

REVISION HISTORY			
REV	DATE	BY	DESCRIPTION
K	22FEB2024	PBJ/VK	PRN: P2024-0245

LATCH ASSEMBLY PART NUMBER: R4-25-2 I 0-500 B - M M

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

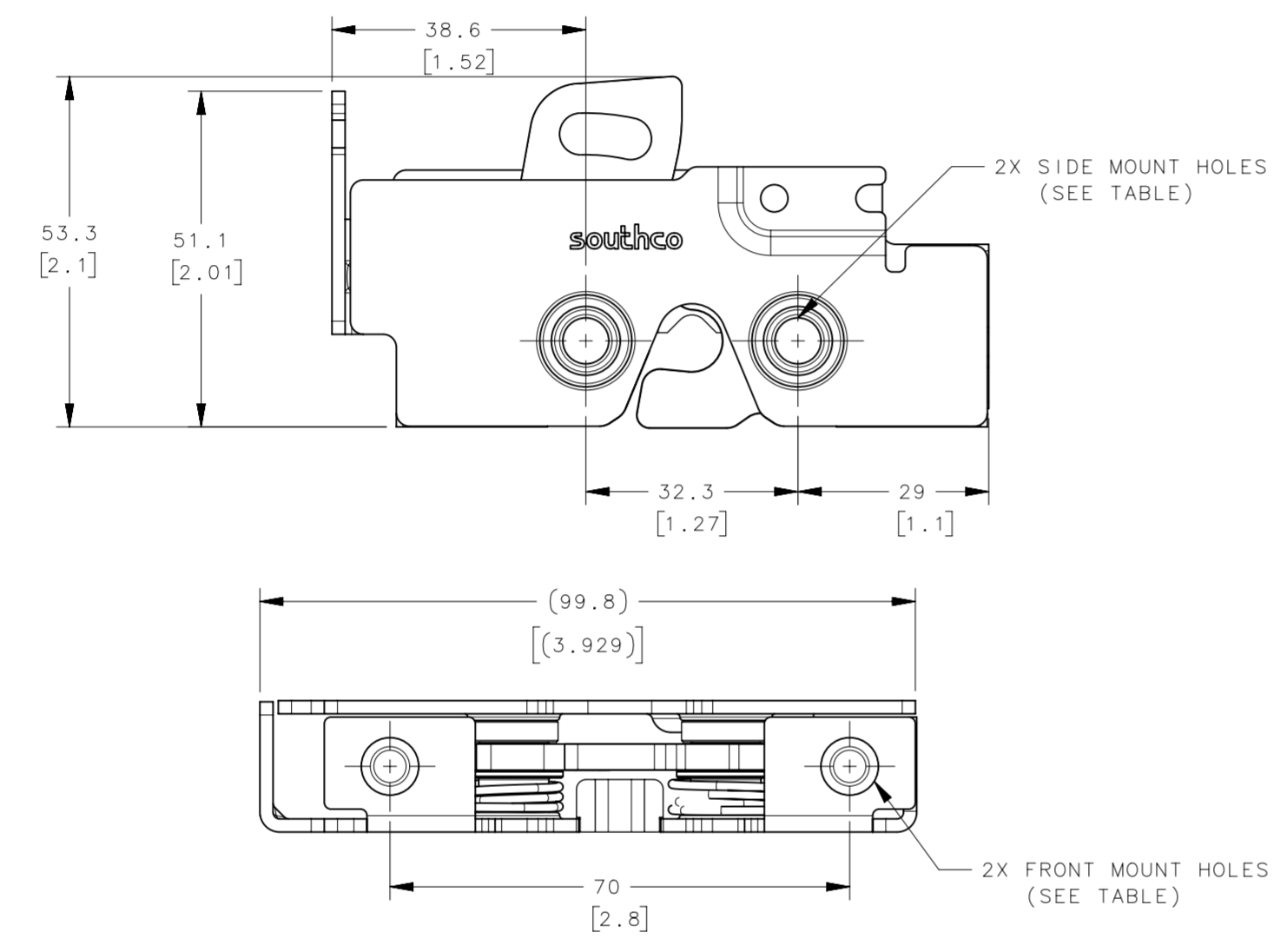
B BASE STYLE

- 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

