



QUARTER TURN ELECTRIC ACTUATOR

AVA-02C SMART ON-OFF 20Nm

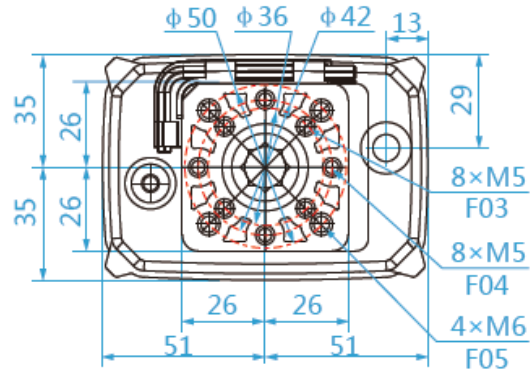
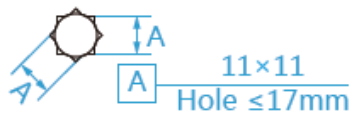
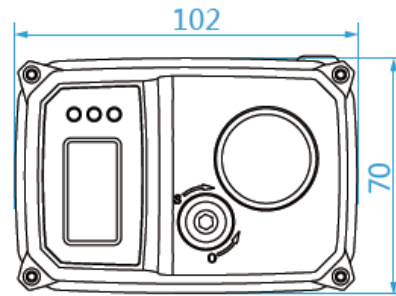
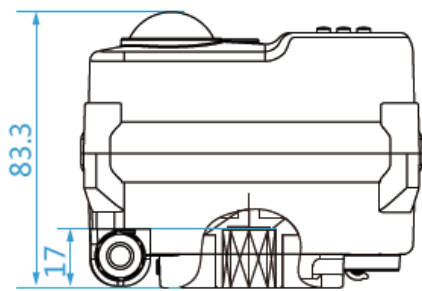


Model	AVA02-C 20Nm MULTI-VOLTAGE SMART ON-OFF ELECTRIC ACTUATOR	
	High voltage	Low voltage
Rated Voltage	230V	24V
Voltage Range	AC 95-265V 50/60Hz, DC 100-300V	AC 18-26V 50/60Hz, DC 2-32V
Consumption	9.6W run, 0.12W hold	9.6W run, 0.85W hold
Peak current	35mA (AC230V), 75mA (DC110V) for 5ms	350mA (DC 24V) for 5ms
Fuse	1A	2A
Maximum Break Torque Nm	20	20
Run & Reseat Torque Nm	15	15
Manual operation	Yes, by hexagonal wrench (supplied in clip) when no power is being applied	
Run time	≈ 10 sec	≈ 10 secs
STANDARD FEATURES:		
Operating frequency	Not continuous, 75% duty cycle but recommended to allow ≥ 1 minute between cycles	
Position indication (visual)	2 colour (red/ yellow) dome for local visual confirmation	
Mounting restriction	None, can be mounted at any angle. Leave room for space to operate manually, and for electrical connection	
End Position indication	2 x Electronic relay	
ISO:5211	F03 & F05 (+ F04 which mounts at 45 degrees)	
Female drive	11mm octagon x 17mm deep	
Ingress protection	IP67, recommend cover provided if exposed to direct rain or sun	
Max media temp	≤ 80C	
Ambient temp	-20 to +60C (ABS) -20 to +80C (Aluminium)	
Non-operating temp	≤ -40C to ≥80C	
Ambient humidity	5-95% RH non-condensing	
Explosion proof	No, prohibited. Do not use in hazardous areas	
Housing	Aluminium base, plastic (ABS) cover	
Weight	With standard ABS cover 0.62kg (With optional aluminium cover 0.82kg)	



Success results from our continual pursuit of perfection, details therefore subject to change in the interests of product development and improvement.

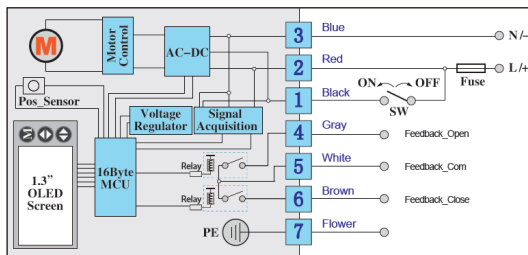
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Model	Voltage	Cover	Heater	Control of on-off function	Feedback
AVA-02C-	1 AC 230V or	P Plastic (ABS)	N None	D SPDT. Switchable +ve/ live	R Relay auxiliary contacts ¹
	1 AC 110V	A Aluminium	H 5W/24kΩ	S SPST. Make to open, break to close	A 'R' above with alarm output ²
	2 AC 24V or			F Failsafe, fails closed on loss of power	1 & 2 Requires external power supplied to actuator for relay to function.
	2 DC 24V				
	Multi-voltage				

