

# ASAHI/AMERICA SERIES 19 ELECTRIC ACTUATORS

#### CAV Com Pack<sup>®</sup> Electric Actuators SAV Smart Pack<sup>®</sup> Electric Actuators MAV MultiPack<sup>®</sup> Electric Actuators









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## SERIES 19 FAMILY OF SMART ELECTRIC ACTUATORS

# SMART. Compact. Powerful.

The Series 19 family of smart electric actuators by Asahi/America packs a variety of standard features into a compact, lightweight and corrosion resistant package that is perfect for OEMs, skid manufacturers and general use locations. Available in on/off, modulating, failsafe, and modulating failsafe configurations, and three powerful sizes, the Series 19 coupled with an Asahi/America ball or butterfly valve offers longevity, reliability and precise control for your application. All actuators are factory-mounted and tested to ensure dependable operation.

#### Series 19 Actuator Size Selection Chart

Valve	Valve Size	C20	S20	S50	S110	S400
Type-14 Diaphragm Valve (24 VAC/VDC)	1/2" - 1-1/4"		Х			
	1-1/2" - 4"			Х		
Type-14 Diaphragm Valve (95-265 VAC)	1/2"-4"			х		
Type-C Gate Valve	1-1/2" - 4"			Х		
Type-27 Omni® Ball Valves	3/8"-2"	х				
Type-21/21a SST Ball Valves	1/2" - 2"	Х	Х			
	2-1/2" - 3"			Х		
	4"				Х	
Type-23 Multiport® Valves	1/2"-2"	Х	Х			
	3"			Х		
	4"				Х	
Type-57P Butterfly Valves	1-1/2" - 2-1/2"		Х			
	3" - 4"			Х		
	5" - 6"				Х	
	8" - 10"					Х



The Series 19 CAV Com Pack® is available as an on/off or failsafe unit that mounts on Asahi/America Type-27 Omni® ball valves, Type-21/21a ball valves, and Type-23 Multiport® ball valves to provide smooth operation in a compact and lightweight package.



The Series 19 SAV Smart Pack<sup>®</sup> is smart unit that is available as an on/off, failsafe, modulating, or modulating failsafe unit and mounts on Asahi/America Type-21/21a and Type-21a SST ball valves, Type 23 Multiport<sup>®</sup> ball valves, and Type-57 series butterfly valves.



The Series 19 MAV MultiPack® is a multiturn actuator available as on on/off or modulating unit that mounts on Asahi/America Type-14 diaphragm valves and gate valves.

## SERIES 19 VALVE/ACTUATOR PACKAGES

#### SERIES 19 CAV COM PACK® ELECTRIC ACTUATORS

Series 19 CAV Com Pack<sup>®</sup> electric actuators can be factory-mounted on Type-27 Omni<sup>®</sup> ball valves, Type-21/21a ball valves and Type-23 Multiport<sup>®</sup> ball valves. Choose from PVC or CPVC valves shipped with either socket or threaded end connectors. The Com Pack<sup>®</sup> is available as an on/off actuator or failsafe only. Type-27 Omni<sup>®</sup> ball valves are only available with on/off Series 19 CAV electric actuator models.





Type-27 Omni<sup>®</sup> Ball Valves Sizes: 3/8" - 2"





Type-21/21a Ball Valves Sizes: 1/2" - 2"



Type-23 Multiport® Ball Valves Sizes: 1/2" - 2"

#### SERIES 19 SAV SMART PACK® ELECTRIC ACTUATORS

Series 19 SAV Smart Pack<sup>®</sup> electric actuators can be factory-mounted on Type-21/21a and Type-21a SST ball valves, Type-23 Multiport<sup>®</sup> ball valves and Type-57 series butterfly valves. Choose from PVC, CPVC, PP, and PVDF valve bodies, and socket or threaded end connectors (ball valves). One part number for valve and actuator packages makes ordering easy. All actuated Smart Packs<sup>®</sup> are available in the four different models: on/off, modulating, failsafe, and modulating failsafe.



Type-21/21a SST True Union Ball Valves Sizes: 1/2" - 4"



Type-23 Multiport® Ball Valves Sizes: 1/2" - 4"

3



Type-57 Series Butterfly Valves Sizes: 1-1/2" - 10"



For wiring diagrams and other technical documents, please visit our website.

