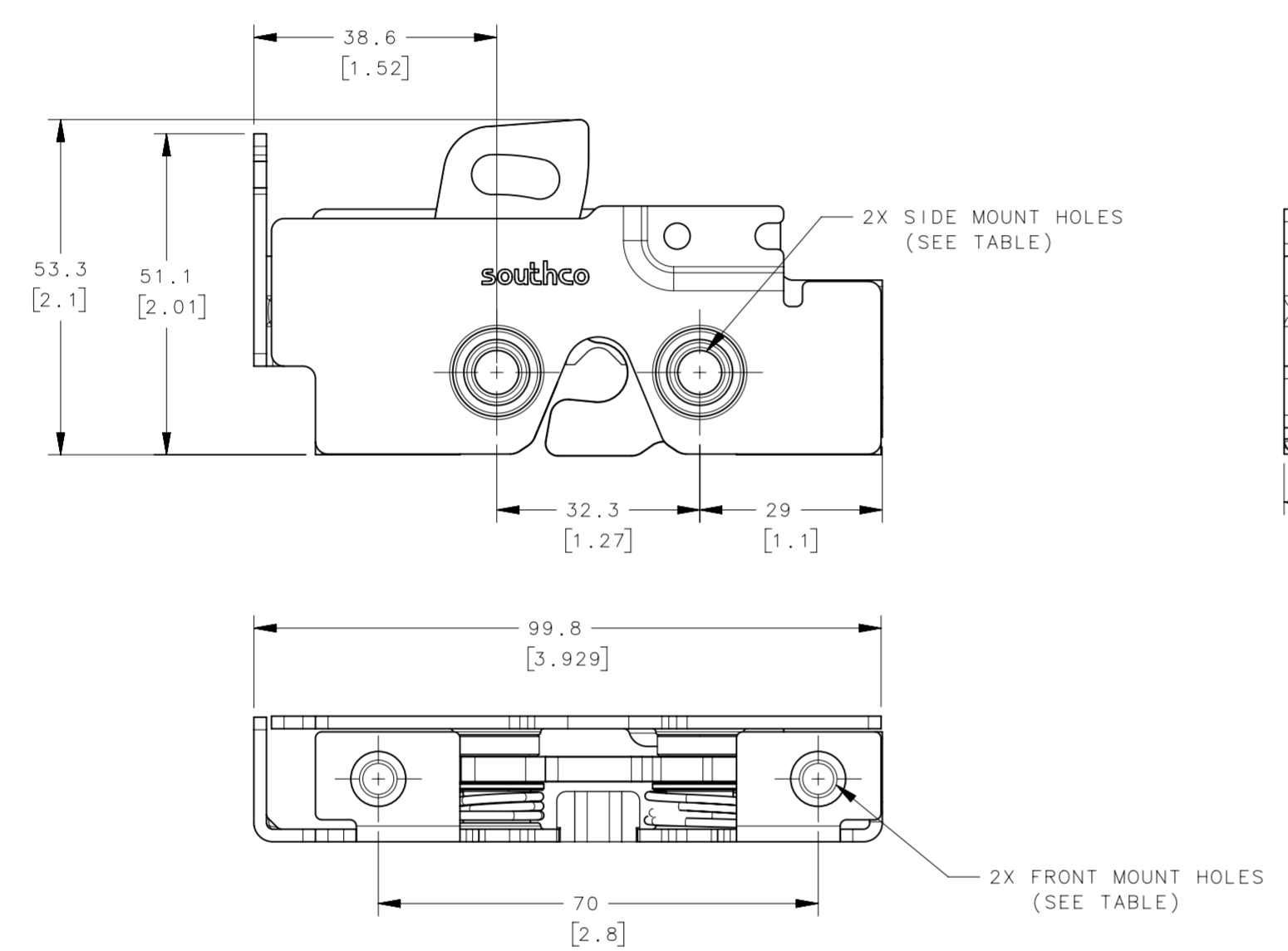
## B BASE STYLE

- 2 MOUNT FOR CABLE WITH RETURN SPRING ASSIST, NO BUMPER
- 3 MOUNT FOR CABLE WITHOUT RETURN SPRING ASSIST, NO BUMPER
- 6 MOUNT FOR CABLE WITH RETURN SPRING ASSIST, WITH BUMPER
- 7 MOUNT FOR CABLE WITHOUT RETURN SPRING ASSIST, WITH BUMPER

