

**QUARTER TURN ELECTRIC ACTUATOR**

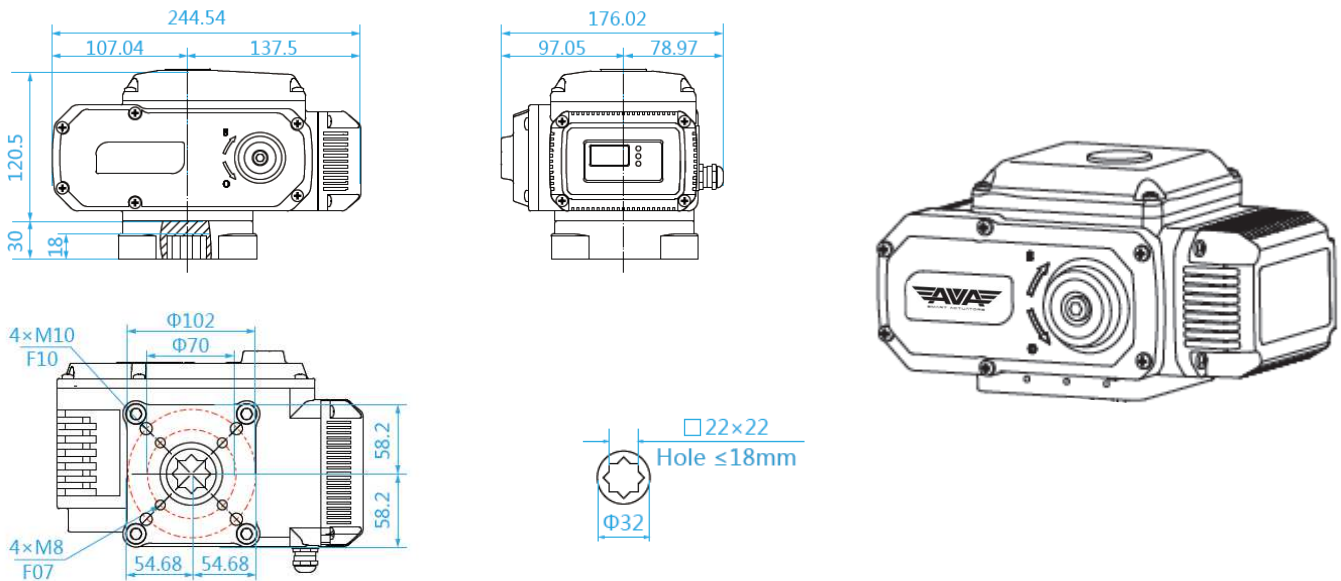
**AVA-S400.10 SMART ON-OFF 400Nm**



Model	AVA-S400.10 400Nm SMART ON-OFF ELECTRIC ACTUATOR		
Rated Voltage	230V AC	110V AC	24V DC
Voltage Range	AC 190-250V 50/60Hz	AC 90-130V 50/60Hz	DC 22-28V
Consumption	150W run, 0.7W hold	150W run, 0.7W hold	To be confirmed
Peak current	1.8A for 5ms	4.0A for 5ms	To be confirmed
Fuse	10A	15A	To be confirmed
Maximum Break Torque Nm	400	400	400
Run & Reseat Torque Nm	360	360	360
Run time (90°)	≈ 30 sec	≈ 30 sec	To be confirmed
<b>STANDARD FEATURES:</b>			
Operating frequency	AC: Not continuous, 75% duty cycle but recommended to allow ≥ 1 minute between cycles. DC: Continuous		
Position sensing	Magnetic with digital sensing. No mechanical cams fitted.		
Maximum angle of rotation	110° ±5°		
Position indication (visual)	2 colour (red/ yellow) dome for local visual confirmation		
End Position indication	2 x Electronic relay		
Mounting restriction	None, can be mounted at any angle. Leave room for space to operate manually, and for electrical connection		
ISO:5211	F057& F10		
Female drive	22mm octagon x 18mm deep		
Manual operation	Yes, by hexagonal wrench (supplied in clip) when no power is being applied		
Ingress protection	IP67, recommend cover provided if exposed to direct rain or sun		
Max media temp	≤ 80C		
Ambient temp	-20 to +60C		
Non-operating temp	≤ -40C to ≥80C		
Ambient humidity	5-95% RH non-condensing		
Explosion proof	No, absolutely prohibited. Do not use in hazardous areas		
Shock Resistance	≥300m/S <sup>2</sup>		
Vibration	10 to 55Hz, 1.5mm double amplitude (product damage most likely if exceeded)		
Noise level	Around 50dB		
Flame Retardant Level	V0 using the UL94 Test method		
Certification	CE		
Maintenance	Maintenance free		
Cable Entry	1 x Nickel plated brass		
Housing	Aluminium		
Weight	5.5Kg		

