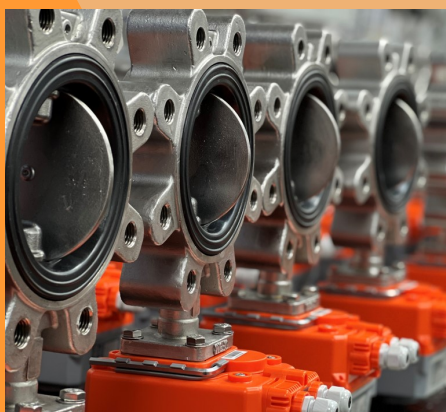




COMPANY INTRODUCTION



10- 400Nm



COMPACT DESIGN



SMART SERIES



MULTI TURN



MODBUS RS485



UK INVENTORY



10-400NM

UK BRAND

ISO 9001:2015

Join the **orange** and grey revolution



THE FUTURE OF VALVE ACTUATION

With sales of over 10,000 actuators per year and growing since its formation in 2015, AVA are on a mission to deliver the very best in valve automation, through its continuous research and development program. Each year AVA add to their range through new product and new features via the SmartMenu system. The Smart AVA series of actuators offer a 1.3" OLED screen with features such as local control, speed control, accuracy and 3rd position setup all available at a touch of a button.

Combined with the brushless DC motors and digital encoder, the level of performance, accuracy, life expectancy and user experience is unique and in many ways puts AVA years ahead of its competition. AVA also has a Basic series for entry level product and functionality. This UK brand of electric actuators offer something new for the industry.

As an ISO 9001:2015 certified company, AVA offer a number of benefits including large stock levels of built actuators in the UK. English and Spanish speaking staff offering technical support. Warranty available from 12 months to 3 years or 12,000 cycles to 60,000 cycles.

QUALITY AS STANDARD

All actuators are TUV CE certified and independently tested and approved to the latest standards. AVA includes IP67 housings, LED status light, ISO 5211 valve mounting, end of travel confirmation and manual override as standard. Soon to be CSA and UL approved for use in the USA and Canadian markets.



Feature rich Compact valve actuators



FAILSAFE VIA SUPER CAPACITORS:

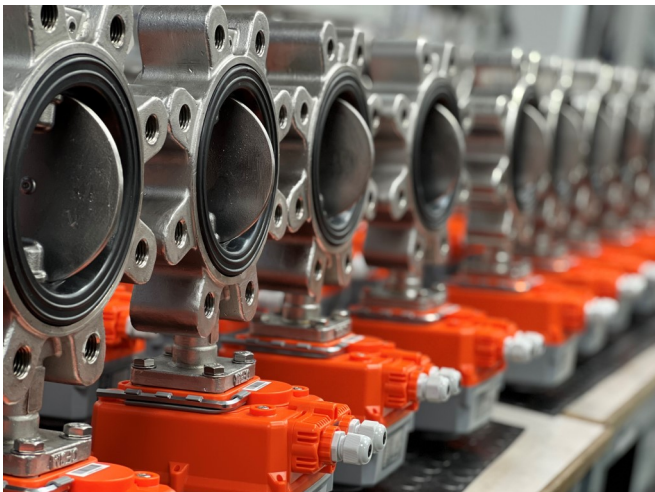
AVA offer failsafe functionality allowing either failsafe closed, failsafe open and with our smart series we can even offer fail to a 3rd position on power loss. The technology used to achieve this is via super capacitors and not battery as many others offer.

POSITION SENSOR AND DIGITAL ENCODER:

AVA's Basic Series uses a traditional design of motor and limit switches cam system using mechanical switches. However, our smart series utilises a digital encoder and position sensing technology that means internal switches are replaced by relays. This allows the AVA to electronically set its position, end of travel limit switches and more. Onboard firmware can allow the user to set features including operating angle 0-270 degrees, speed control via PWM and much more.