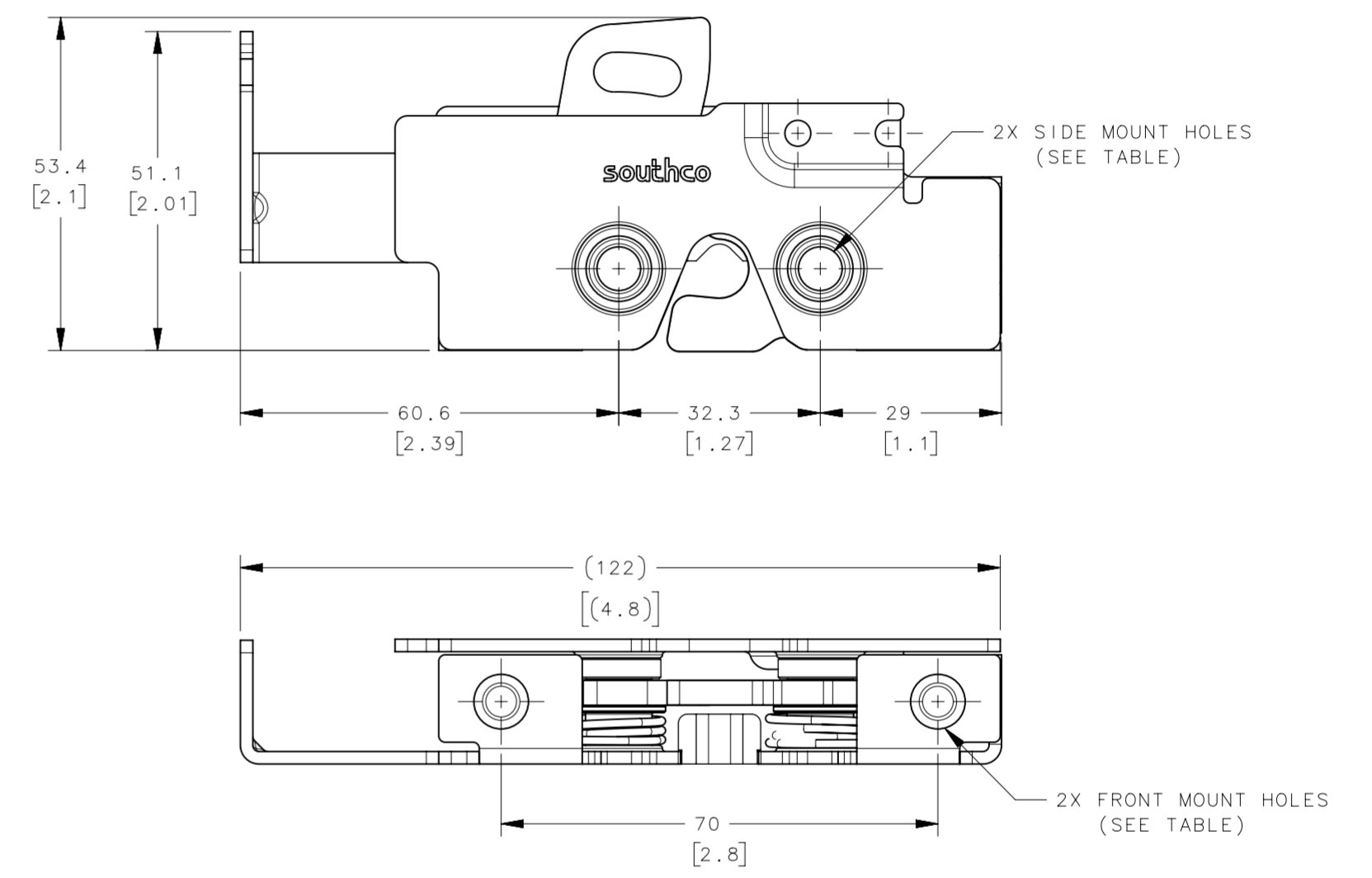
MM MATERIAL

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

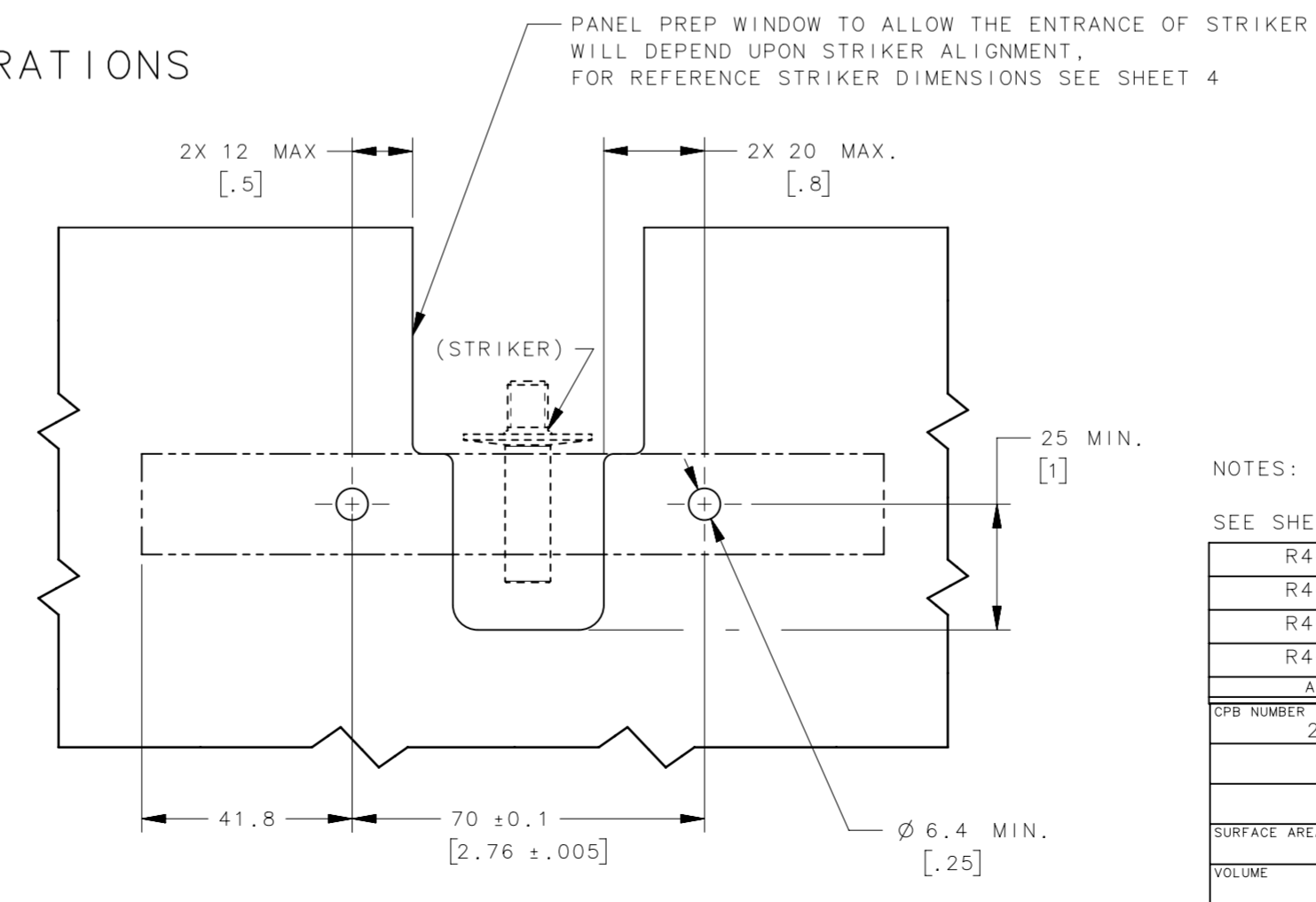
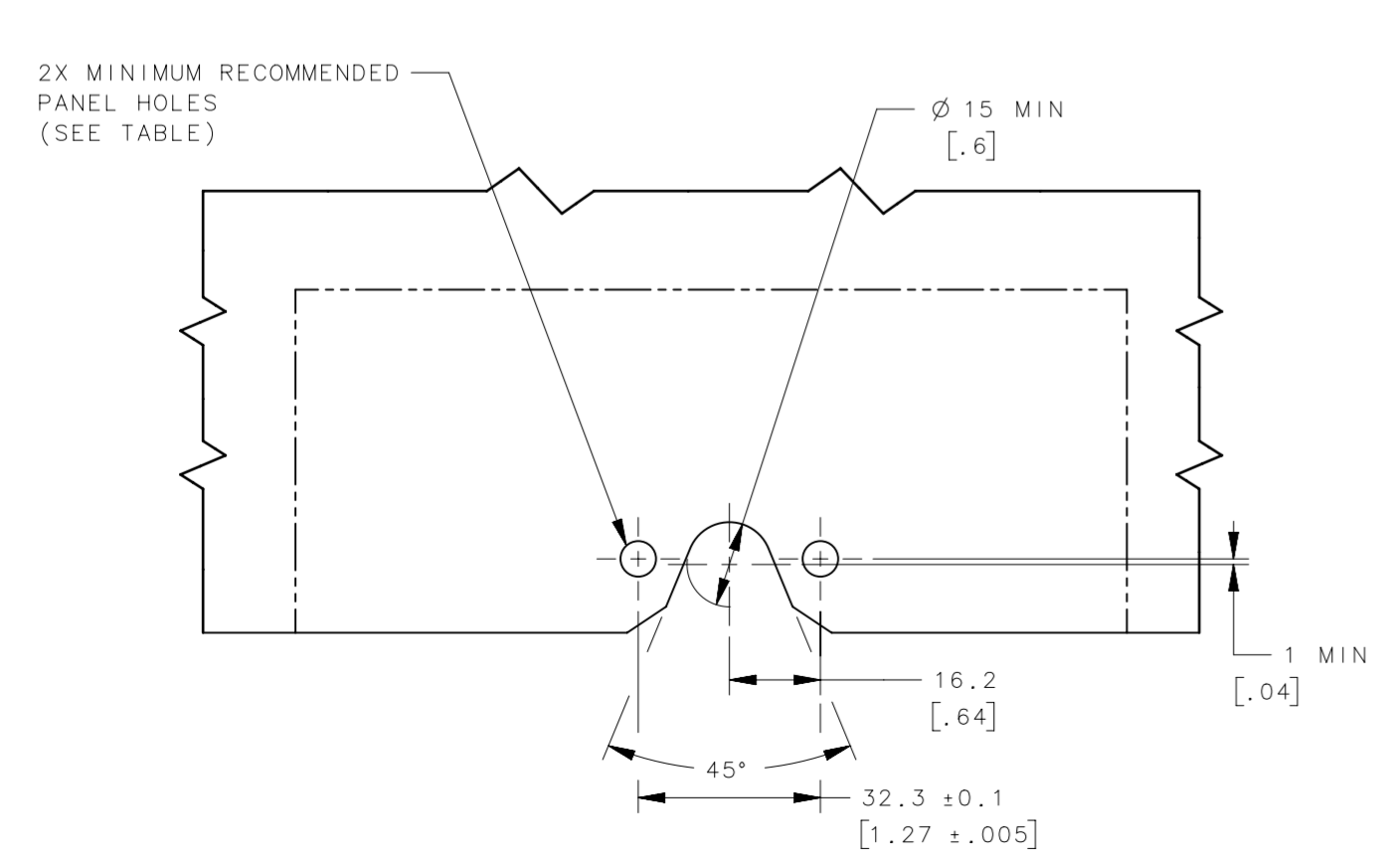
LATCH WITH MOUNT FOR CABLE WITHOUT RETURN SPRING ASSIST