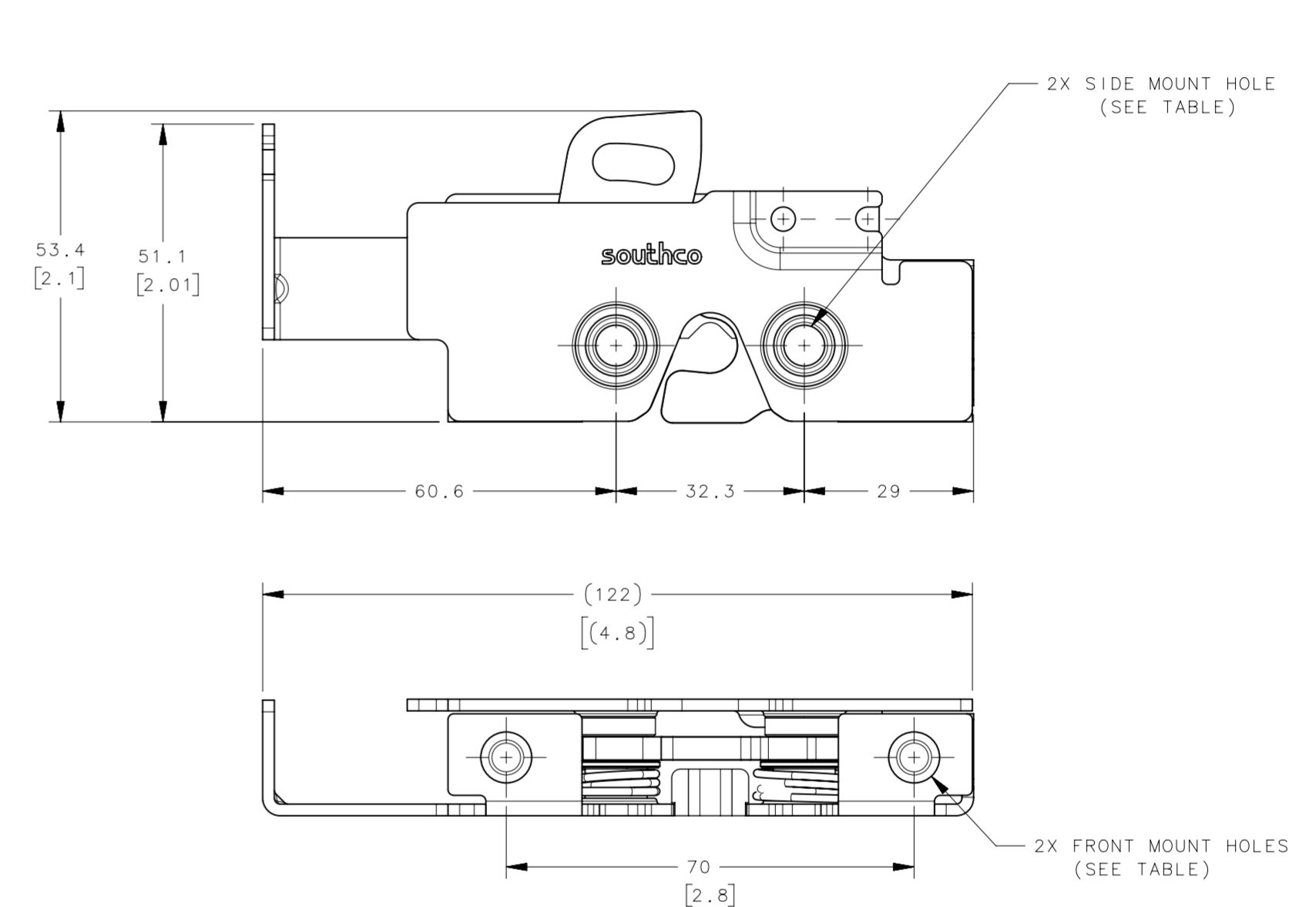
## MM MATERIAL

- 10 STEEL, ZINC PLATE
- 15 STEEL, BLACK ZINC NICKEL
- 77 STEEL, ZINC NICKEL

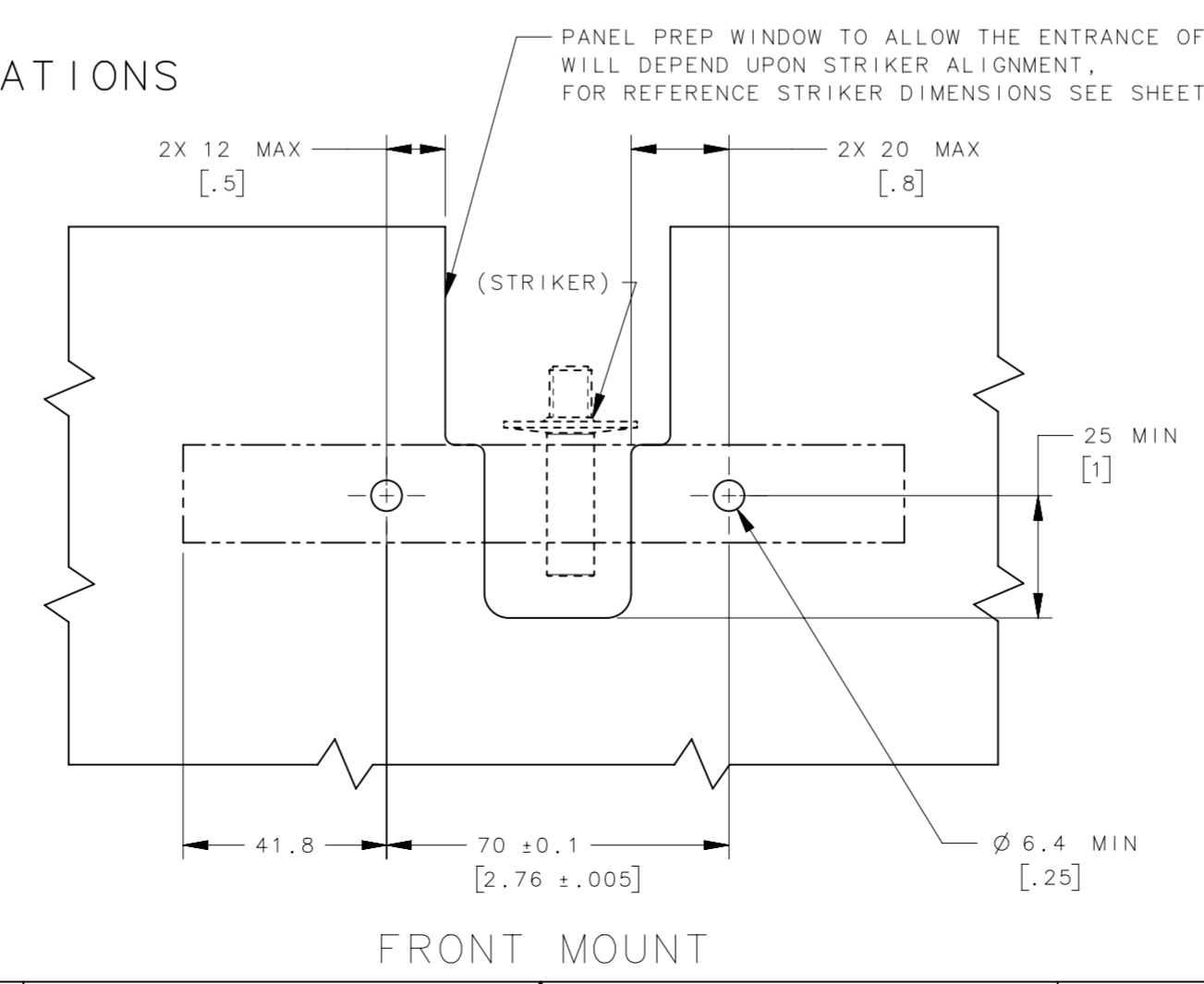
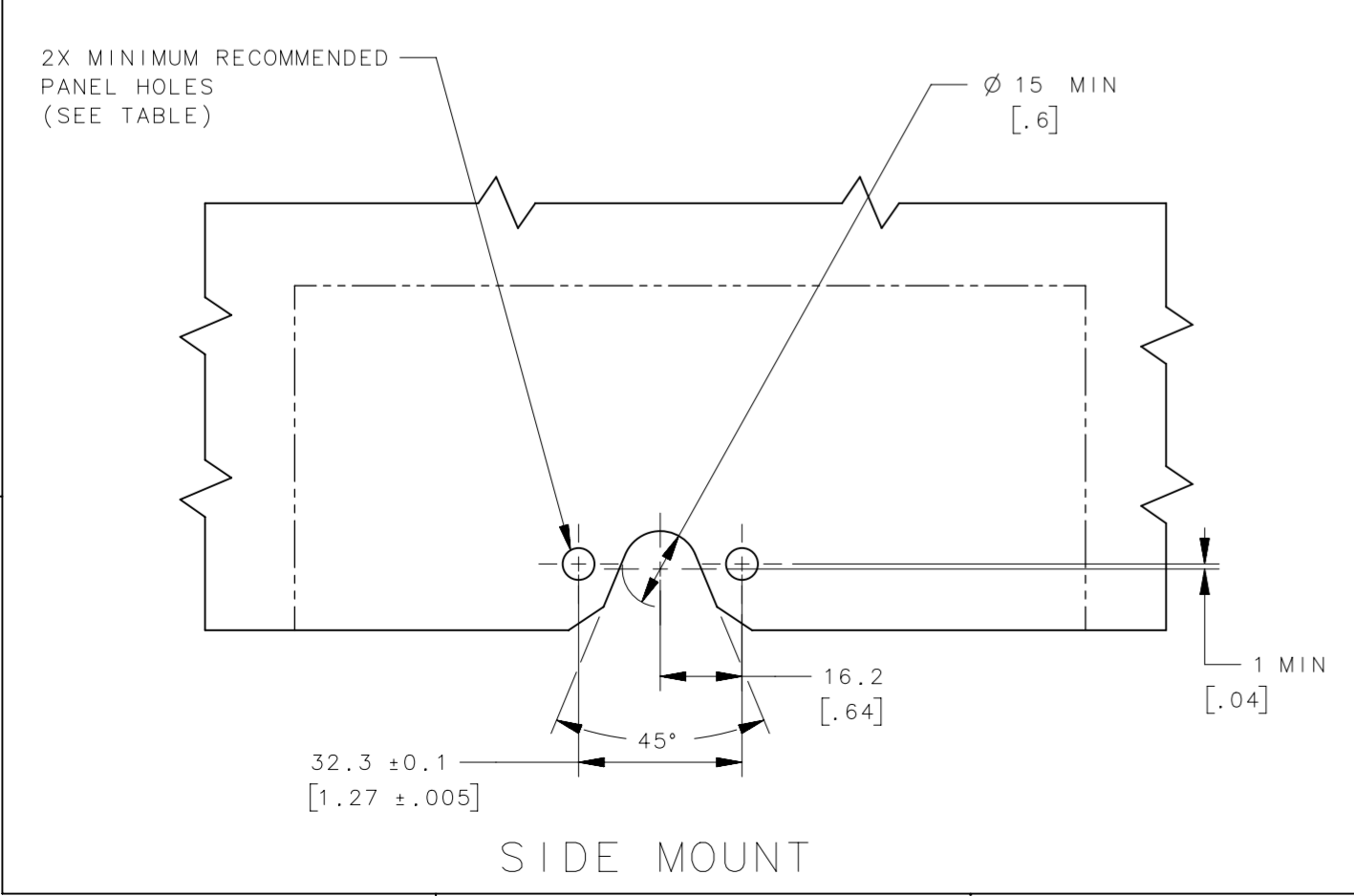
LATCH WITH MOUNT FOR CABLE WITHOUT RETURN SPRING ASSIST