ONBOARD FIRMWARE TO CUSTOMISE ACTUATOR FUNCTIONALITY:

AVA utilises its SmartMenu to offer the user unrivalled customisation. Speed, working angle, accuracy, failsafe position, 3 position setup, local control and much more, via onboard firmware.



SERIES 10

Our most compact actuator is our 10Nm actuator series, perfect for those OEM applications where size is a huge factor in which actuators can be used. The 10Nm unlike other manufacturers does not substitute quality or features to achieve the compact size. Offering a 5 second working time as standard. Available with failsafe function via super capacitor.



Standard Specifications	B10 Basic	S10 Smart
Max Rated torque Nm output (in.lbs)	12Nm Break (106) / Run 10Nm (88)	10Nm Break (106) / Run 10Nm (88)
Voltage range	24VDC, 24VAC, 12VDC, 110VAC, 220VAC	12VDC, 24V AC/DC, 110-220VAC
Mounting (ISO5211) x drive (female octagon)	F03 & F05 x 11mm	F03 & F05 x 11mm
Standard Run Time	5 Seconds	5 Seconds
Electrical connection	Pre-wired multi-core 0.8m cable	Pre-wired multi- core 0.8m cable
End of travel confirmation (dry contact/volt-free)	2 x Mechanical micro-switches	2 x Electronic relays
LED Status	LED open/close	LED open/close/ alert
Actuator Dimensions & Weight in Kg	Height 76mm x Width 66mm x Length 90mm 0.5Kg	

Basic Series Functionality:	On Off (power open/power close)	Failsafe closed/open	Hi Speed On Off
Smart Series Functionality::	On Off (power open/power close)	Failsafe closed/open/3rd position	Hi Speed On Off / Modulating
	Modulating 4-20ma or 0-10v	Modulating Failsafe	Modbus RS485



Range **10Nm** to 400Nm torque output

SERIES 20

Our series 20 is by far the most popular product and it is easy to see why. The compact 20Nm torque output is available with a 1 second working time, Modbus RS485, Multi Turn and more. The first actuator that started it all introducing the OLED screen, digital encoder to name a few features of this now iconic actuator series.



Standard Specifications	B20 Basic	S20 Smart
Max Rated torque Nm output (in.lbs)	Break 25Nm (221) / Run 20Nm (178)	Break 25Nm (221) / Run 20Nm (178)
Voltage range	24VDC, 24VAC, 12VDC, 110VAC, 220VAC	12VDC, 24V AC/DC, 110-220VAC
Mounting (ISO5211) x drive (female octagon)	F03, F04 & F05 x 14mm	F03, F04 & F05 x 14mm
Standard Run Time	10 Seconds	10 Seconds
Electrical connection	Pre-wired multi-core 0.8m cable	Pre-wired multi- core 0.8m cable
End of travel confirmation (dry contact/volt-free)	2 x Mechanical micro-switches	2 x Electronic relays
LED Status	LED open/close	LED open/close/ alert
Actuator Dimensions & Weight in Kg	Height 90mm x Width 70mm x Length 104mm 0.8Kg	

Basic Series Functionality:	On Off (power open/power close)	Failsafe closed/open	Hi Speed On Off
Smart Series Functionality::	On Off (power open/power close)	Failsafe closed/open/3rd position	Hi Speed On Off / Modulating
	Modulating 4-20ma or 0-10v	Modulating Failsafe	Modbus RS485
	Timer	Wireless	Multi Turn



SERIES 50

AVA 50Nm retains the compact design of the 20Nm actuator whilst offering the additional torque output needed for larger diameter valves. The 50 series was the first actuator to introduce the LED status light. The LED light will show the user locally if the actuator is open or closed and with Smart actuators if the actuator has an alarm condition. All actuators now have LED's.