## SERIES 19 VALVE/ACTUATOR PACKAGES

#### SERIES 19 MAV MULTIPACK® ELECTRIC ACTUATORS

Series 19 MAV MultiPack<sup>®</sup> electric actuators can be factory-mounted on Asahi/America Type-14 diaphragm valves. Choose from PVC, CPVC, PP, and PVDF bodies and true union or flanged end connectors. The units can also be mounted on Asahi/America flanged gate valves in PVC bodies. The MultiPack<sup>®</sup> is available in two different models: on/off or modulating actuator.





Type-14 Diaphragm Valves Sizes: 1/2" - 4"



Type-C Gate Valves Sizes: 1-1/2" - 4"



#### **SERIES 19 IN ACTION**

Series 19 actuators are multipurpose units installed in a variety of industries. From an electric vehicle facility's water treatment system in the western US (right), to an indoor farming facility in the midwestern US (bottom right), and a fish farm in the southern US (bottom), the Series 19 actuation line provides reliability and rugged service where it's needed most.



For wiring diagrams and other technical documents, please visit our website.



## SERIES 19 COMPACT ON/OFF



An on/off Series 19 electric actuator provides maintenance- and trouble-free operation in an on/off application. For wiring diagrams and other technical documents, please visit our website.

- **Compact:** Compact and lightweight actuated valve package that is ideal for OEMs
- Motor: Reversing, brushless DC motor
- Multi-voltage: 95 VAC to 265 VAC or 24 VAC/VDC
- Gear Train: Permanently lubricated solid gears
- Corrosion Resistant Enclosure: NEMA 4X ABS enclosure with stainless
  steel trim
- Position Indication: Highly visible dome position indicator
- LED Position Indication: RED closed, GREEN open
- Manual Override: Manually cycle valve via electroless nickel-plated hex key
- Auxiliary Contacts: Open and closed dry contacts rated 0.1 Amp @ 250 VAC, 0.5 Amp @ 30 VDC
- Space Heater: A two-watt heater is internally wired to limit condensation
- QR Code: Links to user manual; includes wiring schematic





#### SERIES 19 SMART ON/OFF



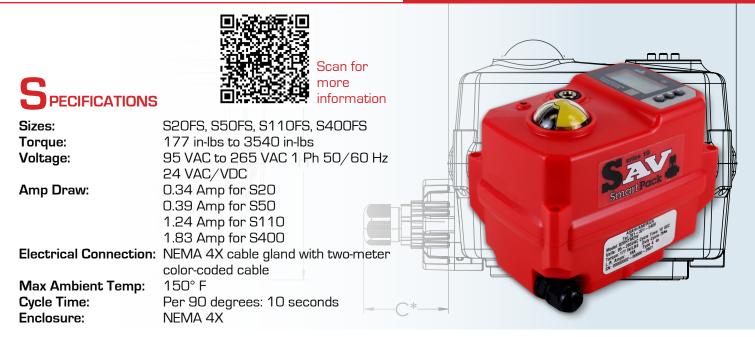
Specifications	Scan for more information			
Sizes:	S20, S50, S110, S400			
Torque:	177 in-lbs to 3540 in-lbs			
Voltage:	95 VAC to 265 VAC 1 Ph 50/60 Hz			
	24 VAC/VDC			
Amp Draw:	0.34 Amp for S20			
	0.39 Amp for S50			
	1.24 Amp for S110			
	1.83 Amp for S400			
Electrical Connection:	NEMA 4X cable gland with two-meter			
	color-coded cable			
Max Ambient Temp:	150° F			
Cycle Time:	Per 90 degrees: 10 seconds			
Enclosure:	NEMA 4X			

An on/off Series 19 electric actuator provides maintenance- and trouble-free operation in an on/off application. For wiring diagrams and other technical documents, please visit our website.

- **Compact:** Perfect for OEM and skid manufacturers with a footprint of 2.75" x 4" up to a 2" ball valve
- OLED Screen: Displays valve position, alarms (such as an over torque condition)
- Push Buttons: Used to calibrate/adjust end positions and operate local controls
- Multi-voltage: 95 VAC to 265 VAC or 24 VAC/VDC
- Position Indication: Highly visible beacon position indicator
- LED Position Indication: RED closed, GREEN open, BLUE fault
- Manual Override: Manually cycle valve via electroless nickle-plated hex key
- Auxiliary contacts: Open and closed dry contacts rated 0.1 Amp @ 250 VAC, 0.5 Amp @ 30 VDC
- Space Heater: Internally wired to limit condensation
- **QR Code:** Links to user manual; includes wiring schematic



## **SERIES 19 SMART FAILSAFE**



A failsafe actuator cycles as on/off while charging internal capacitors. When power is lost, the capacitors discharge and power the unit to a predetermined fail position. When power is restored, the capacitors charge up again. For wiring diagrams and other technical documents, please visit our website.

