

### BASIC SERIES



- Very compact housing offering 10Nm torque output. Ideal for actuating your small bore valve sizes, such as brass, stainless or PVC ball valves.
- Multi Voltage 24VAC/DC or 95-265VAC voltage range, reducing stock required to be held to cover possible on site voltages.
- Fast Acting as standard with a Run Time of 5 seconds with option of 1 second version available.
- Available with internal super capacitor fitted for Failsafe functionality.

Version 001: 3/10/22 subject to change without notice

Technical Specifications			
Rated Torque Nm (in.lbs):	12Nm Break (106) / Run 10Nm (88)	Enclosure:	PC+ PET Plastic Housing **
ISO 5211:	F03/05 x 11mm Output Drive	LED Status Light:	Yes, RGB Open, Close, Alarm.
Voltage Range:	24VAC/DC, 95-265VAC, 12VDC	Run Time no load:	5 seconds
Connecting Cable:	0.8m pre wired AC300V rated 7 core*	IP Rating:	IP67 / Nema 4x
Working Angle Range:	0-270 degrees. Set via internal cams.	Temperature Range:	-20 > +80C ***
Duty Cycle:	75% rated	Shock Resistance:	< 300m/S2
Sound Power Level:	Max50dB(A)	Vibration Rating:	10 to 55Hz, 1.5mm double amplitude
Position Indicator:	Mechanical Flat Window. See above	Installation :	Vertical/Horizontal - not underslung
Withstand Voltage:	500VAC for 1 minute.	Maintenance:	Maintenance Free - do not remove cover
Insulation Resistance:	100MΩ/ 500VDC	Approvals:	TUV CE & EMC Certified, REACH, RoHS ****
Explosion Proof:	No, not to be used in a hazardous location. Can only be used in safe area applications.		

\* Standard cable length is 0.8m, we can supply extended cables to the required length. Note cable extension at additional cost

\*\* PC+PET plastic housing as standard. Aluminium cover will be made available for the Series 10 in the near future.

\*\*\* Note that we can extend the lower temperature range through special lubricant and grease and upgraded heater system. Speak to your sales representative.

\*\*\*\* AVA has began the process to have all of our electric actuators approved for UL and CSA

#### Main Ordering Codes for Basic Series:

Example : B106-PHB-11

Series >	Function >	Voltage >	Housing >	Heater >	Wiring >	Output Drive >					
B	Basic	10	On Off	1	220VAC	P *PC+PET	H *Included	A	3 Wire SPST	11	11mm
		14	Failsafe	2	110VAC	A Aluminium	0 Without	B	*3 Wire SPDT		
		19	Hi Speed	3	24VAC			G	2 wire		
		4		4	24VDC						
		5		5	95-265VAC						
		6		6	24VAC/DC						
		7		7	12VDC						

\*For single voltage actuators, the actuator will not have an LED light. For multi voltage actuators the LED is standard. For 1 second operation, this is only available with 24VDC single voltage motor. All actuators are as standard supplied with a heater.



New feature, we are adding a QR label to all of our products that will enable users of our product to have quicker and more direct access to support documents via our new purpose built QR website. Simply scan the QR code using your Smart phone camera and you will be taken directly to the specific actuator you have on site and will have access to Technical Datasheets, Firmware guides and product support videos.

English version. Available in Spanish



### SMART SERIES

- Introduces OLED screen with colour display, providing the user with visual display of actuator status including any Alert conditions that might occur.
- SmartMenu provides onboard Firmware and enables user to change certain parameters in the actuator including speed, angle, accuracy.
- Local Control as standard allows the user to operate the actuator open > close via the touch buttons.
- Increased functionality including Modulating, Failsafe Modulating, Modulating Hi Speed.
- For Multi Turn, Modbus and Timer series, see Series 20 >110.



Technical Specifications:			
Rated Torque Nm (in.lbs):	12Nm Break (106) / Run 10Nm (88).	Alarm Relay:	Yes, option for fault alarm output
ISO 5211:	F03/05 x 11mm Output Drive	LED Status Light:	Yes, RGB Open, Close, Alarm.
Voltage Range:	24VAC/DC, 95-265VAC, 12VDC	Run Time no load:	5 seconds
Connecting Cable:	0.8m pre wired AC300V rated 7 core*	3 Position Function:	Yes, setup via SmartMenu firmware
Working Angle Range:	0-270 degrees. Set via digital encoder. Working angle can be digitally set via SmartMenu firmware.		
Duty Cycle:	75% rated - 100% rated for Modulating	Brushless Motor:	Yes, DC brushless motor
Sound Power Level:	Max50dB(A)	Modulating Control:	Pre set at factory where applicable.
Position Indicator:	Mechanical connected to digital encoder sensor for accurate position sensing.		
Local Control:	Yes via SmartMenu using touch buttons	Reverse Acting:	Yes, set via SmartMenu
Speed Control:	PWM or PULSE speed control via SmartMenu	Fail to 3rd Position:	Yes, set via SmartMenu
Explosion Proof:	No, not to be used in a hazardous location. Can only be used in safe area applications. 		