LATCH WITH MOUNT FOR CABLE WITH RETURN SPRING ASSIST



## PANEL PREPARATIONS



NOTES:  
SEE SHEET 4 FOR MATERIAL, STRIKER ALIGNMENT AND MOUNTING SPECIFICATIONS.

ASSEMBLY PART NUMBER	MOUNTING STYLE	MINIMUM PANEL HOLE
R4-25-20S-5WEB-MM	$\varnothing 6.7$ mm THRU	$\varnothing 7.0$ [.276]
R4-25-21S-5WEB-MM	1/4-20 THREAD	$\varnothing 6.8$ [.266]
R4-25-22S-5WEB-MM	M6x1 THREAD	$\varnothing 6.4$ [.25]
R4-25-23S-5WEB-MM	M6x1 THREAD	$\varnothing 6.4$ [.25]

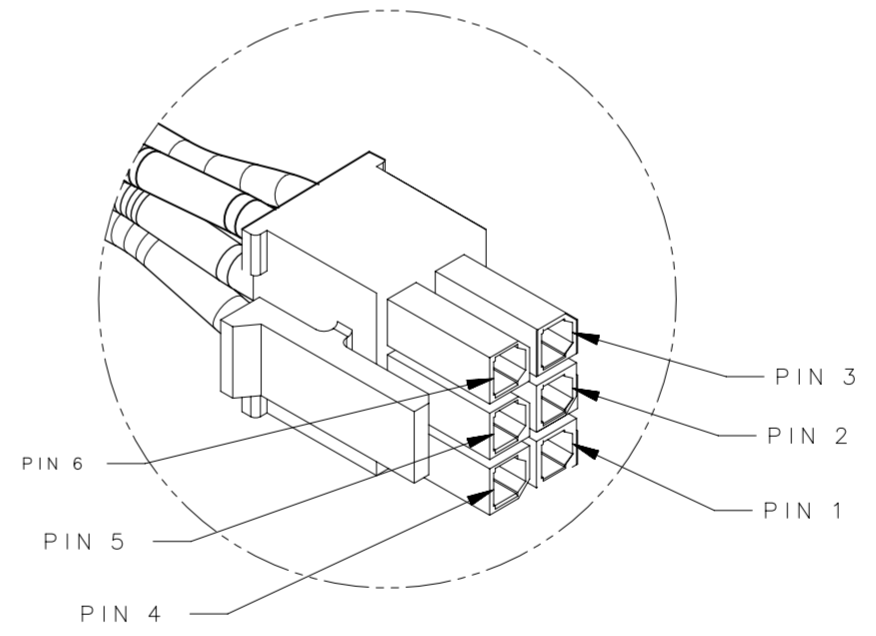
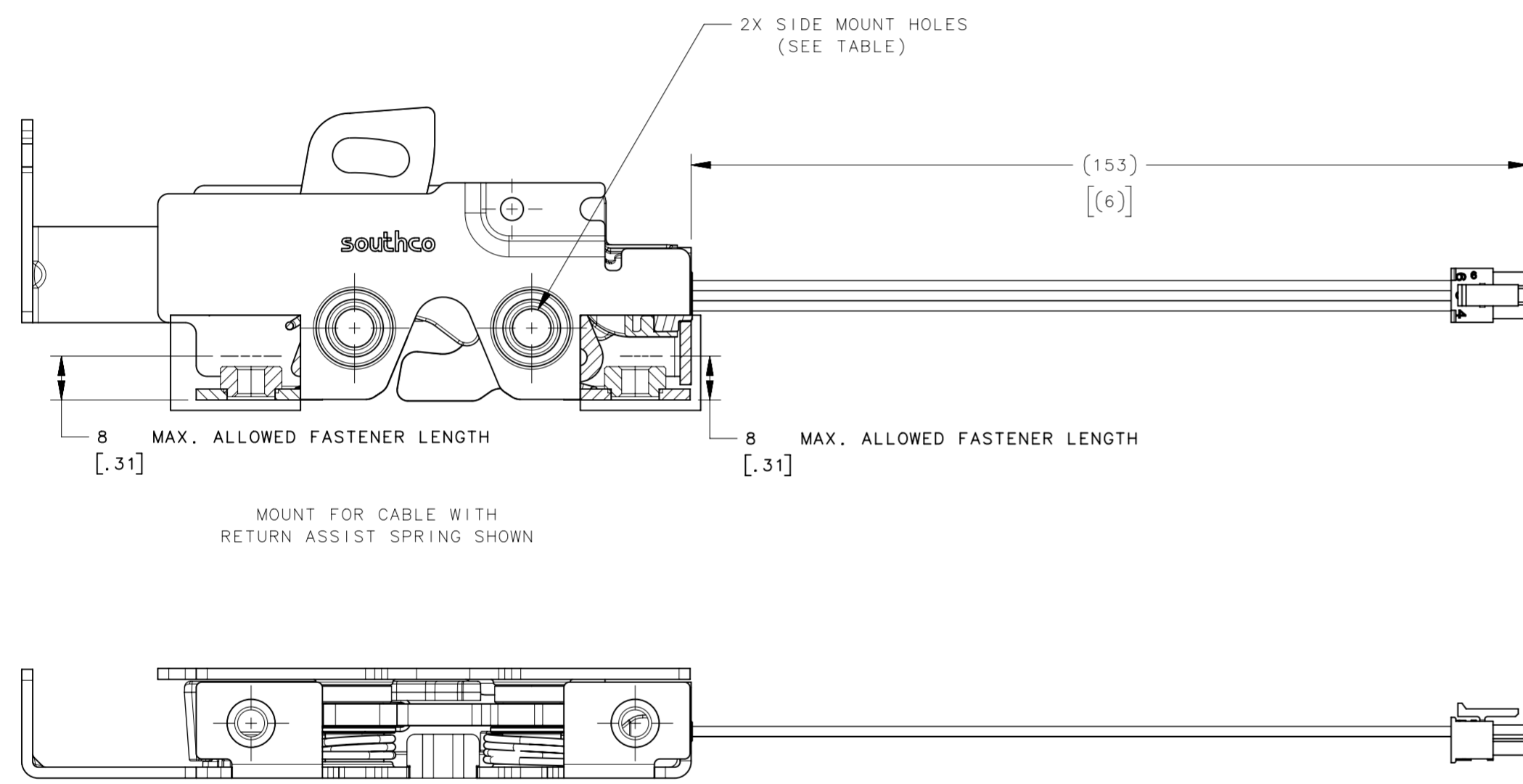
  