- Compact: Perfect for OEM and skid manufacturers
- OLED Screen: Displays valve position and alarms
- **Push Buttons:** Used to calibrate/adjust end positions and operate local controls
- Multi-voltage: 95 VAC to 265 VAC or 24 VAC/VDC
- Motor: Reversing, brushless DC motor
- Capacitor Discharge System: A capacitor is used in place of batteries for failsafe mode
- Selectable Fail Position: Fail close is standard; fail as is, or fail open are options
- Corrosion Resistant Enclosure: NEMA 4X ABS enclosure with stainless steel
  trim
- Electrical Connection: NEMA 4X cable gland with two-meter cable length
- LED Position Indication: RED closed, GREEN open, BLUE fault
- Manual Override: Manually cycle valve via electroless nickel-plated hex key
- Auxiliary Contacts: Open and close dry contacts rated 0.1 Amp @ 250 VAC, 0.5 Amp @ 30 VDC
- Alarm Contacts: Dry contacts rated 0.1 Amp @ 250 VAC, 0.5 Amp @ 30 VDC for alarm status (over torque, as an example)
- Space Heater: Internally wired to limit condensation
- CE Compliant: All actuators are CE labeled and compliant
- **75% Duty Cycle:** Ideal for high cycling applications
- **Output Torque:** Series 19 electric actuators have an output torque range from 177 in-lbs to 442 in-lbs
- Simple Wiring: Wiring technique is the same for all voltage units
- Local Controls: Used with OLED and push buttons, a user can locally open or close units via password
- **QR Code:** Links to user manual; includes wiring schematic





#### **SERIES 19 SMART MODULATING**



Specifications	Scan for more information
Sizes:	S20, S50, S110, S400
Torque:	177 in-lbs to 3540 in-lbs
Voltage:	95 VAC to 265 VAC 1Ph 50/60 Hz
	24 VAC/VDC
Amp Draw:	0.34 Amp for S20
	0.39 Amp for S50
	1.24 Amp for S110
	1.83 Amp for S400
Electrical Connection:	NEMA 4X cable gland with two-meter
	color-coded cable
Max Ambient Temp:	150° F
Cycle Time:	Per 90 degrees: 10 seconds
Enclosure:	NEMA 4X

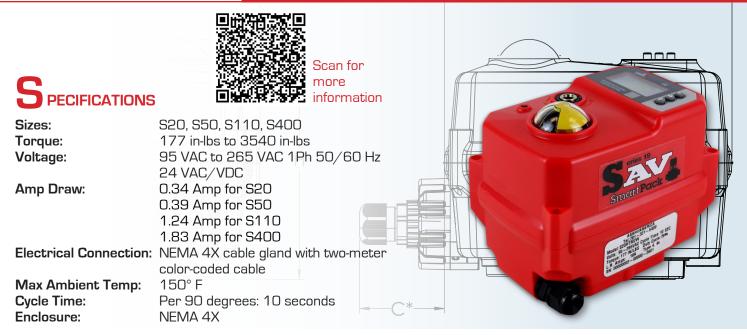
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Series 19 modulating actuators provide precise flow for your process line or system. The actuators use voltage or current control signals to accurately modulate the valve to the required position, while simultaneously providing voltage or current position feedback. For wiring diagrams and other technical documents, please visit our website.