Standard Specifications	B50 Basic	S50 Smart
Max Rated torque Nm output (in.lbs)	60Nm Break (532) / Run 50Nm (443)	60Nm Break (532) / Run 50Nm (443)
Voltage range	24VDC, 24VAC, 12VDC, 110VAC, 220VAC	12VDC, 24V AC/DC, 110-220VAC
Mounting (ISO5211) x drive (female octagon)	F05 & F07 x 14mm	F05 & F07 x 14mm
Standard Run Time	12 Seconds	12 Seconds
Electrical connection	Pre-wired multi-core 0.8m cable	Pre-wired multi- core 0.8m cable
End of travel confirmation (dry contact/volt-free)	2 x Mechanical micro-switches	2 x Electronic relays
LED Status	LED open/close	LED open/close/ alert
Actuator Dimensions & Weight in Kg	Height 121mm x Width 111mm x Length 132mm Weight 2Kg	

Basic Series Functionality:	On Off (power open/power close)	Failsafe closed/open	Hi Speed On Off
Smart Series Functionality::	On Off (power open/power close)	Failsafe closed/open/3rd position	Hi Speed On Off / Modulating
	Modulating 4-20ma or 0-10v	Modulating Failsafe	Modbus RS485
	Timer	Wireless	Multi Turn



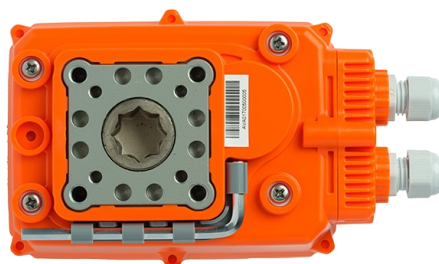
SERIES 80-110

AVA 80-110 series was the first actuator to offer dual torque output range within the same housing. The 80-110 range also was the first to introduce a new wiring box with conduit cable glands in place of the 20 and 50 series pre wired solution. Available in hi speed offering 110Nm torque output in 6 seconds run time. Also available in Multi Turn, Modbus and more



Standard Specifications	B80-110 Basic	S80-110 Smart
Max Rated torque Nm output (in.lbs)	Break 90Nm (796) / Run 80Nm (708)	Break 90Nm (796) / Run 80Nm (708)
Voltage range	24VDC, 110VAC, 220VAC	24V AC/DC, 110-220VAC
Mounting (ISO5211) x drive (female octagon)	F05 & F07 x 17mm	F05 & F07 x 17mm
Standard Run Time	10 Seconds	10 Seconds
Electrical connection	Terminal strip via gland	Terminal Strip via gland
End of travel confirmation (dry contact/volt-free)	2 x Mechanical micro-switches	2 x Electronic relays
LED Status	LED open/close	LED open/close/ alert
Actuator Dimensions & Weight in Kg	Height 122mm x Width 115mm x Length 165mm Weight 2.2Kg	

Basic Series Functionality:	On Off (power open/power close)	Failsafe closed/open	Hi Speed On Off
Smart Series Functionality::	On Off (power open/power close)	Failsafe closed/open/3rd position	Hi Speed On Off / Modulating
	Modulating 4-20ma or 0-10v	Modulating Failsafe	Modbus RS485
	Timer	Wireless	Multi Turn



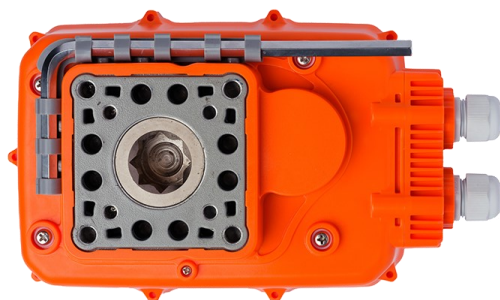
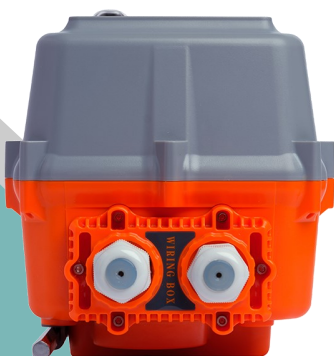
SERIES 200-400

Our latest actuator and offering the latest technology from the highly skilled AVA engineers. Declutchable gearbox, dual screen for displaying more information than ever. New sensor technology includes vibration, humidity and temperature sensors. The actuator can run self diagnostic health check to ensure the motor and other key components are in good working order.