CPB NUMBER 2023-0911	THIRD ANGLE PROJECTION	<b>southco</b> CONNECT · CREATE · INNOVATE
MILLIMETERS [IN]		
SURFACE AREA		DESCRIPTION R4-25 ROTARY LATCH
VOLUME		SIZE SYSTEM A2 NX
PROPRIETARY ITEM EXCEPT FOR USES EXPRESSLY GRANTED IN WRITING, INFORMATION DISCLOSED HEREON IS CONFIDENTIAL AND ALL RIGHTS, PATENT AND OTHERWISE, ARE RESERVED BY SOUTHCO, INC.		DWG NO. J-R4-25-5
PER ASME Y14.5M-2009		DRAWN BY CAD
		DATE 18MAY2021
		SCALE 1:1
		SHEET 1 OF 4

REVISION HISTORY			
REV	DATE	BY	DESCRIPTION
M	14OCT2024	GJL/SAK	PRN: P2024-1739

# LATCH ASSEMBLY WITH MICRO-SWITCH PART NUMBER: R4-25-2 **I**0-510 **B**-**MM**

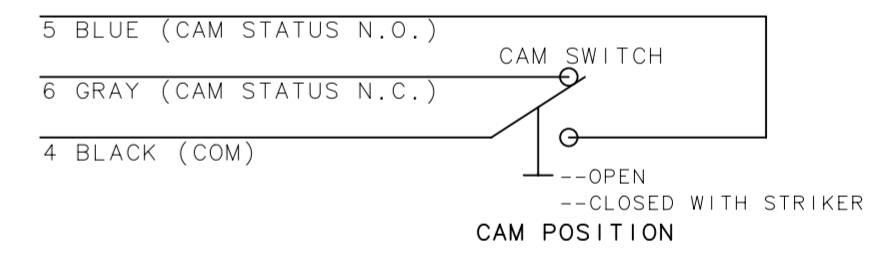
- |                                                  |                                                             |                             |
|--------------------------------------------------|-------------------------------------------------------------|-----------------------------|
| <b>I</b> MOUNTING STYLE                          | <b>B</b> BASE STYLE                                         | <b>MM</b> MATERIAL          |
| 0 SIDE MOUNT Ø6.7 (.263) THRU HOLE               | 2 MOUNT FOR CABLE WITH RETURN SPRING ASSIST, NO BUMPER      | 10 STEEL, ZINC PLATE        |
| 1 SIDE MOUNT 1/4-20 THREAD                       | 3 MOUNT FOR CABLE WITHOUT RETURN SPRING ASSIST, NO BUMPER   | 15 STEEL, BLACK ZINC NICKEL |
| 2 SIDE MOUNT M6X1 THREAD                         | 6 MOUNT FOR CABLE WITH RETURN SPRING ASSIST, WITH BUMPER    | 77 STEEL, ZINC NICKEL       |
| 3 FRONT MOUNT (M6X1) WITH Ø6.7 (.263) SIDE MOUNT | 7 MOUNT FOR CABLE WITHOUT RETURN SPRING ASSIST, WITH BUMPER |                             |



MOLEX MICRO-FIT 3.0 CONNECTOR

DETAIL C  
SCALE 3:1

	CAM POSITION	
	CAM OPEN	CAM CLOSED WITH STRIKER
BLACK/GREY WIRES	CLOSED CIRCUIT	OPEN CIRCUIT
BLACK/BLUE WIRES	OPEN CIRCUIT	CLOSED CIRCUIT



PIN	FUNCTION
1	NOT CONNECTED
2	NOT CONNECTED
3	NOT CONNECTED
4	SWITCH COMMON (BLACK)
5	DOOR SECURE (BLUE)
6	DOOR OPEN (GRAY)

NOTES:  
SEE SHEET 4 FOR MATERIAL, STRIKER ALIGNMENT, MOUNTING AND SWITCH SPECIFICATIONS.

CPB NUMBER 2023-0911	THIRD ANGLE PROJECTION	 CONNECT · CREATE · INNOVATE
	MILLIMETERS [IN]	
SURFACE AREA	TOLERANCES UNLESS OTHERWISE NOTED	DESCRIPTION R4-25 ROTARY LATCH
VOLUME	ALL DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY.	SIZE SYSTEM A2 NX
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	DWG NO. J-R4-25-5
		DRAWN BY CAD
		DATE 18MAY2021
		SCALE 1:1
		SHEET 2 OF 4