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-SWEB-MM	$\varnothing 6.7$ mm THRU	$\varnothing 7.0$ [.276]
R4-25-21S-SWEB-MM	1/4-20 THREAD	$\varnothing 6.8$ [.266]
R4-25-22S-SWEB-MM	M6x1 THREAD	$\varnothing 6.4$ [.25]
R4-25-23S-SWEB-MM	M6x1 THREAD	$\varnothing 6.4$ [.25]

CPB NUMBER 2023-0911	THIRD ANGLE PROJECTION	southco 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 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 1 OF 4

LATCH ASSEMBLY WITH MICRO-SWITCH PART NUMBER: R4-25-2 I0-510 B-MM

REVISION HISTORY			
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I MOUNTING STYLE

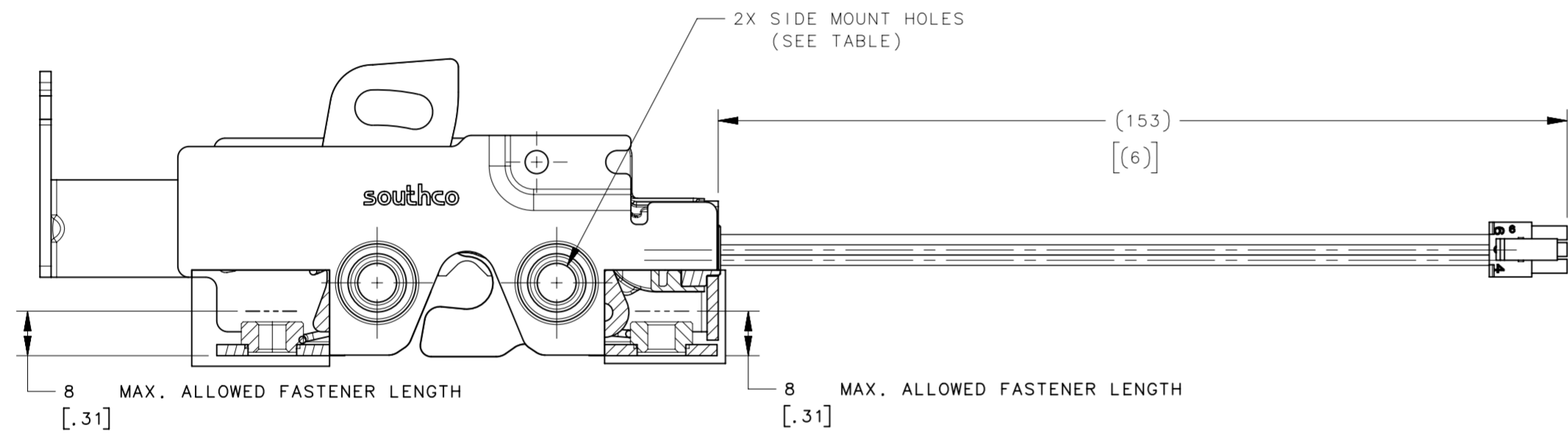
- 0 SIDE MOUNT $\varnothing 6.7$ (.263) THRU HOLE
- 1 SIDE MOUNT 1/4-20 THREAD
- 2 SIDE MOUNT M6X1 THREAD
- 3 FRONT MOUNT (M6X1) WITH $\varnothing 6.7$ (.263) SIDE MOUNT

