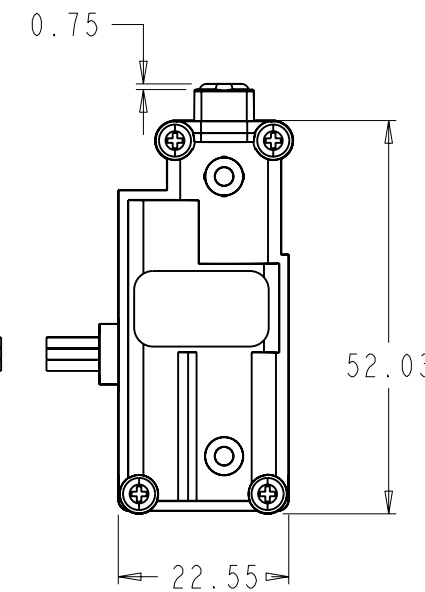
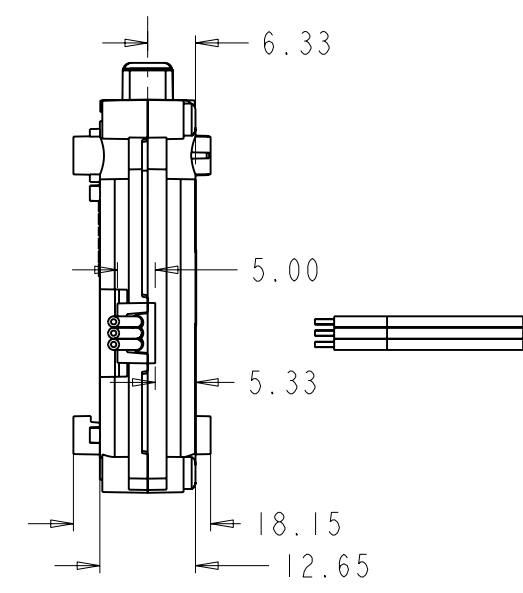
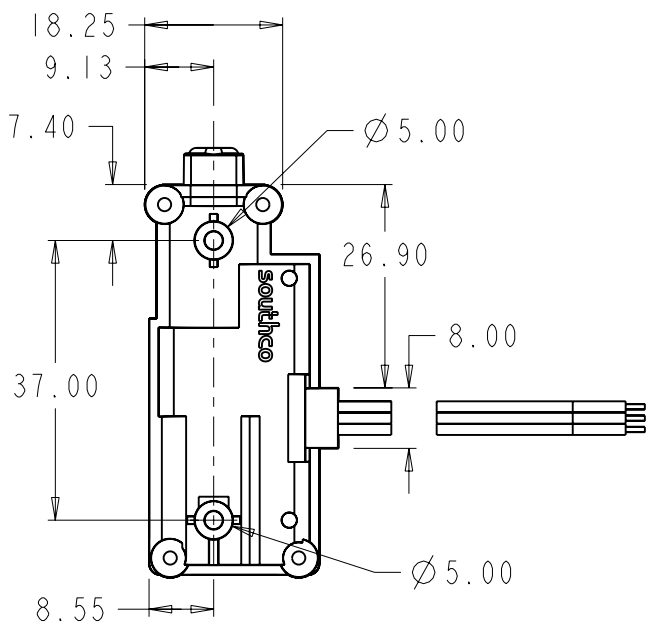
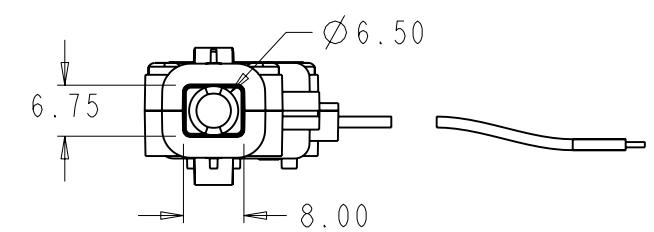
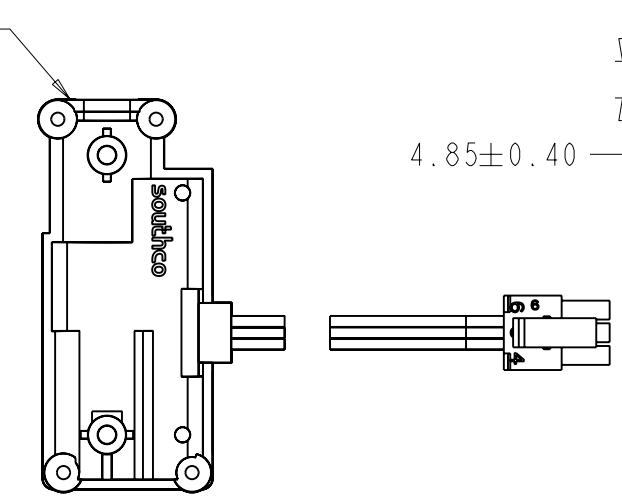