- **Compact:** Perfect for OEM and skid manufacturers with a footprint of 2.75" x 4" up to a 2" ball valve
- OLED Screen: Displays input command, position status, alert conditions
- Push Buttons: Used to calibrate/adjust end positions and operate local controls
- Multi-voltage: 95 VAC to 265 VAC or 24 VAC/VDC
- Motor: Reversing, brushless DC motor
- Gear Train: Permanently lubricated steel gears
- Corrosion Resistant Enclosure: NEMA 4X ABS enclosure with stainless
  steel trim
- **ISO** mounting configuration
- Electrical Connection: NEMA 4X cable gland with two-meter cable length
- Position Indication: Highly visible beacon position indicator
- LED Fault: BLUE
- Manual Override: Manually cycle valve via electroless nickel-plated hex key
- Selectable Control Signal: User can select 4-20 mA, 0-20 mA, 0-10 VDC, 2-10 VDC, or 1-5 VDC (size 20 is specifically a current control signal or a voltage control signal)
- Reverse Acting: User can select standard operation or reverse acting
- Selectable Fail Position: If control signal is lost, the unit can be calibrated to fail as is, fail open, or fail close
- **Transmitter:** Current or voltage transmitter (matching the control signal) is standard equipment
- Alarm Contacts: Dry contacts rates 0.1 Amp @ 250 VAC, 0.5 Amp @ 30 VDC for alarm status (over torque, as an example)
- Space Heater: Internally wired to limit condensation
- **QR Code:** Links to user manual; includes wiring schematic



## SERIES 19 SMART MODULATING FAILSAFE



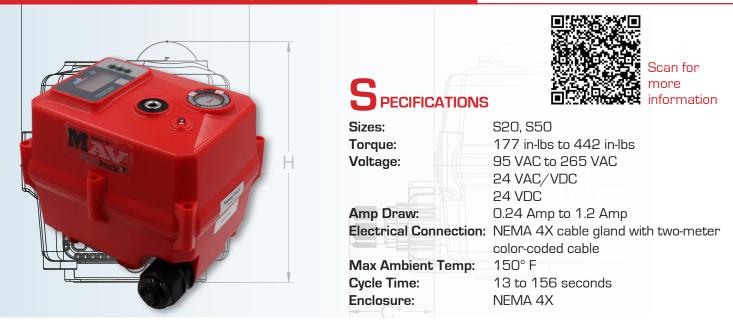
The Series 19 modulating failsafe combines the features of a modulating unit with the reliability of a failsafe unit. With all of the same features of the modulating unit, the modulating failsafe employs a capacitor discharge design for the failsafe ability. When the power supply is lost, the failsafe system will cycle the valve to a predetermined position (open, closed, or as is). For wiring diagrams and other technical documents, please visit our website.

- **Compact:** Perfect for OEM and skid manufacturers with a footprint of 2.75" x 4" up to a 2" ball valve
- **OLED Screen:** Displays input command, position status, alert conditions
- Push Buttons: Used to calibrate/adjust end positions and operate local controls
- Multi-voltage: 95 VAC to 265 VAC or 24 VAC/VDC
- Motor: Reversing, brushless DC motor
- Gear Train: Permanently lubricated steel gears
- Corrosion Resistant Enclosure: NEMA 4X ABS enclosure with stainless
  steel trim
- **ISO** mounting configuration
- Electrical Connection: NEMA 4X cable gland with two-meter cable length
- Position Indication: Highly visible beacon position indicator
- LED Fault: BLUE
- Manual Override: Manually cycle valve via electroless nickel-plated hex key
- Selectable Control Signal: User can select 4-20 mA, 0-20 mA, 0-10 VDC, 2-10 VDC, or 1-5 VDC (size 20 is specifically a current control signal or a voltage control signal)
- Reverse Acting: User can select standard operation or reverse acting
- Selectable Fail Position: If control signal is lost, the unit can be calibrated to fail as is, fail open, or fail close
- **Transmitter:** Current or voltage transmitter (matching the control signal) is standard equipment
- **Capacitor Discharge System:** A capacitor is used in place of batteries for failsafe mode
- **QR Code:** Links to user manual; includes wiring schematic





#### SERIES 19 SMART ON/OFF MULTITURN



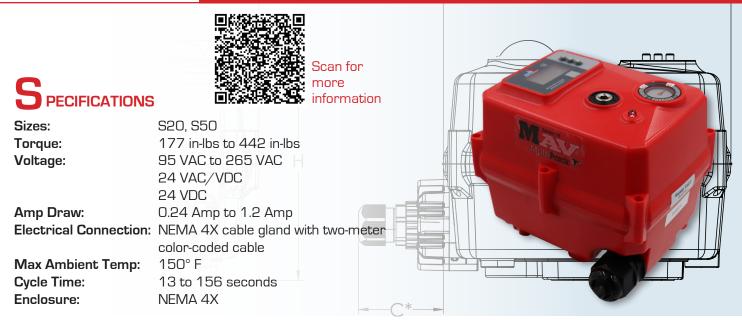
An on/off Series 19 electric actuator provides maintenance- and trouble-free operation in an on/off application. For wiring diagrams and other technical documents, please visit our website.