B BASE STYLE

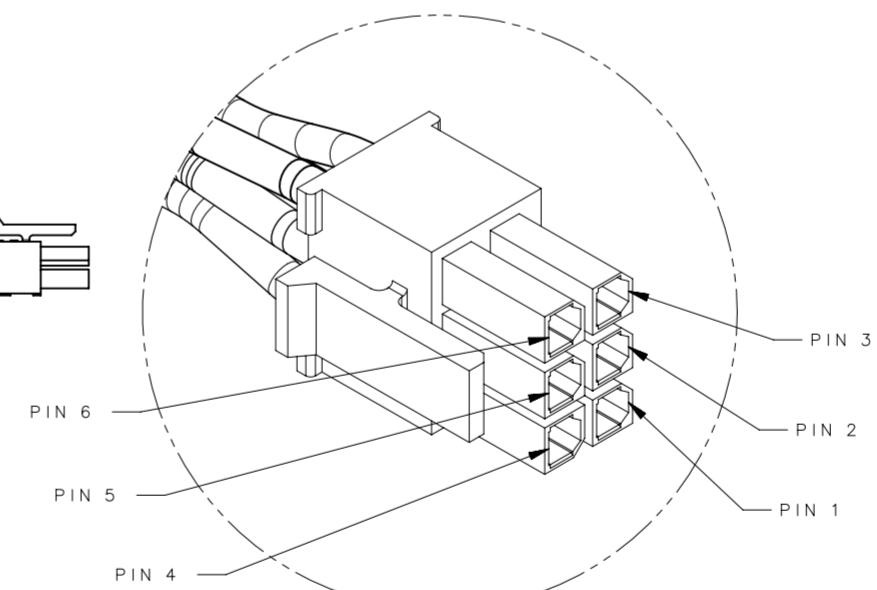
- 2 MOUNT FOR CABLE WITH RETURN SPRING ASSIST, NO BUMPER
- 3 MOUNT FOR CABLE WITHOUT RETURN SPRING ASSIST, NO BUMPER
- 6 MOUNT FOR CABLE WITH RETURN SPRING ASSIST, WITH BUMPER
- 7 MOUNT FOR CABLE WITHOUT RETURN SPRING ASSIST, WITH BUMPER

MM MATERIAL

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



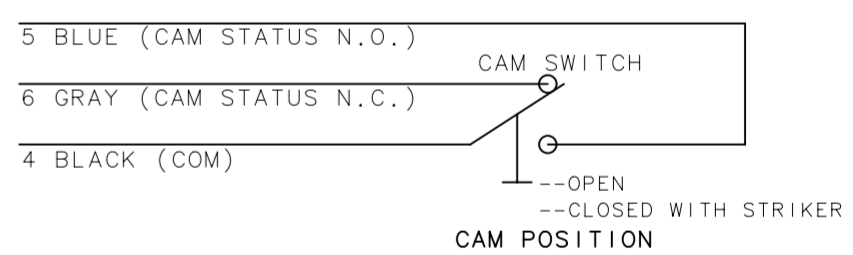
MOUNT FOR CABLE WITH RETURN ASSIST SPRING SHOWN



DETAIL B
SCALE 3:1

MOLEX MICRO-FIT 3.0
CONNECTOR

	CAM STATUS INDICATOR CIRCUIT	
	CAM OPEN	CAM CLOSED WITH STRIKER
BLACK/GREY WIRES	CLOSED CIRCUIT	OPEN CIRCUIT
BLACK/BLUE WIRES	OPEN CIRCUIT	CLOSED CIRCUIT



CONNECTOR PINOUT	
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.

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SURFACE AREA	TOLERANCES UNLESS OTHERWISE NOTED	DESCRIPTION R4-25 ROTARY LATCH
VOLUME	ALL DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY.	SIZE SYSTEM A2 NX
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		DRAWN BY CAD
		DATE 18MAY2021
		SCALE 1:1
		SHEET 2 OF 4