\*\* See previous page for details on options available on pre wired cable lengths, temperature rating, cover and upcoming approvals.

#### Main Ordering Codes for Smart Series: Example : S1010-6PHB-11

Series >	Function >	Voltage >	Housing >	Heater >	Wiring >	Output Drive >							
S10	Smart	10	On Off	4	24VDC	P	PC+PET	H	Included	E	3 wire SPDT	11	11mm
	14	Failsafe	5	95-265VAC	A	Aluminium	0	Without	P	4-20mA	Alarm Relay >		
	19	Hi Speed	6	24VAC/DC			U	0-10V	A	Alarm			
	25	Modulating	7	12VDC			V	2-10V					
	26	Modulating Failsafe					W	RS485 Modbus					
	29	Modulating Hi Speed											
	31	Modbus On Off											
	34	Modbus Failsafe											
	35	Modbus Modulating											

\*For Smart series we only offer Multi Voltage versions, unless Hi Speed 24VDC to achieve 1 second run time. Note that we cannot currently offer Hi Speed Failsafe function.

# POWER & WIRING

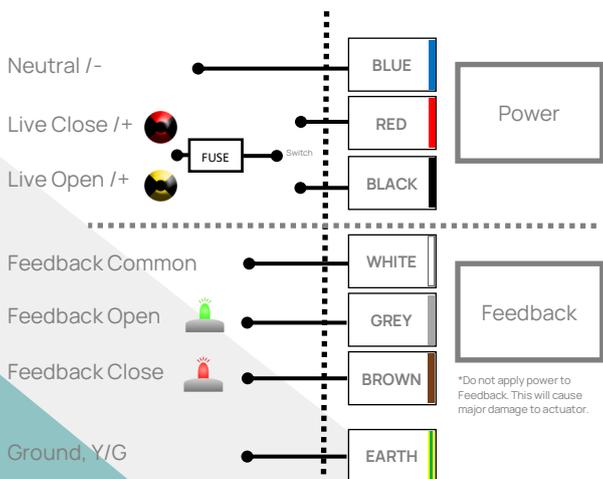
All you need to know for sizing the correct power supply for the actuators you are installing including the power requirements when the actuator is running and what we would call Peak or maximum power requirements.



Power Ratings for most common series: including run torque and peak current for sizing power supply

Code	Voltage	Power	Time	Fuse	Peak	Code	Voltage	Power	Time	Fuse	Peak
B105-PHB-11	95-265VAC	12W	5s	1A	100W	S1025-5PHP/U-11	95-265VAC	12W	5s	1A	100W
B106-PHB-11	24VAC/DC	12W	5s	5A	100W	S1025-6PHP/U-11	24VAC/DC	12W	5s	5A	100W
B145-PHB-11	95-265VAC	20W	5s	1A	100W	S1026-5PHP/U-11	95-265VAC	20W	5s	1A	100W
B146-PHB-11	24VAC/DC	20W	5s	5A	100W	S1026-6PHP/U-11	24VAC/DC	20W	5s	5A	100W
B195-PHB-11	95-265VAC	50W	3s	1A	100W	S1029-5PHP/U-11	95-265VAC	50W	4s	1A	100W
B194-PHB-11	24VDC	50W	1s	5A	100W	S1029-4PHP/U-11	24VDC	50W	4s	5A	100W
S1010-5PHE-11	95-265VAC	12W	5s	1A	100W	S1031-5PHW-11	95-265VAC	12W	5s	1A	100W
S1010-6PHE-11	24VAC/DC	12W	5s	5A	100W	S1031-6PHW-11	24VAC/DC	12W	5s	5A	100W
S1014-5PHE-11	95-265VAC	20W	5s	1A	100W	S1034-5PHW-11	95-265VAC	20W	5s	1A	100W
S1014-6PHE-11	24VAC/DC	20W	5s	5A	100W	S1034-6PHW-11	24VAC/DC	20W	5s	5A	100W
S1019-5PHE-11	95-265VAC	50W	3s	1A	100W	S1035-5PHW-11	95-265VAC	50W	5s	1A	100W
S1019-4PHE-11	24VDC	50W	1s	5A	100W	S1035-6PHW-11	24VDC	50W	5s	5A	100W