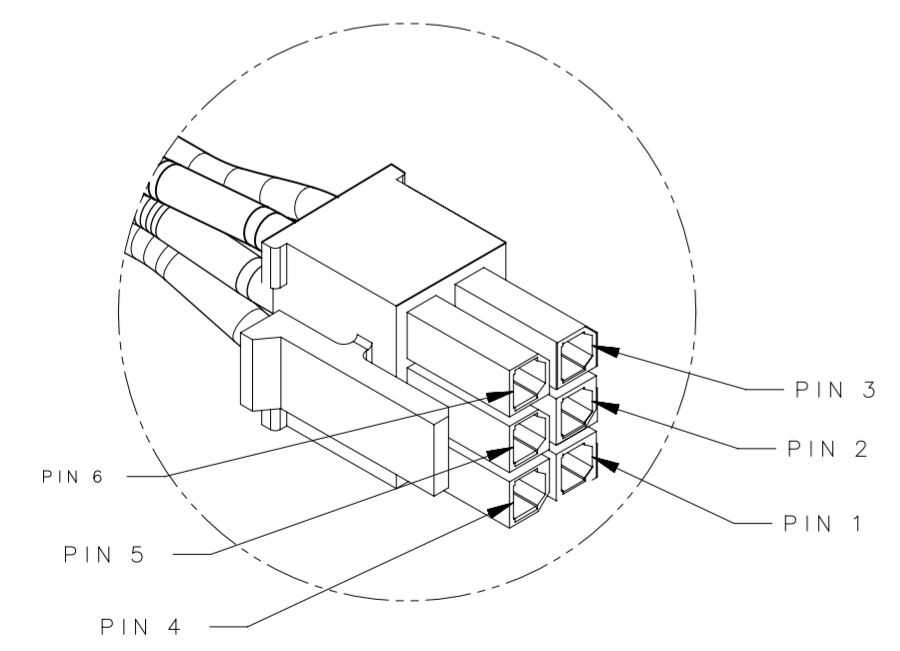
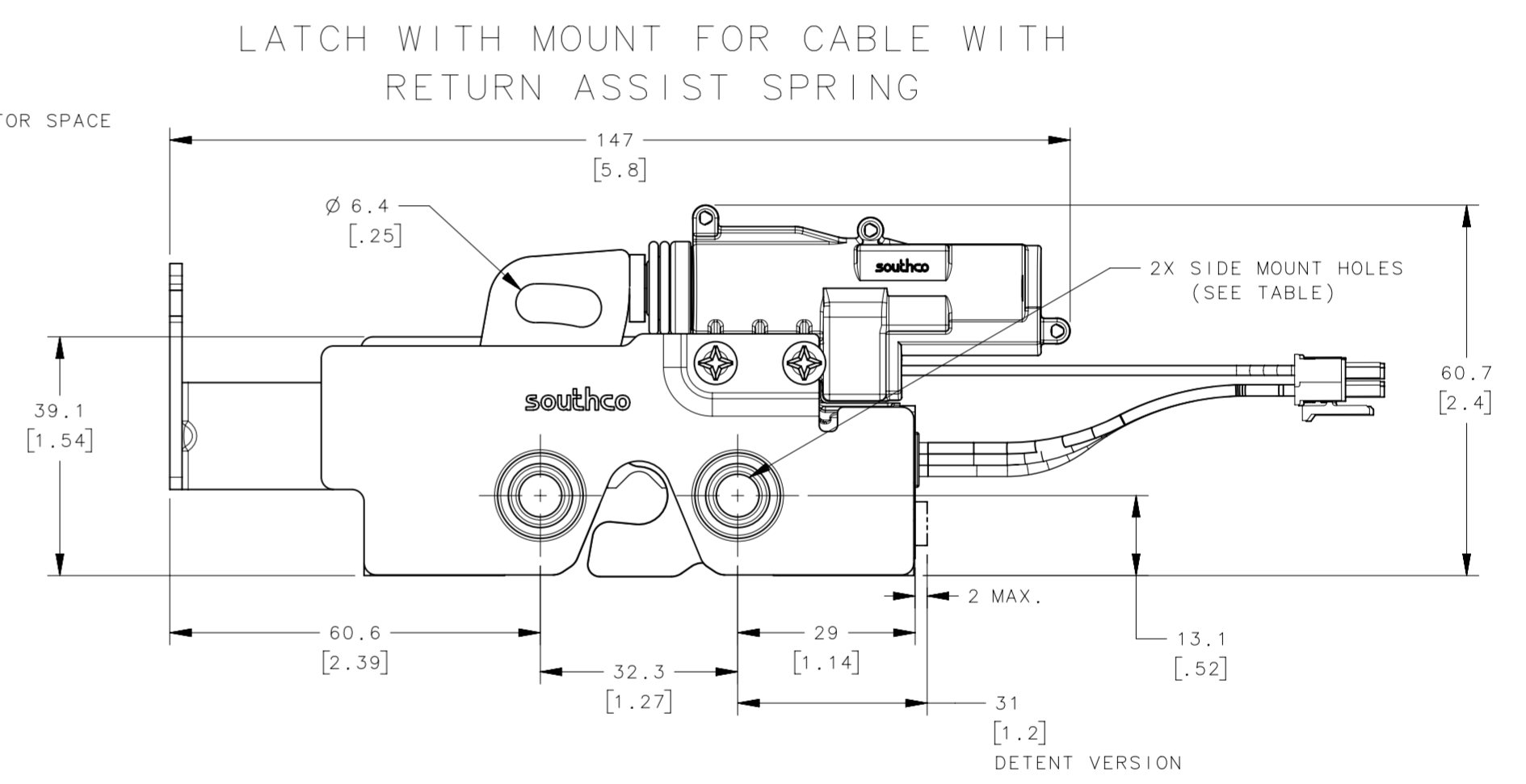
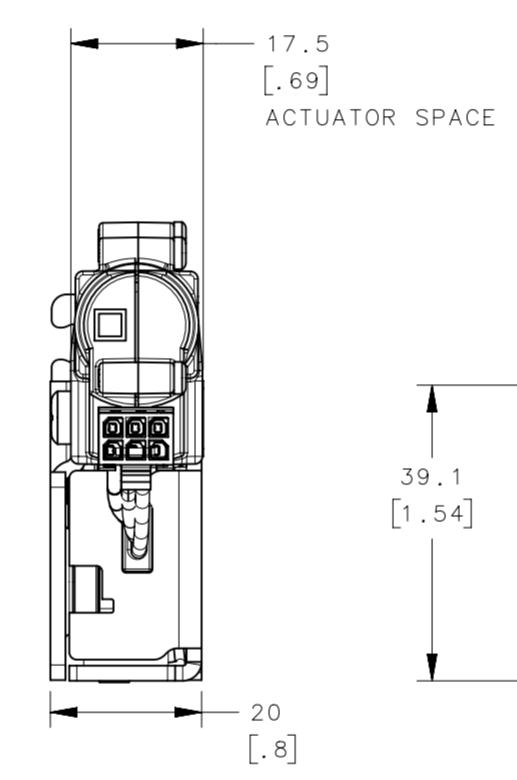
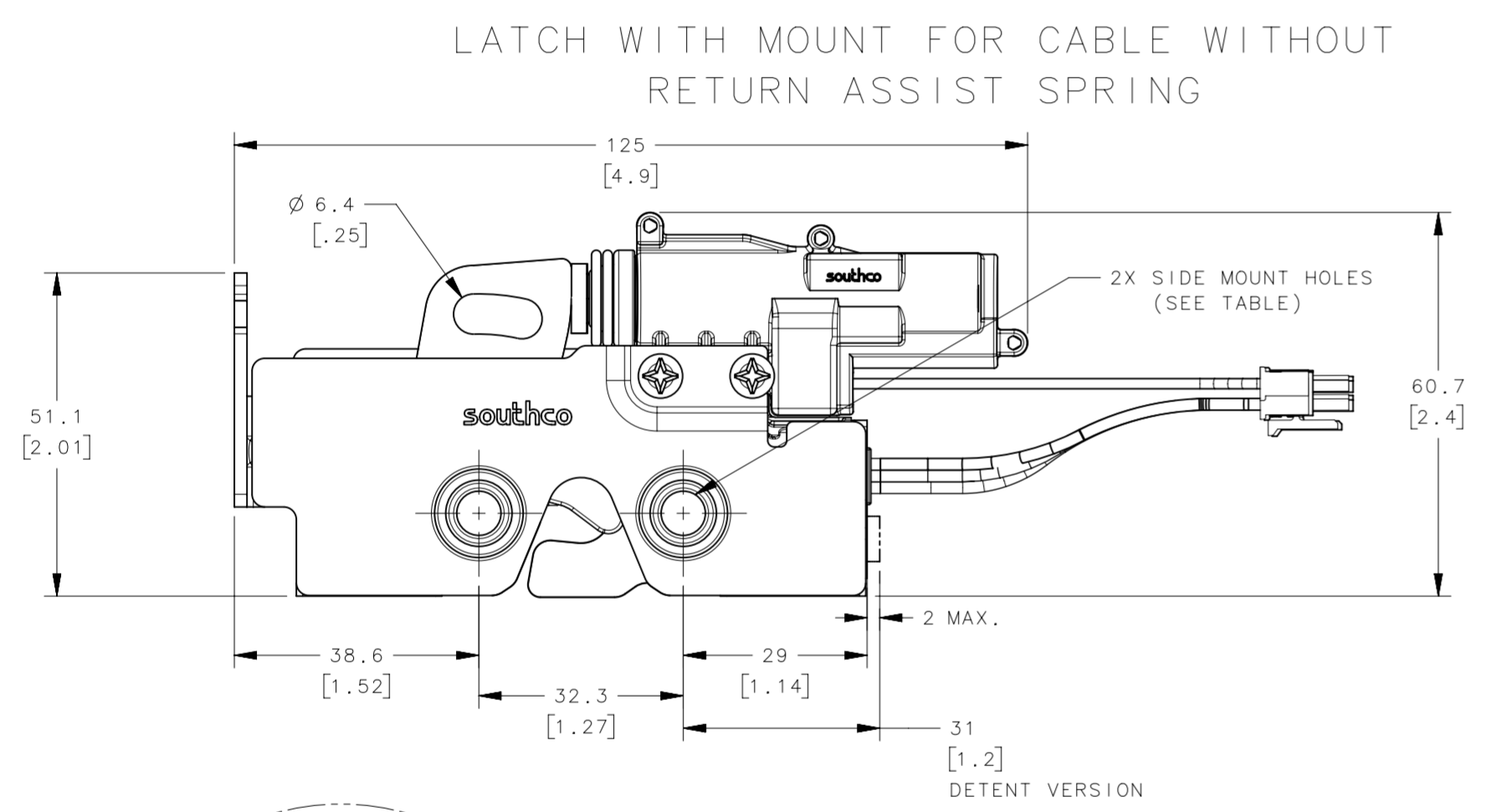
REVISION HISTORY			
REV	DATE	BY	DESCRIPTION
M	14OCT2024	GJL/SAK	PRN: P2024-1739