REVISION HISTORY			
REV	DATE	BY	DESCRIPTION
K	22FEB2024	PBJ/VK	PRN: P2024-0245

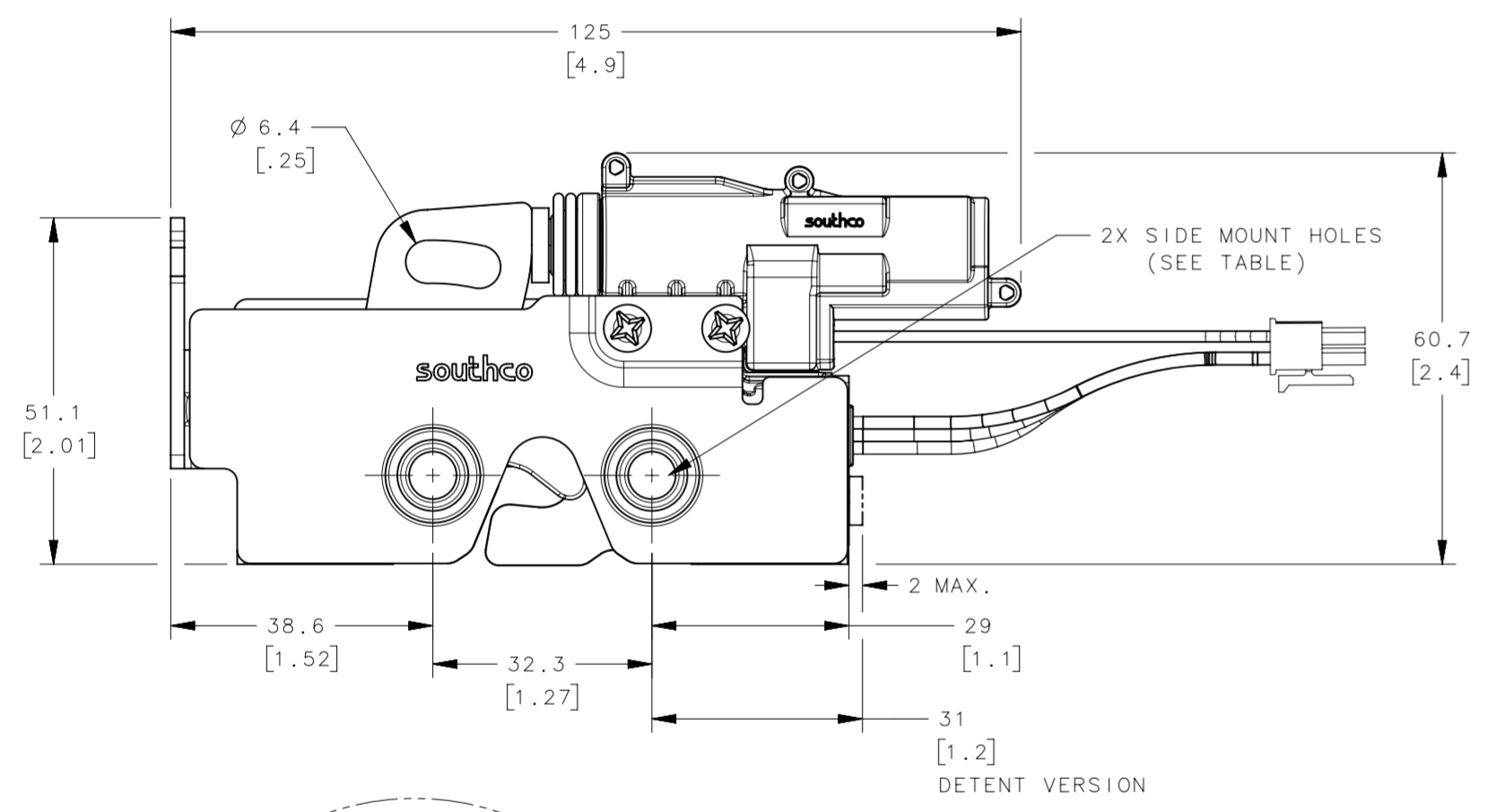
LATCH ASSEMBLY WITH MICRO-SWITCH AND ELECTRONIC ACTUATOR

PART NUMBER:

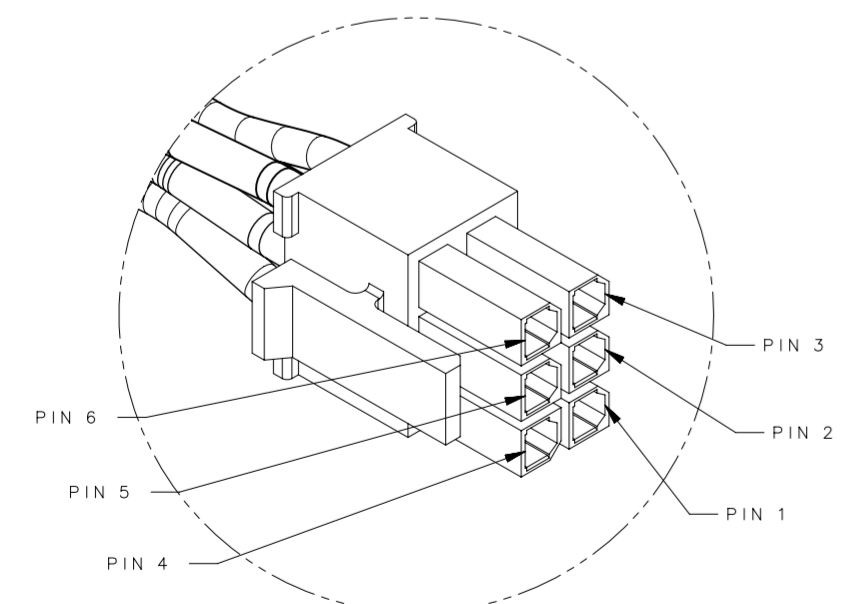
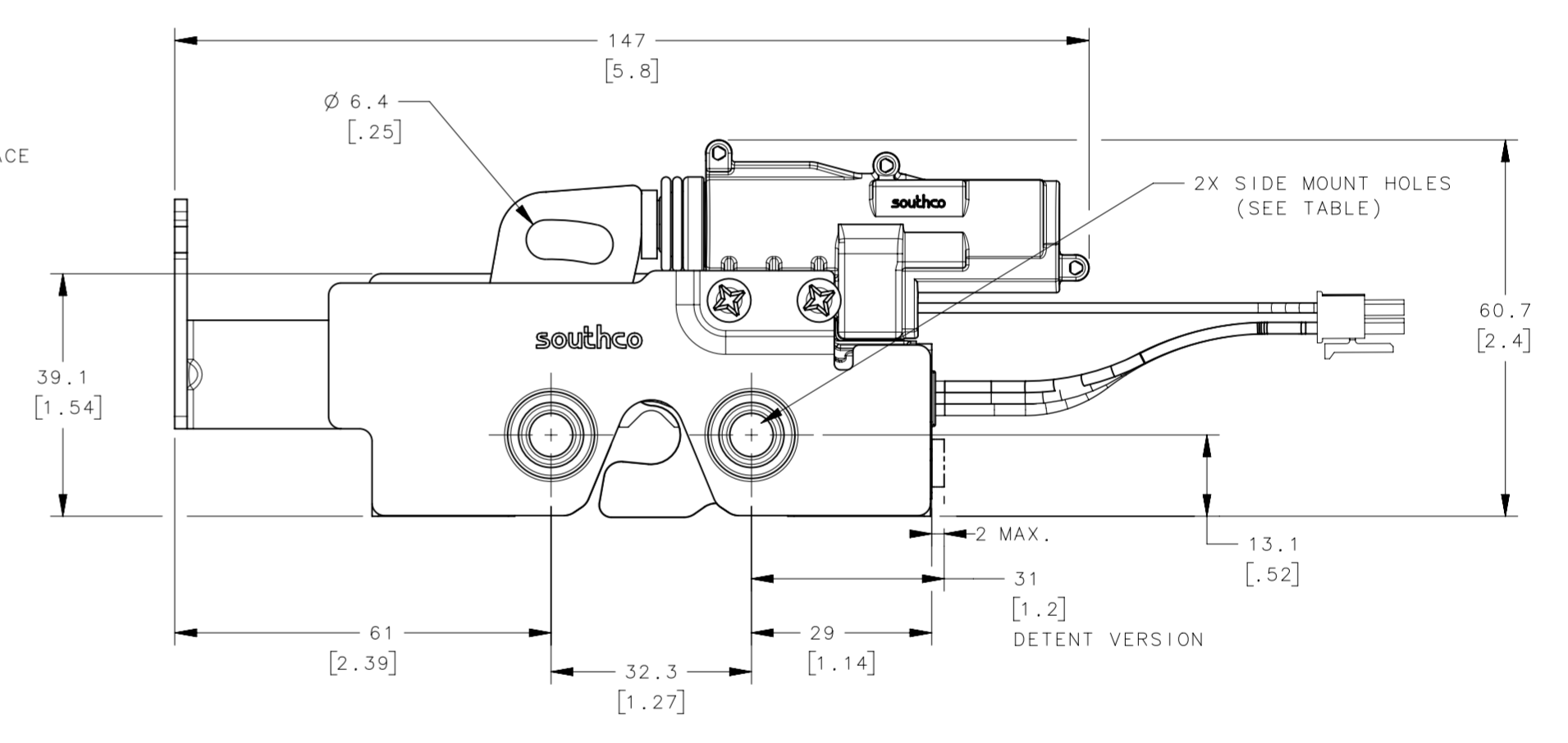
R4-25-2 **I** **S** -51 **E** **B** - **M** **M**