### Standard On Off, Failsafe and Hi-Speed Open/Close Wiring: Additional wiring options available online.

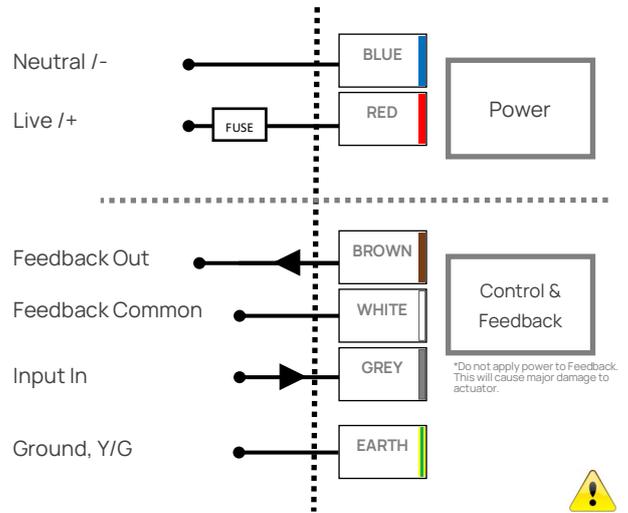


Failsafe versions have internal capacitor, this is charged whilst power is applied. When power is removed, the actuator will close or open depending on what you have ordered. Re-apply power and the capacitor will charge again and is always being charged when power is applied. When actuator is powered, heater is working.



\*Failsafe via internal super capacitor

### Standard Modulating including Failsafe and Hi-Speed Wiring: Additional wiring options available online.



Note that Black is not used as standard unless Alarm Relay option is selected. Separate wiring schematic available for actuators with alarm. For Series 10, you must order the specific Control you require, you cannot select between Control input via firmware as you can with Series 50-400.

# MATERIALS & DIMENSIONS

Below are the materials of construction, including any options available for this specific series. Dimensional drawing can also be found below detailing key dimension details including ISO 5211 mounting details.

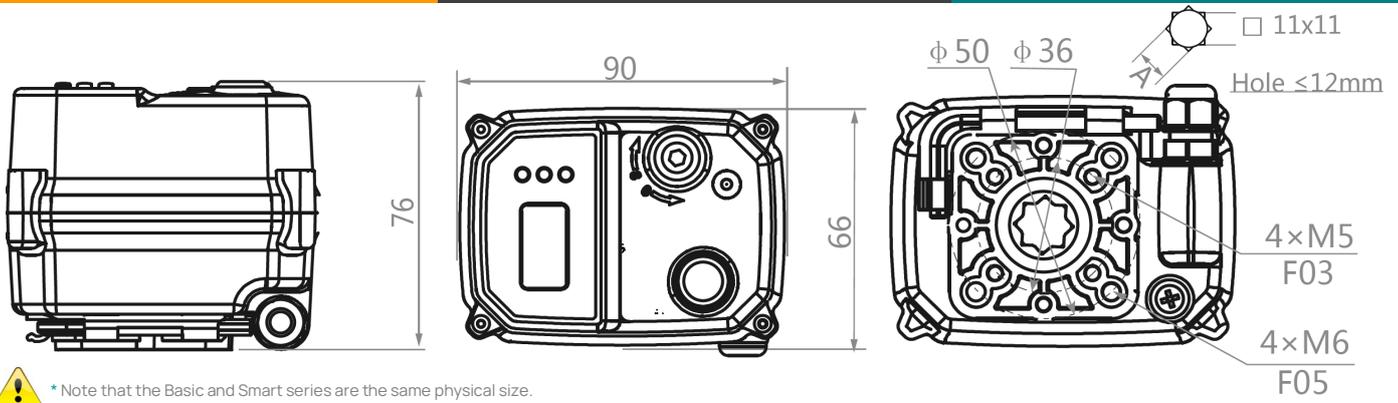


Manual Override Key is steel

Output drive is Carbon Steel.

F03 and F05 inserts are plated steel.

Cable entry is Nylon



We are able to supply our actuators with a prewired cable with IP67/68 weatherproof rated plug and play connector. We can supply both male and female connectors with a pre determined cable length required. We are able to terminate the cable for your PLC as required, loose for you to terminate or with a panel mount connector for example. Options include screw terminal and welded (soldered) connection.

To access our website for additional support documents, contact information and latest news, simply scan the QR code. You can find our list of official distributors at our website.