- Compact: Perfect for OEM and skid manufacturers
- OLED Screen: Displays valve position, alarms (such as an over torque condition)
- Push Buttons: Used to calibrate/adjust end positions, local controls
- Multi-voltage: 95 VAC to 265 VAC or 24VAC/VDC
- Motor: Reversing, brushless DC motor
- Gear Train: Permanently lubricated steel gears
- **Corrosion Resistant Enclosure:** NEMA 4X PC/PET enclosure with stainless steel trim
- **ISO** mounting configuration
- Electrical Connection: NEMA 4X cable gland with two-meter cable
- Visual Position Indication: Flat disc position indicator
- LED Position Indication: RED closed, GREEN open, BLUE fault
- Manual Override: Manually cycle valve via electroless nickel-plated hex key
- Auxiliary Contacts: Open and closed dry contacts rated 0.1 Amp @ 250 VAC, 0.5 Amp @ 30 VDC
- Alarm Contacts: Dry contacts rated 0.1 Amp @ 250 VAC, 0.5 Amp @ 30 VDC for alarm status (over torque, as an example)
- Space Heater: Internally wired to limit condensation
- CE Compliant: All actuators are CE labeled and compliant
- **70% Duty Cycle:** Extended duty cycle is ideal for high cycling applications
- Simple Wiring: Wiring technique is the same for all voltage units
- Local Controls: Used with OLED and push buttons, a user can locally open or close units via password
- QR Code: Links to user manual; includes wiring schematic





### **SERIES 19 SMART MODULATING MULTITURN**



Series 19 modulating actuators provide precise flow for your process line or system. The actuators use voltage or current control signals to accurately modulate the valve to the required position, while simultaneously providing voltage or current position feedback. For wiring diagrams and other technical documents, please visit our website.

- Compact: Perfect for OEM and skid manufacturers
- **OLED Screen:** Displays valve position, alarms (such as an over torque condition)
- Push Buttons: Used to calibrate/adjust end positions, local controls
- Multi-voltage: 95 VAC to 265 VAC, 24VAC/VDC
- Motor: Reversing, brushless DC motor
- Gear Train: Permanently lubricated steel gears
- Corrosion Resistant Enclosure: NEMA 4X PC/PET enclosure with stainless
  steel trim
- ISO mounting configuration
- Electrical Connection: NEMA 4X cable gland with two-meter cable
- Visual Position Indication: Flat disc position indicator
- LED Position Indication: RED closed, GREEN open, BLUE fault
- Manual Override: Manually cycle valve via electroless nickel-plated hex key
- Selectable Control Signal: User can select 4-20 mA, 0-20 mA, 0-10 VDC, or 1-5 VDC for Type-14 95-265 VAC, and can select 4-20 mA, 0-20 mA, 0-10 VDC, 2-10 VDC, or 1-5 VDC for Type-14 24 VAC/VDC
- **Reverse Acting:** (on Type-14 diaphragm valves) User can select standard operation or reverse acting
- Selectable Fail Position: (on Type-14 diaphragm valves) If control signal is lost, the unit can be calibrated to fail as is, fail open, or fail close
- Transmitter: (on Type-14 diaphragm valves) Current or voltage transmitter (matching the control signal) is standard equipment
- Auxiliary Contacts: (on Type-C gate valves) Open and closed dry contacts rated 0.1 Amp @ 250 VAC, 0.5 Amp @ 30 VDC
- Alarm Contacts: Dry contacts rated 0.1 Amp @ 250 VAC, 0.5 Amp @ 30 VDC for alarm status (over torque, as an example)
- Space Heater: Internally wired to limit condensation
- CE Compliant: All actuators are CE labeled and compliant
- 70% Duty Cycle: Extended duty cycle is ideal for high cycling applications
- Simple Wiring: Wiring technique is the same for all voltage units
- Local Controls: Used with OLED and push buttons, a user can locally open or close units via password
- QR Code: Links to user manual; includes wiring schematic







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