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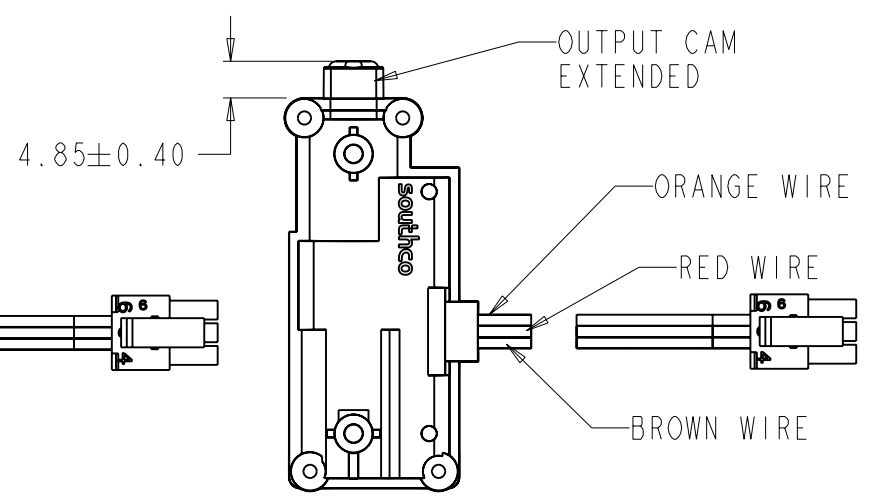
REVISION RECORD			
SYMB	DESCRIPTION	BY	DATE
A	PRN: P2010-0366	MJS	16APR2010



OUTPUT CAM RETRACTED
FLUSH WITH THIS SURFACE
0±0.4



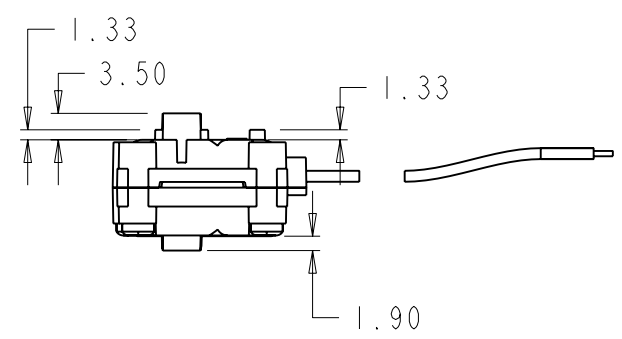
RETRACTED POSITION



EXTENDED POSITION

R4-EM-21-33 SHOWN

R4-EM-21-34 SHOWN EXTENDED



MILLIMETERS		TITLE ACTUATOR ASSEMBLY, 2 POSITION		
ALL DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY		DESIGNER	DRAFTER	DWG No J-R4-EM-21-33
		MODEL NAME R4-EM-21-3X-J_SCHEM	SCALE 1.000	REVISION A
		PART NUMBER SEE TABLE		
		CALC. WEIGHT/VOL.	1 OF 2	FORMAT B

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REVISION RECORD

SYMB	DESCRIPTION	BY	DATE
A	PRN: P2010-0366	MJS	16APR2010

NOTES:

- A. MATERIAL AND FINISH
PLASTIC (PC/ABS AND ACETAL) AND METAL COMPONENTS
- B. ELECTRICAL SPECIFICATIONS:
OPERATING VOLTAGE : 8 TO 26 VDC
TYPICAL OPERATING CURRENT:LESS THAN 500 mA @12VDC
PEAK/STALL OPERATING CURENT: 1A MAX @12VDC (STALL LIMITED TO 1 SECOND)
STANDBY CURRENT LESS THAN 185 MICROAMP
CONTROL SIGNAL HIGH(UNLOCK COMMAND): 6 TO 26VDC, 25 mA MAX
CONTROL SIGNAL LOW(LOCK COMMAND): 0 TO 1VDC (OPEN)
TRANSIT TIME : 600 MILLISECONDS NO LOAD, 1 SECOND MAX.
OPERATING TEMPERATURE RANGE: -20C TO +60C
- C. ELECTRICAL CONNECTIONS AND HOOKUP:
A BASIC SWITCH CONTROL ELECTRICAL HOOKUP DIAGRAM IS PROVIDED FOR REFERENCE.
CONSULT WITH A SOUTHCO REPRESENTATIVE FOR ADDITIONAL ELECTRICAL HOOKUP INFORMATION.
-CONNECT POWER, GROUND AND CONTROL SIGNAL WIRES TO AN APPROPRIATE DC POWER SUPPLY.
-A DC POWER SUPPLY CAPABLE OF SUPPLYING 1 AMP MINIMUM IS RECOMMENDED.
-POWER MUST BE AVAILABLE TO OPERATE THE LATCH AND MUST REMAIN AVAILABE DURING THE FULL TRANSIT TIME OF THE LATCH DURING LOCKING OR UNLOCKING.
CAUTION ! ACTUATOR CAN BE DAMAGED IF WIRED INCORRECTLY, OR IF IMPROPER VOLTAGE IS APPLIED!
WIRE COLOR CODE/CONNECTOR PIN ASSIGNMENT:

PIN1: BROWN: GROUND (-)

PIN4:

PIN2: RED: POWER (+12V TYPICAL)

PIN5:

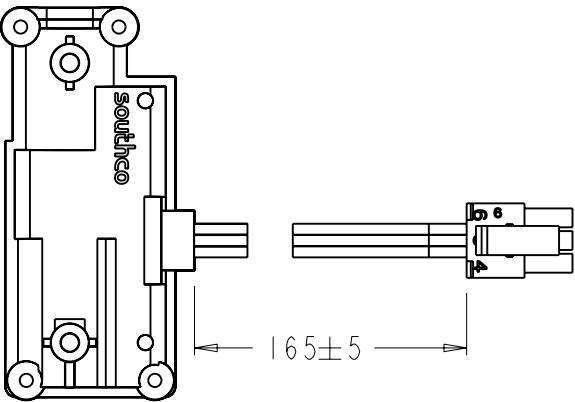
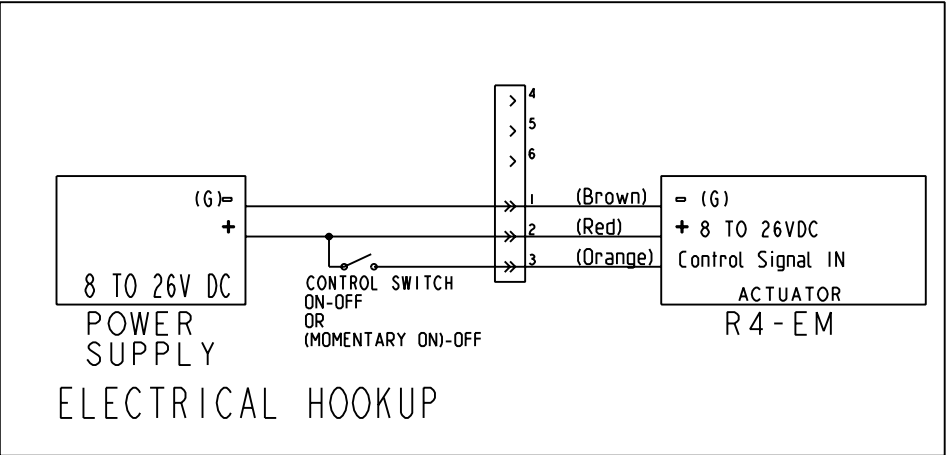
PIN3: ORANGE: CONTROL SIGNAL (+12V TYPICAL)