- | | | |
|--|--|--|
| <p>I MOUNTING STYLE</p> <ul style="list-style-type: none"> 0 SIDE MOUNT \varnothing6.7 (.263) THRU HOLE 1 SIDE MOUNT 1/4-20 THREAD 2 SIDE MOUNT M6X1 THREAD 3 FRONT MOUNT (M6X1) WITH \varnothing6.7 (.263) SIDE MOUNT <p>S SPRING OPTIONS</p> <ul style="list-style-type: none"> 0 KICK-OUT SPRING 1 PULL TO OPEN | <p>E ELECTRIC ACTUATION OPTIONS</p> <ul style="list-style-type: none"> B SEALED (IP67) 12VDC EXTEND & HOLD MOLEX 2X3 CONNECTOR 6 SEALED (IP67) 5V EXTEND & HOLD MOLEX 2X3 CONNECTOR <p>B BASE STYLE</p> <ul style="list-style-type: none"> 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 | <p>MM MATERIAL</p> <ul style="list-style-type: none"> 10 STEEL, ZINC PLATE 15 STEEL, BLACK ZINC NICKEL 77 STEEL, ZINC NICKEL |
|--|--|--|

LATCH WITH MOUNT FOR CABLE WITHOUT RETURN ASSIST SPRING



LATCH WITH MOUNT FOR CABLE WITH RETURN ASSIST SPRING



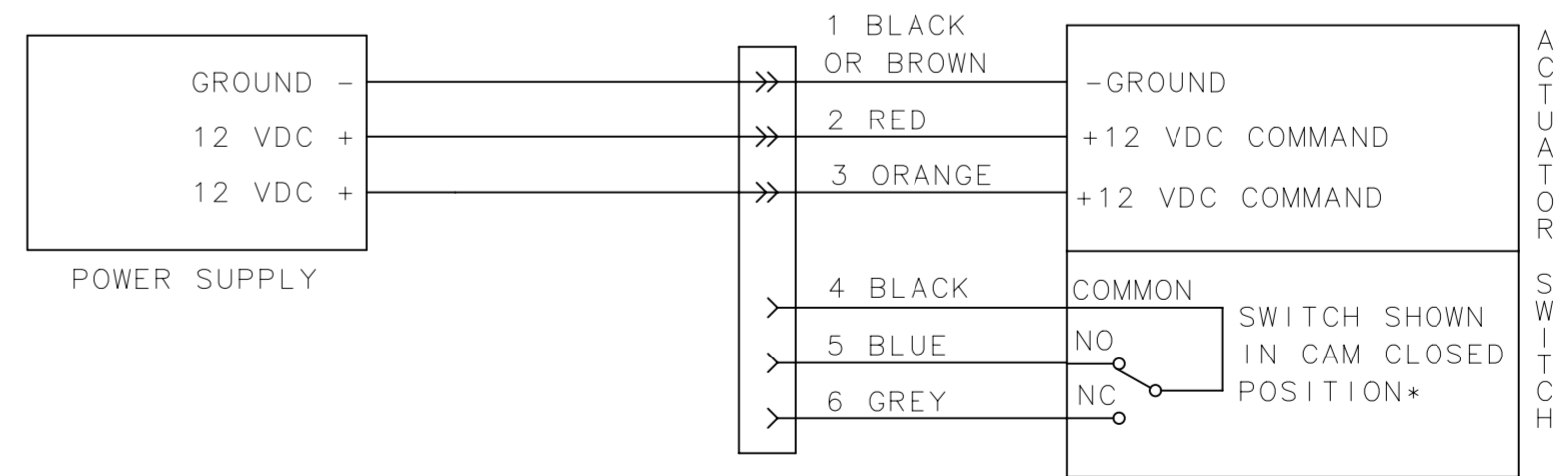
DETAIL C
SCALE 3:1

MOLEX MICRO-FIT 3.0 CONNECTOR

NOTES:

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

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)

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		DRAWN BY CAD
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		SCALE 3:4
		SHEET 3 OF 4

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 105°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)

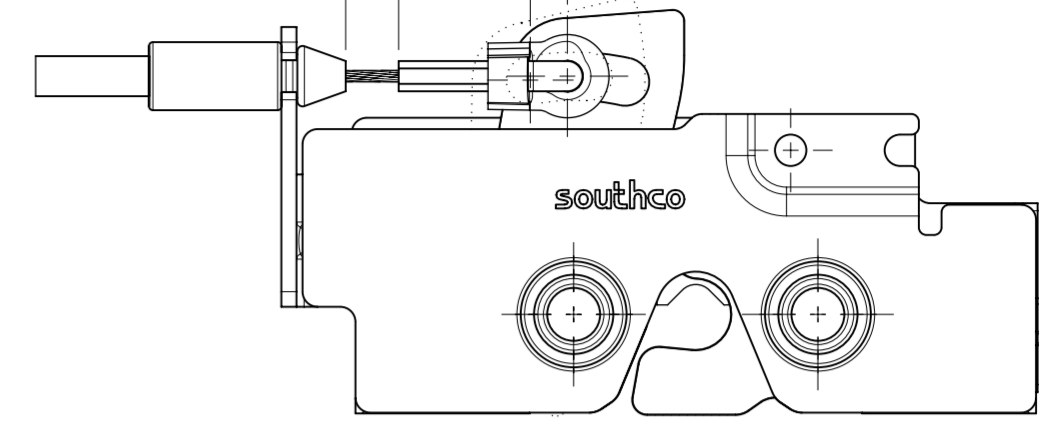
F. THIS VIEW SHOWS THE MAXIMUM STRIKER MISALIGNMENT ACCEPTED BY THE LATCH FROM NOMINAL STRIKER POSITION. IT ASSUMES THE STRIKER CENTERLINE IS PERFECTLY PERPENDICULAR TO THE LATCH MOUNTING SURFACE. STRIKER MISALIGNMENT COULD BE FROM MANUFACTURING TOLERANCES OR FROM NON RIGID DOOR SYSTEMS AND THIS REPRESENTS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

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

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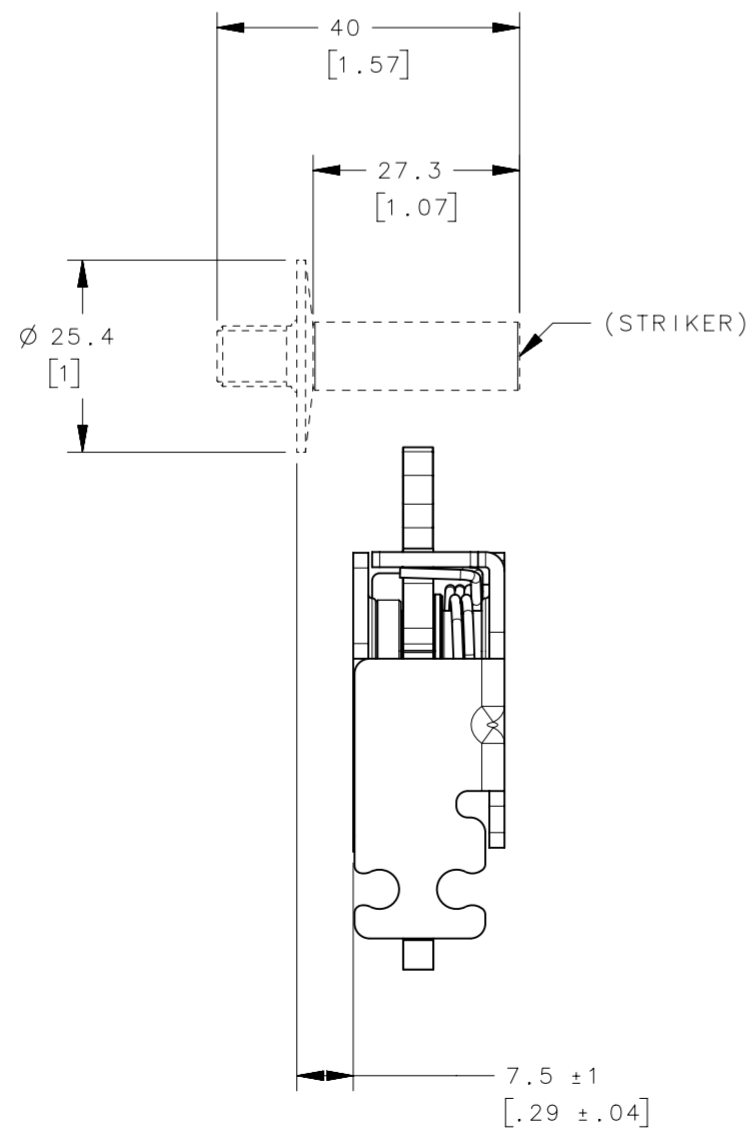
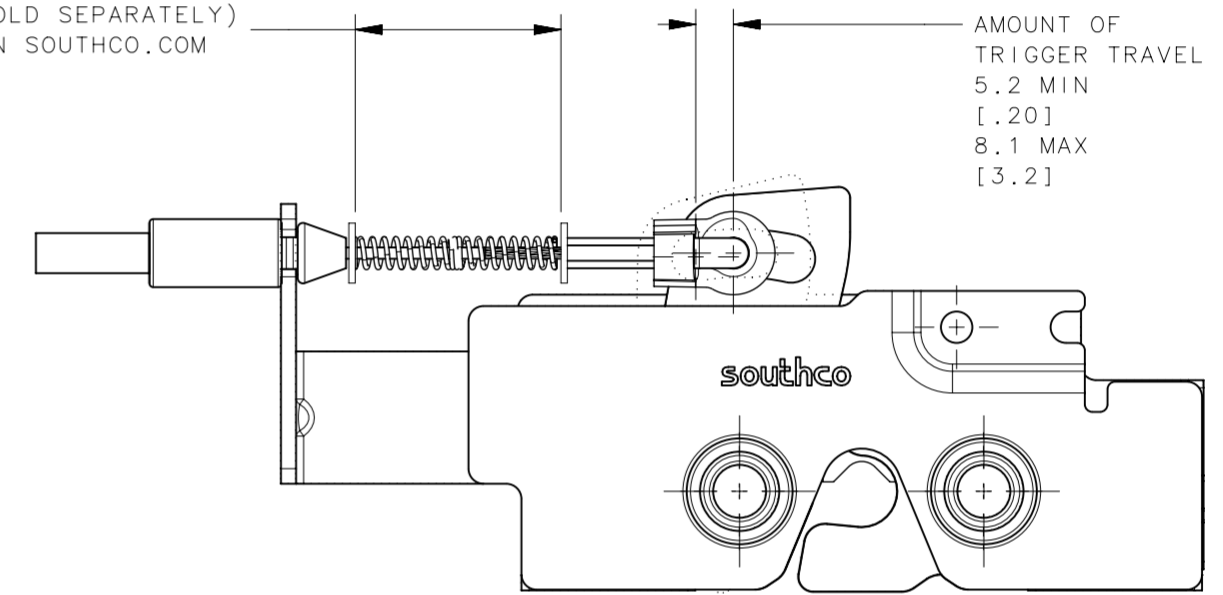
TLC = 7 FOR CABLE TYPE 7 (SOLD SEPARATELY)
SEE CABLE SELECTION TOOL ON SOUTHCO.COM