**Dimensions**

**AVA-S400.10 400Nm SMART ON-OFF ELECTRIC ACTUATOR**



**PART NUMBERING**

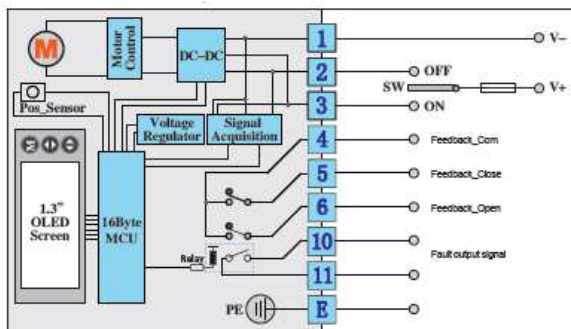
Model	Voltage	Housing	Heater	Control of on-off function and end of travel confirmation
AVA-S400.10-	1 AC 230V	A Aluminium	0 None	A SPDT. Switchable +ve/ live with volt free confirmation
	2 AC 110V		H 5W/24kΩ	B SPDT. Switchable +ve/ live with volt free confirmation & Alarm
				C SPST. Make to open, break to close with volt free confirmation
	4 DC 24V			D SPST. Make to open, break to close with volt free confirmation & Alarm
				E SPDT. Switchable +ve/ live with relay confirmation
				F SPDT. Switchable +ve/ live with relay confirmation Alarm
				G SPST. Make to open, break to close with relay confirmation
				H SPST. Make to open, break to close with relay confirmation & Alarm

*NOTE: UK STANDARD STOCK IS WITH WIRING 'A', ANY OTHERS ARE FACTORY OPTIONS.*

**STANDARD WIRING DIAGRAM**

**AVA-S400.10 100Nm SMART ON-OFF ELECTRIC ACTUATOR**

**AVA-S400.10 ON-OFF WIRING 'B'**



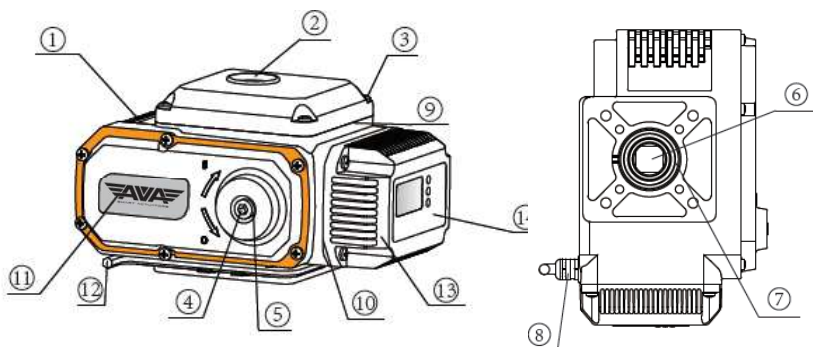
SW	Valve Position	Confirmation	Notes
OFF	Closed	4 & 5 connected	No signal mid-travel
ON	Open	4 & 6 connected	

*NOTE: UK STANDARD STOCK IS WIRING 'A', OTHERS ARE FACTORY OPTIONS. WIRING 'A' IS THE SAME AS 'B' SHOWN HERE EXCEPT IT DOES NOT HAVE THE RELAY POWERED FAULT CIRCUIT INSTALLED (TERMINAL POSITIONS 10 & 11)*



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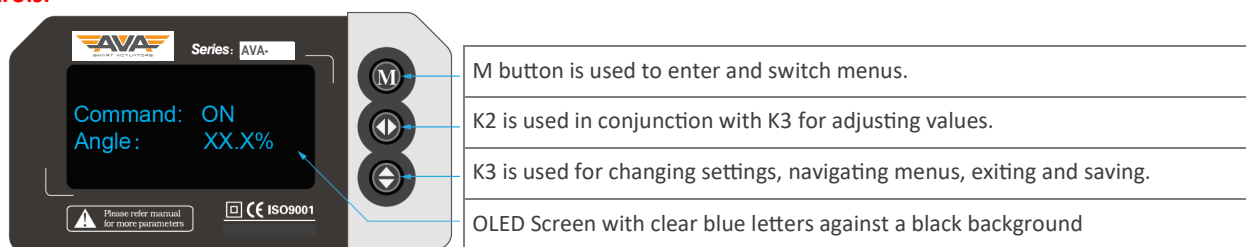
Details are subject to change without notice in the interests of product development and improvement.



No	PART	MATERIAL
1	Housing	Aluminium
2	Indicator	Clear plastic
3	Cover screws	304SS
4	Override drive	304SS
5	Seal	NBR
6	Output drive	304SS
7	Cover seal	NBR
8	Cable gland	NP Brass
9	Lid seal	NBR
10	Cover seal	NBR
11	Label	PVC
12	Allen key	Tool steel
13	Terminal box	Heatproof ABS
14	Screen	OLED

**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 position (subject to wiring style)