# LATCH ASSEMBLY WITH MICRO-SWITCH AND ELECTRONIC ACTUATOR

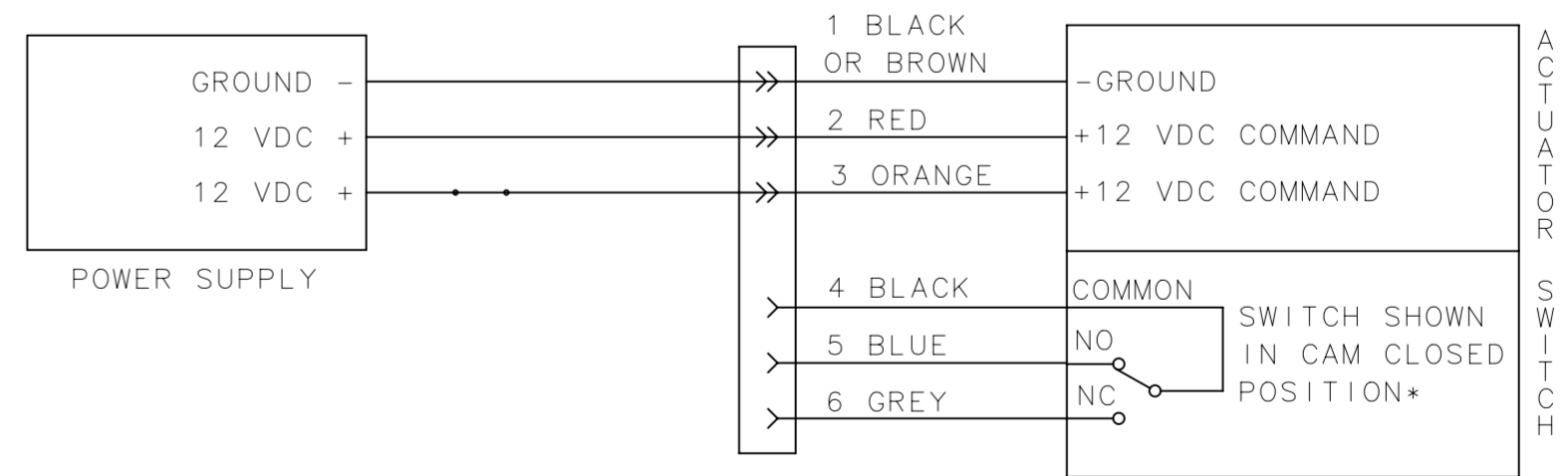
PART NUMBER:

R4-25-2 **I** **S** -51 **E** **B** - **M** **M**

- |                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>I</b> MOUNTING STYLE</p> <ul style="list-style-type: none"> <li>0 SIDE MOUNT Ø6.7 (.263) THRU HOLE</li> <li>1 SIDE MOUNT 1/4-20 THREAD</li> <li>2 SIDE MOUNT M6X1 THREAD</li> <li>3 FRONT MOUNT (M6X1) WITH Ø6.7 (.263) SIDE MOUNT</li> </ul> <p><b>S</b> LATCH RELEASE OPTIONS</p> <ul style="list-style-type: none"> <li>0 KICK-OUT SPRING</li> <li>1 PULL TO OPEN</li> </ul> | <p><b>E</b> ELECTRIC ACTUATION OPTIONS</p> <ul style="list-style-type: none"> <li>B SEALED (IP67) 12VDC EXTEND &amp; HOLD MOLEX 2X3 CONNECTOR</li> <li>6 SEALED (IP67) 5V EXTEND &amp; HOLD MOLEX 2X3 CONNECTOR</li> </ul> <p><b>B</b> BASE STYLE</p> <ul style="list-style-type: none"> <li>2 MOUNT FOR CABLE WITH RETURN SPRING ASSIST, NO BUMPER</li> <li>3 MOUNT FOR CABLE WITHOUT RETURN SPRING ASSIST, NO BUMPER</li> <li>6 MOUNT FOR CABLE WITH RETURN SPRING ASSIST, WITH BUMPER</li> <li>7 MOUNT FOR CABLE WITHOUT RETURN SPRING ASSIST, WITH BUMPER</li> </ul> | <p><b>MM</b> MATERIAL</p> <ul style="list-style-type: none"> <li>10 STEEL, ZINC PLATE</li> <li>15 STEEL, BLACK ZINC NICKEL</li> <li>77 STEEL, ZINC NICKEL</li> </ul> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|



CONNECTOR PINOUT	
PIN	FUNCTION
1	GROUND (BLACK OR BROWN)
2	POWER RELEASE (RED)
3	POWER RELOCK (ORANGE)
4	SWITCH COMMON (BLACK)
5	DOOR SECURE (BLUE)
6	DOOR OPEN (GRAY)



## ELECTRICAL HOOKUP (EXTEND AND HOLD)

NOTES:  
SEE SHEET 4 FOR MATERIAL, STRIKER ALIGNMENT, MOUNTING, SWITCH AND ELECTRONIC ACTUATOR SPECIFICATIONS.

CPB NUMBER 2023-0911	THIRD ANGLE PROJECTION	<b>southco</b> CONNECT · CREATE · INNOVATE
	MILLIMETERS [IN]	
SURFACE AREA	TOLERANCES UNLESS OTHERWISE NOTED	DESCRIPTION R4-25 ROTARY LATCH
VOLUME	ALL DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY.	SIZE SYSTEM A2 NX
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	DWG NO. J-R4-25-5
		DRAWN BY CAD
		DATE 18MAY2021
		SCALE 1:1
		SHEET 3 OF 4

8

7

6

5

4

3

2

1

NOTES:

A. MATERIAL AND FINISH:

- HOUSINGS, RIVETS AND INTERNAL COMPONENTS:  
MATERIAL - STEEL
- 10 ZINC PLATED, BRIGHT CHROMATE
- 15 ZINC NICKEL, BLACK
- 77 ZINC NICKEL, BRIGHT CHROMATE

- PAWL AND TRIGGER:

- MATERIAL - HARDENED STEEL
- 10 ZINC PLATED, BRIGHT CHROMATE
- 15 ZINC NICKEL, BLACK
- 77 ZINC NICKEL, BRIGHT CHROMATE

- SPRINGS: 304 STAINLESS STEEL, PASSIVATED

B. CONNECTOR: MANUFACTURER MOLEX, SERIES MICROFIT 3.0

C. SWITCH SEALED TO IP67; RATING 3A AT 125 VAC; OPERATING TEMPERATURE -40 to 85°C.

D. SEE J-AC-EM-10-2 DRAWING FOR ELECTRIC ACTUATOR SPECIFICATIONS.

E. MOUNTING

- MOUNT THE LATCH SECURELY USING TWO (2) SCREWS IN MOUNTING HOLES PROVIDED (SCREWS NOT PROVIDED)
- MOUNTING HOLES ARE AVAILABLE WITH 1/4 - 20 UNC THREAD, M6 X 1 THREAD (SIDE AND FRONT MOUNT) OR THRU HOLE
- MAXIMUM ALLOWABLE TORQUE ON THREADED MOUNTING SCREWS IS 650 N.cm (57.5 in.lb)