PIN6:
- D. ELECTRICAL OPERATION:
TO EXTEND THE ACTUATOR:
PROVIDE THE FOLLOWING CONTROL SIGNAL TO THE ORANGE WIRE OR CONNECTOR PIN 3
-PROVIDE 6 TO 26VDC (CONTROL SINGAL HIGH) FOR A MINIMUM OF 50 MILLISECONDS
-THE CONTROL SIGNAL CAN REMAIN HIGH INDEFINITELY
-THE ACTUATOR WILL STAY EXTENDED FOR A MINIMUM OF 1 SECOND OR AS LONG AS THE SIGNAL IS HIGH
TO RETRACT THE ACTUATOR:
PROVIDE THE FOLLOWING CONTROL SIGNAL TO THE ORANGE WIRE OR CONNECTOR PIN 3
-PROVIDE 0 TO 1VDC (CONTROL SINGAL LOW). POWER MUST BE AVAILABLE DURING TRANSIT TO RETRACTED POSITION

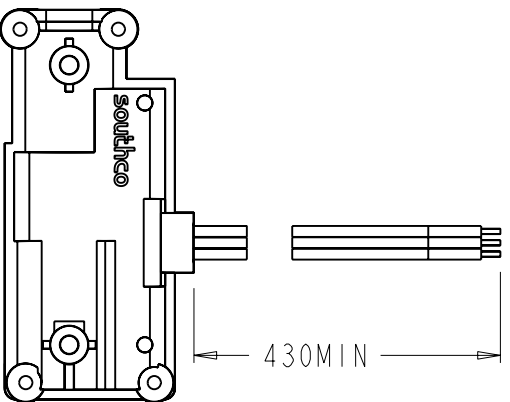


CAUTION ! IT IS IMPORTANT TO NOT BLOCK (STALL) THE MOTION OF THE ACTUATOR DURING ELECTRICAL OPERATION TO PREVENT LONG TERM DAMAGE TO THE ELECTRICAL COMPONENTS IN THE ACTUATOR. THE ACTUATOR CANNOT REVERSE A CYCLE. THE ACTUATOR MUST BE ALLOWED TO REACH ITS FULL EXTENDED TRAVEL TO COMPLETE ITS CYCLE.

- E. OPTIONAL CONNECTOR:
MANUFACTURER: MOLEX, SERIES: MICROFIT 3.0
-CONNECTOR RECEPTICAL 6 POSITION 3MM VERTICAL DUAL: MOLEX P/N: 43025-0600
-CONTACTS: FEMALE CRIMP TERMINAL(SOCKET) MOLEX P/N: 43030-0007
WIRE: 24 AWG STYLE 1007
WIRE LENGTH: SEE TABLE FOR AVAILABLE LENGTHS
- F. MATE CONNECTOR (NOT SUPPLIED)
MANUFACTURER: MOLEX, SERIES: MICROFIT 3.0
-CONNECTOR PLUG 6 POSITION 3MM VERTICAL DUAL MOLEX P/N: 43020-0601
-RECOMMENDED CONTACTS (6 MAXIMUM REQUIRED): MOLEX, MALE CRIMP TERMINAL(PIN) MOLEX P/N: 43031-0007,
-RECOMMENDED WIRE GAGE : 24 AWG

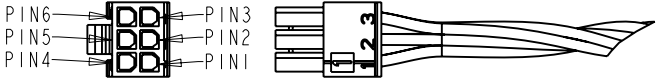


R4-EM-21-33



R4-EM-21-34

ACTUATOR PART NUMBERS		
2 POSITION ACTUATOR	150MM WIRE LENGTH WITH CONECTOR	425MM WIRE LENGTH NO CONNECTOR
	R4-EM-21-33	R4-EM-21-34



MILLIMETERS		TITLE ACTUATOR ASSEMBLY, 2 POSITION	
ALL DIMENSIONS WITHOUT TOLERANCES ARE FOR REFERENCE ONLY		DESIGNED BY	APPROVED BY
		MODEL NAME R4-EM-21-XX,ACTUATOR	SCALE 1.000
		MATERIAL NA	
		CALC. WEIGHT/VOL.	FORMAT B
		2 OF 2	