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



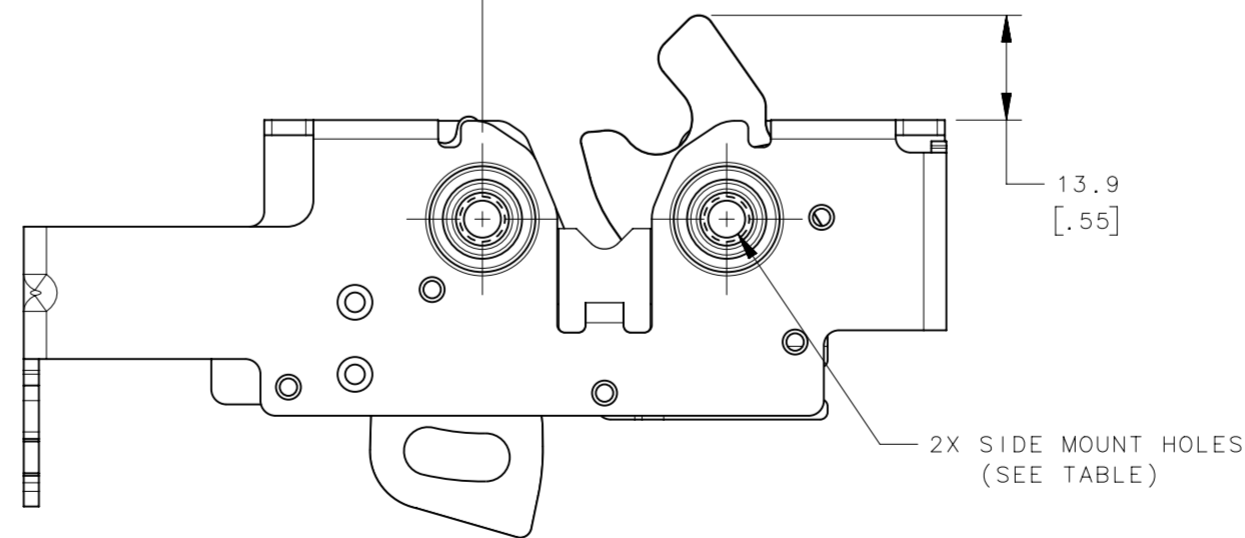
TLC = 29 FOR CABLE TYPE 7 (SOLD SEPARATELY)
SEE CABLE SELECTION TOOL ON SOUTHCO.COM

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

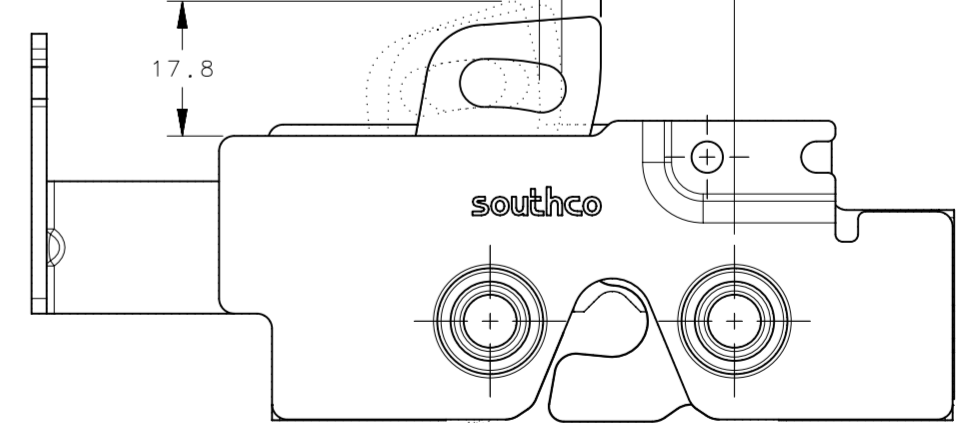


STRIKER POSITION TOLERANCE VIEW (SEE NOTE F)

16.2 NOMINAL [.64]
5 MAX [.2]
5 MAX [.2]
Ø9 mm STRIKER (SOLD SEPARATELY, SEE J-R4-90-124 FOR DETAILS)



8.1 [.32] MAX. TRAVEL
5.2 [.2] MIN. TRAVEL TO OPEN THE LATCH
17.7 [.7]



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