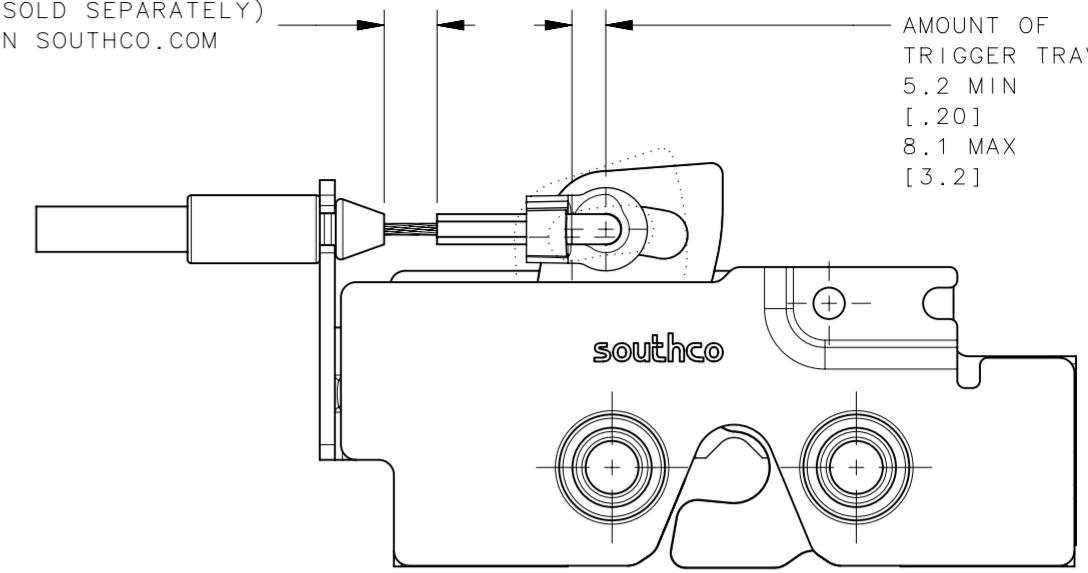
F. THIS VIEW SHOWS THE MAXIMUM STRIKER MISALIGNMENT ACCEPTED BY THE LATCH FROM NOMINAL STRIKER POSITION. IT ASSUMES THE STRIKER CENTERLINE IS PERFECTLY PERPENDICULAR TO THE LATCH MOUNTING SURFACE. STRIKER MISALIGNMENT COULD BE FROM MANUFACTURING TOLERANCES OR FROM NON RIGID DOOR SYSTEMS AND THIS REPRESENTS THE MAXIMUM OF BOTH COMBINED.

G. FOR CABLE OR ROD MOUNTING USE ROTARY CLIP R4-0-72894-4.

REVISION HISTORY			
REV	DATE	BY	DESCRIPTION
M	14OCT2024	GJL/SAK	PRN: P2024-1739

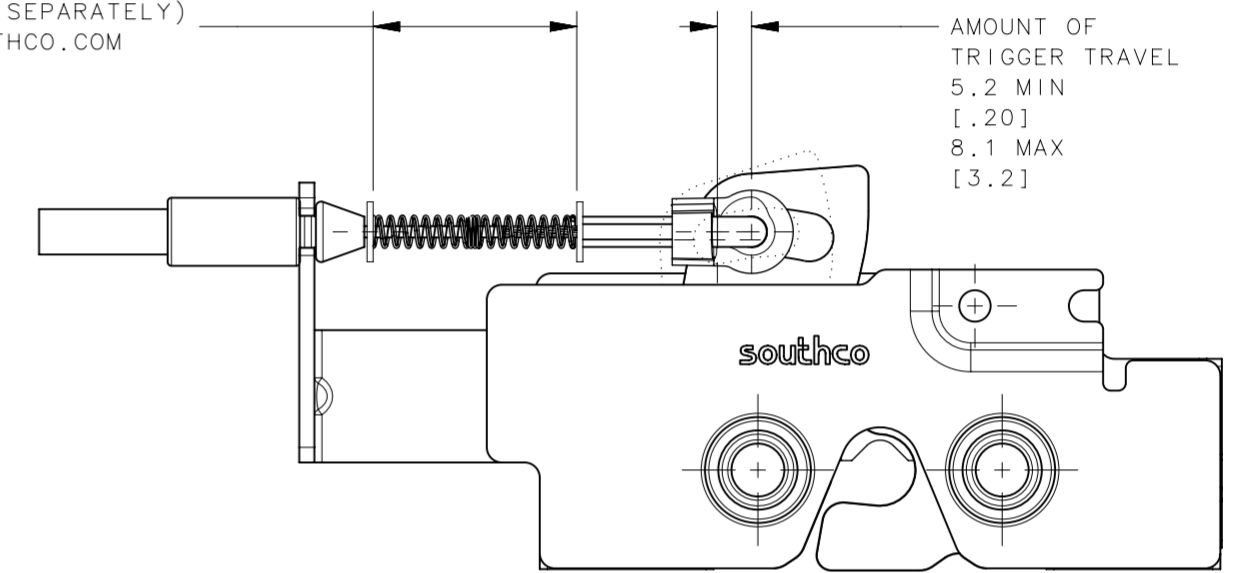
TLC = 7 FOR CABLE TYPE 7 (SOLD SEPARATELY)  
SEE CABLE SELECTION TOOL ON SOUTHCO.COM

AMOUNT OF TRIGGER TRAVEL  
5.2 MIN  
[.20]  
8.1 MAX  
[3.2]