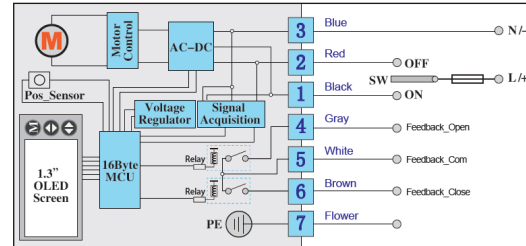
WIRING DIAGRAMS

AVA-02C ON-OFF WIRING 'A'

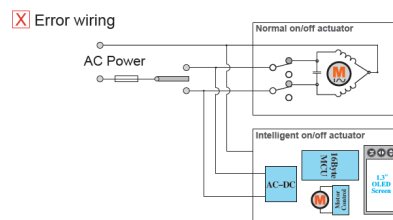
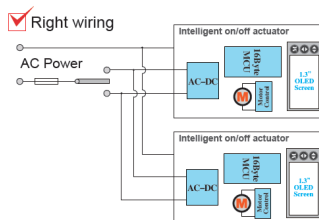


Control type 'S' Single throw switch

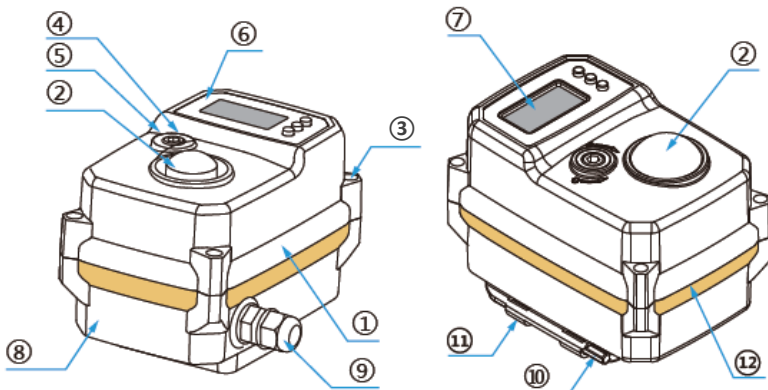
AVA-02C ON-OFF WIRING 'B'



Control type 'D' Double throw switch



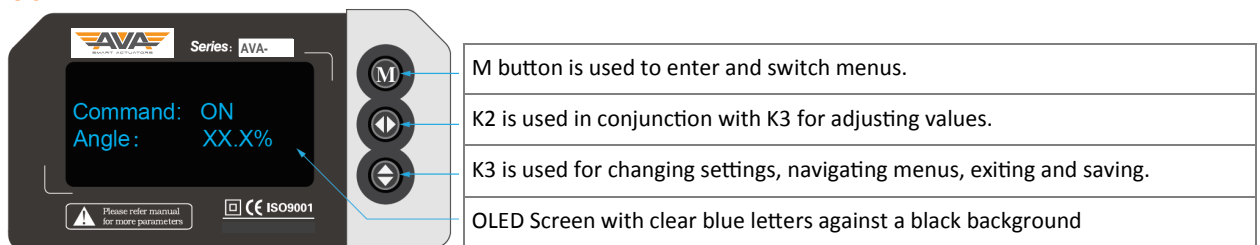
Note on wiring multiple actuators. Do not control AVA basic and Smart actuators in parallel using the same contactor.



No	PART	MATERIAL
1	Housing	Aluminium base, ABS cover
2	Indicator	Clear plastic
3	Cover screws	304SS
4	Override drive	304SS
5	Seal	NBR
6	Screen cover	Rubber
7	Screen	OLED
8	ID Label	PVC
9	Connector	Plastic
10	Allen key	Tool steel
11	Allen key clip	ABS
12	Cover seal	NBR

Overview: All AVA smart electric actuators have local controls as standard which combine an OLED screen and 3 positive feel push buttons to create local control and a variety of user friendly adjustments. The bright screen with blue letters on a black background are easy to read, and the use of the push buttons to adjust settings is intuitive. The local controls require power to be applied to the actuator to operate.

Local controls:



Standard local control function options:

MANUAL CONTROL	The AVA smart actuator can be opened and closed using the K2 and K3 buttons
DEAD BAND	Adjusts the accuracy and sensitivity
SPEED CONTROL	The working time can be increased either by setting a step timer (run/stop/run/stop), or continuous running adjusting the PWM
CLOSED POSITION	Small adjustments can easily and quickly be made to the final close position angle (zero adjustment).
REVERSE ACTING	Receiving an open command signal sends the AVA smart actuator to the closed position and vice versa
EXTEND ANGLE	Adjust the open position by adjusting the span. Typically used to set 0-180 degree operation
3 POSITIONS	Sets the 3rd positions