

**AVA Smart Electric Actuator Function: POWER OPEN, POWER CLOSE - FAILS SAFE ON POWER FAILURE**



DN15-40 1/2" - 1 1/2"

**Type: EA-3014H**

AVA Electric actuator fitted via mounting kit



DN50-100 2" - 3"

**AVS Basic OnFailsafe electric actuator features:**

Compact size fully weatherproof basic industrial actuator.
Internal capacitor failsafe system pre-installed
All external electrical connections, no need to remove cover .
Individual voltage motors.
Position setting using cams and micro-switches.
Manual override facility.
Electronic torque limiter.
Thermostatic anti-condensation heater.
End of travel switches for remote open/ closed indication.
CE Marked.
ABS housing (aluminium option).

**AVS Smart Failsafe electric actuator features:**

Compact size.
Multi-function OLED Screen
External push buttons for local parameter setting & local control
Fully weatherproof smart industrial actuator.
All external electrical connections, no need to remove cover .
Multi-voltage power supply.
Position control uses digital magnetic electronics, no cams.
Manual override facility.
Electronic torque limiter.
Thermostatic anti-condensation heater.
End of travel relays for remote open/ closed indication.
CE Marked.
ABS housing (aluminium option).
Internal capacitor failsafe system pre-installed

**Applications:**

The EA-3010H is well suited in water, food and general service applications, and is used extensively around the world in water, irrigation, swimming pools, foodstuffs and general service applications. Can be used with potable water (but not WRAS approved in the UK), and many corrosive media, subject to compatibility with wetted parts in contact with media.

Actuators sized on a maximum differential pressure of 10 bar wet service, operated at least once per day. If the intended duty is above this differential, or dry (eg: some solvents) call to check actuator sizing as a larger output actuator may be required.

Maximum working temperature of this assembly is +60C. For temperatures in excess of this please contact us - we may still be able to offer a plastic valve, say PVDF or cPVC, depending upon the working temperature required, and the working pressure.

**PVC information:**

PVC is odourless and tasteless and is used in many applications such as water processing, conveying potable water and food processing.. It has good chemical resistance and resists most solutions of acids, alkalis and salts, and also solvents that can be diluted with water.

It is not resistant to aromatic and chlorinated carbons.

PVC is not suitable in applications where the installation can see negative ambient temperatures, and care must be taken when working above 20C as the allowable working pressure drops significantly as the working temperature increases above +20C.

**Ball valve information:**

The 3010H is an economy, mass produced PVC ball valve.

The double union design allows the centre section to quickly and easily be removed for replacing the seats and seals. These economy PVC ball valves have a blow-out proof ball & stem. Standard seals are EPDM but Viton (FKM) is available.

Automation is made quick and easy when using the manufacturers' purpose designed mounting kit that is usually available from stock.

**J3CS Smart Electric Actuator Function: POWER OPEN, POWER CLOSE - FAILS SAFE ON POWER FAILURE**

**Specifications:**

	AVA BASIC FAILSAFE ACTUATOR	AVA SMART FAILSAFE ACTUATOR
Actuator housing	ABS	ABS
Supply voltage range	24VDC, 24VAC, 100VAC, 240VAC	12-24V AC/DC 85-265V AC/DC
Motor Control	Cam and mechanical micro-switches	Magnetic digital position sensing & control
Position Confirmation	Cam and mechanical micro-switches	Electronic relays
IP Rating	IP67	IP67
Actuator temp limits	-20 to +60°C	-20 to +60°C
Assembly temp limits	EAB-3014H +60°C AVA mounted via kit	EAS-3014H +60°C AVA mounted via kit
	Internal failsafe system pre-installed	Internal failsafe system pre-installed
Valve body	uPVC	uPVC
Valve ball	uPVC	uPVC
Valve seats	PTFE	PTFE
Valve seals	EPDM (Viton option)	EPDM (Viton option)
Ends	Solvent weld or BSP	Solvent weld or BSP
Valve Pressure rating	UTI 2" 16 Bar at 20C, 10 Bar rest	UTI 2" 16 Bar at 20C, 10 Bar rest
Valve temp limits	0C to +60C	0C to +60C
Valve Size range	1/2" to 3" (4" RB)	1/2" to 3" (4" RB)

**Wiring Diagrams:**

Note: AVS Model 20 actuator supplied with approx 0.75m flying lead (9 colour coded cores as per wiring diagram below).

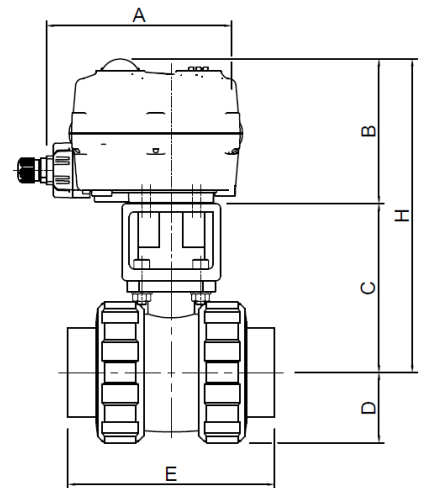
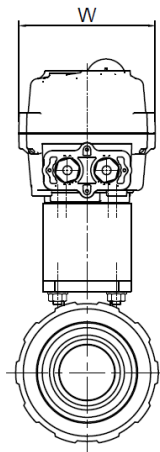
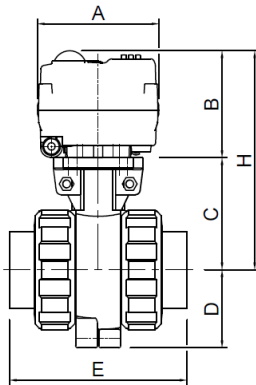
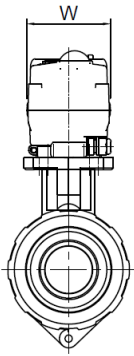
UK Stock wiring: 3 Wire with switching live between open and closed (SPDT)

Neutral	Blue wire		N / -	MOTOR CONTROL for open & closed positions
Live Close Motor Stop	Red wire		L / +	
Live Open Motor Stop	Black wire		L / +	
Common for Position Confirmation	White wire		N / -	POSITION CONFIRMATION for open & closed positions
Open Position Confirmation	Grey wire		L / +	
Closed Position Confirmation	Brown wire		L / +	
Earth	Green wire		E	EARTH

Factory option wiring: 3 Wire with permanent live on closed and switch for open (SPST). Shown in closed position

Neutral	Blue wire		N / -	MOTOR CONTROL for open & closed positions
Live Close Motor Stop	Red wire		L / +	
Live Open Motor Stop	Black wire		L / +	
Common for Position Confirmation	White wire		N / -	POSITION CONFIRMATION for open & closed positions
Open Position Confirmation	Grey wire		L / +	
Closed Position Confirmation	Brown wire		L / +	
Earth	Green wire		E	EARTH

Typical Dimensions:



DN15-40 1/2" - 11/2"

DN50-100 2" - 3"

EA3014H Dimensions remain unchanged for all versions - on-off, failsafe, modulating & failsafe modulating							
	Model	A	B	C	E	H	W
≤1/2"	20	102	88	60	86	148	70
3/4"	20	102	88	64	94	152	70
1"	20	102	88	72	122	160	70
1 1/4"	20	102	88	82	131	170	70
1 1/2"	20	102	88	94	150	182	70
2"	20	102	88	142	177	230	70
2 1/2"	60	165	122	153	216	275	115
3"	60	165	122	165	257	287	115

Type: EA3014H Actuator fitted to valve via the manufacturers' mounting kit