Standard Specifications	B200-400 Basic	S200-400 Smart
Max Rated torque Nm output (in.lbs)	Break 250Nm (2212) / Run 200Nm (1770)	Break 250Nm (2212) / Run 200Nm (1770)
Max Rated torque Nm output (in.lbs)	Break 450Nm (3982) / Run 400Nm (3540)	Break 450Nm (3982) / Run 400Nm (3540)
Voltage range	24VAC/DC or 95-265VAC	24VAC/DC or 95-265VAC
Mounting (ISO5211) x drive (female octagon)	F07 & F10 x 22mm	F07 & F10 x 22mm
Standard Run Time	25 Seconds	25 Seconds
Electrical connection	Terminal strip via gland	Terminal Strip via gland
End of travel confirmation (dry contact/volt-free)	2 x Mechanical micro-switches	2 x Electronic relays
LED Status	LED open/close	LED open/close/ alert
Actuator Dimensions and weight	Height 170.6mm x Width 159.4mm x Length 266.7mm Weight 2Kg	

Basic Series Functionality:	On Off (power open/power close)	Failsafe 400Nm via internal supercapacitor	
Smart Series Functionality::	On Off (power open/power close)	Failsafe closed/open/3rd position	Modulating 4-20mA or 0-10V
	Modulating Failsafe	Modbus and Multi Turn coming soon	



Self Diagnostics via **SmartMenu** firmware

MT SERIES - MULTI TURN

Our Multi Turn actuators utilise the same actuator housing as our standard quarter turn series including the same housing. We use the firmware and a custom sensor to enable multi turn capabilities. Available from 20Nm to 110Nm in both on off and modulating functionality. To be used with non rising stem valves only.

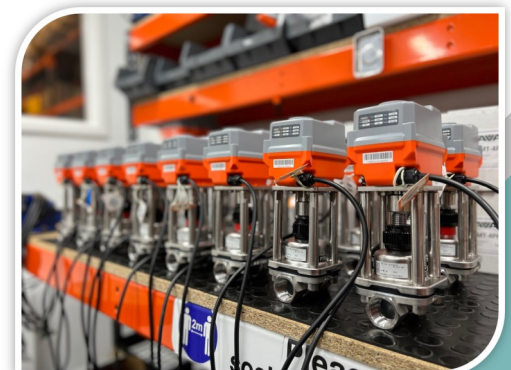


Multi Turn Specifications				Speed	Functionality		
Model	Voltage	Torque	Max No# Turns	Per 360 turn	On Off	Modulating	Failsafe
S2019MT-5PHE-14	95-265VAC	20NM	5	20 Seconds	✓	✓	✗
S2019MT-6PHE-14	24VDC	20NM	5	4 Seconds	✓	✓	✗
S5019MT-5PHE-14	95-265VAC	50NM	15	16 Seconds	✓	✓	✗
S5019MT-6PHE-14	24VDC	50NM	15	16 Seconds	✓	✓	✗
S8019MT-5PHE-14	95-265VAC	80NM	20	24 Seconds	✓	✓	✗
S8019MT-6PHE-14	24VAC/DC	80NM	20	24 Seconds	✓	✓	✗
S11019MT-5PHE-14	95-265VAC	110NM	20	24 Seconds	✓	✓	✗
S11019MT-6PHE-14	24VAC/DC	110NM	20	24 Seconds	✓	✓	✗

UNIQUE MULTI TURN FEATURE:

The AVA Multi Turn actuators can be set to the number of required turns via the onboard firmware. The 20nm for example can be set from 1 to 5 and anything in between to match your exact requirement. Now that is Smart!