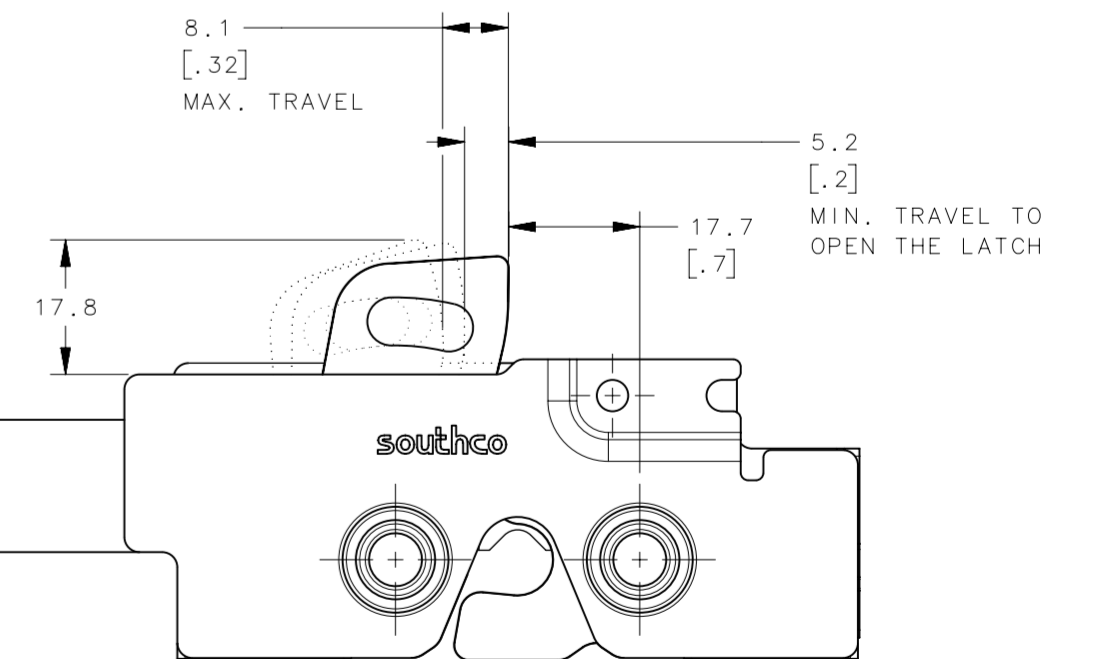
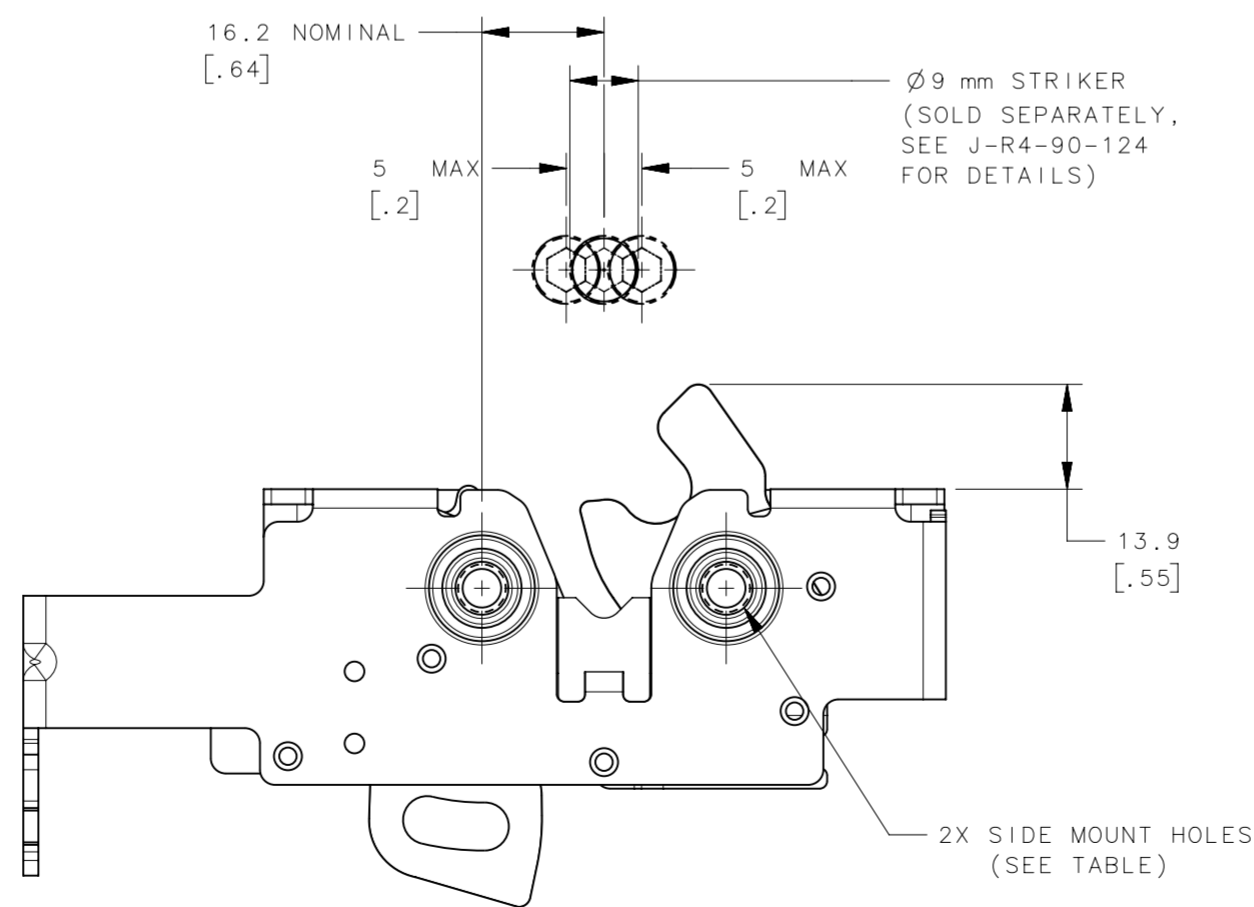
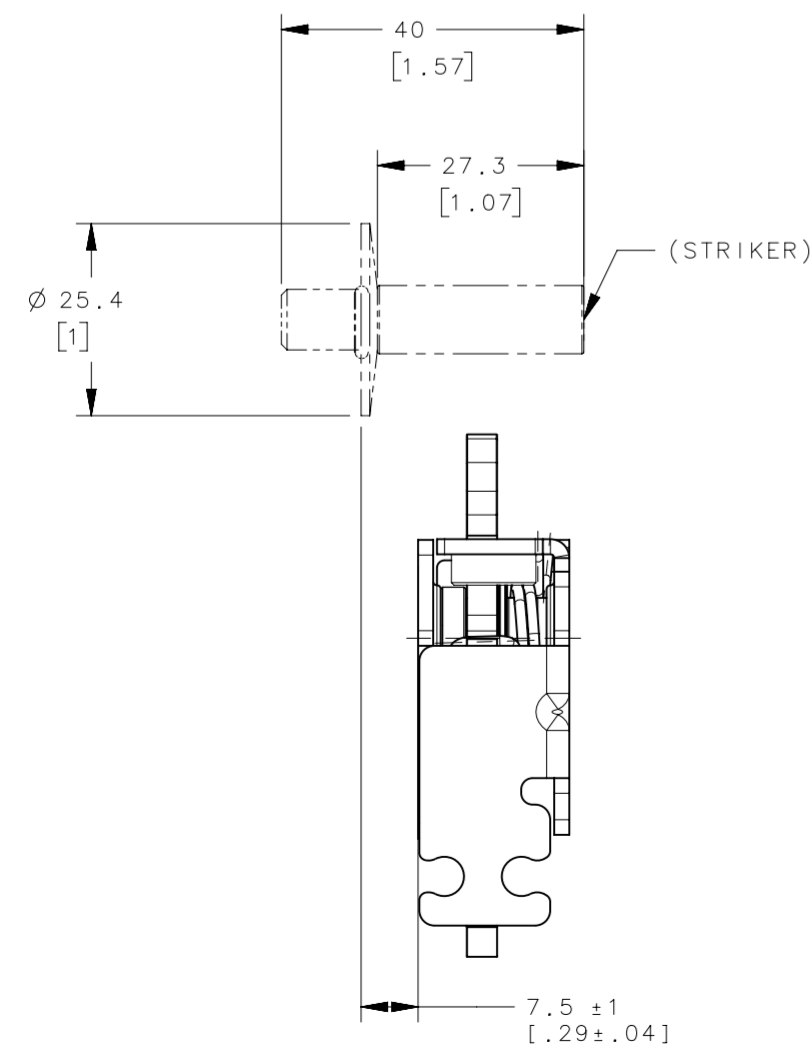


TLC = 29 FOR CABLE TYPE 7 (SOLD SEPARATELY)  
SEE CABLE SELECTION TOOL ON SOUTHCO.COM

AMOUNT OF TRIGGER TRAVEL  
5.2 MIN  
[.20]  
8.1 MAX  
[3.2]



STRIKER POSITION TOLERANCE VIEW  
(SEE NOTE F)



CPB NUMBER 2023-0911	THIRD ANGLE PROJECTION	
	MILLIMETERS [IN]	
SURFACE AREA	TOLERANCES UNLESS OTHERWISE NOTED	DESCRIPTION R4-25 ROTARY LATCH
VOLUME	ALL DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY.	SIZE SYSTEM A2 NX
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.	PER ASME Y14.5M-2009	DWG NO. J-R4-25-5
		DRAWN BY CAD
		DATE 18MAY2021
		SCALE 1:1
		SHEET 4 OF 4

8

7

6

5

4

3

2

1