Suitable for non rising stem diaphragm, knife gate and gate valves.



WIRING CONFIGURATIONS & QR TECHNICAL SUPPORT

AVA have a number of wiring options available both in terms of the pre wired cables that you will receive with your actuators and the wiring schematics to use in order to get them working. From pre wired crimped cables ready to terminate to WEIPU IP rated plug and play soldered adapters. See below a summary of our standard options available.



SERIES 20 & 50 as standard are pre wired with a 0.8m cable for the customer to connect into their system. The actuators will arrive with crimped connection as shown above. Longer pre wired lengths are available.



SERIES 80 to 400 as standard are not pre wired and will come with 2 x conduit plugs fixed to the wiring box located at the rear of the actuator. Removing presents a number terminal strip for the customer to wire.

WEIPU IP RATED CABLES:

AVA are now offering Weipu's range of IP67 and IP68 rated cables for pre wired actuators. We can supply all actuators pre wired on request. We would typically supply the actuator with 0.8m cable from the actuator into a Weipu connector followed by a second connector with the pre agreed length required such as 5-10m long.

We can supply the connectors welded or screwed.



QR CODE FOR AFTER SALE SUPPORT:

We have now added a purpose built for mobile and tablet, QR after sales support site. On scanning the QR code on your smart phone camera, you will be taken to site specific for the actuator you have purchased and can access everything from datasheets to wiring diagrams and more.

We will also be adding over time a number of support videos, also accessible via the QR site.

Each actuator will have QR code located on the side of the actuator.



MODBUS AND MORE...

AVA are able to offer Modbus RS485 BUS communication, free issue valve automation and some bespoke functionality such as Timer series. AVA can also offer private label solutions for customers looking to change the colour of our actuators for their own company branding. We are already working some of the leading valve manufacturers around the world under a private label solution.



MODBUS RS485 PROTOCOL AVAILABLE:

AVA Smart actuators are available with Modbus RS485 protocol for BUS communication applications. Modbus allows the actuators to be connected to the system and provide feedback such as the command signal, feedback signal and alerts AVA is able to also offer Canbus protocol. Speak to our technical sales team today.



EXD EXPLOSION PROOF SERIES:

Available in 20Nm, 80-110Nm models, we can offer Zone 1-2 EXD rated, explosion proof actuators. Available with On Off, Failsafe, Modulating and Modulating Failsafe in both Basic and Smart series, in 24VAC/DC or 95-265VAC voltage range. *Photo shows series 80EXD with 3" ATEX flanged PN16 stainless steel ball valve.*



NO PLC REQUIRED WITH THE SMART TIMER SERIES:

All you need is power, the actuator will do the rest. The Timer series allows the user to set a 24/7 timer from the AVA SmartMenu you can choose from a number of options to set the actuator to open and close at set times, or simply pulse open and close with or without a specified time delay.

FREE ISSUE VALVES FOR ASSEMBLING AND TESTING:

We offer a service of assembling and testing our actuators to your valves to our ISO 9001:2015 quality assurance systems. We dry bench function test the assemblies before shipping to you. We will function test the operation of the actuated valve as well as checking the open and close feedback or where the actuator is a modulating actuator, we will check for 4-20mA or 0-10V feedback. If you require actuated valves, we can supply this on request.



AVAILABLE GLOBALLY

USA & CANADA

Sales distribution channels in place across North, Central and South America.

UK & EUROPE

Head Office in UK with customers across Europe.
Sales and stock location in Barcelona coming in 2023



AFRICA

Distribution and stock on the ground in South Africa.

ASIA & AUSTRALIA

Stocked distribution within Asia including Australia.



FLOWTEKNIK
SCANDINAVIA APS



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