

**Actuated Valves Technical**  
**Actuator Accessories Selection- Call for Application Detail**



**Step 3: Actuator Accessory Selection**

Premium actuator accessories are available for both Electric actuators (Selection Table 7) and Pneumatic actuators (Selection Table 8 and 9). Actuator accessory options are selected and ordered separately as individual Accessory part numbers for the actuated valve. If accessory options are to be ordered, be sure the suffix, "-A", was added to the end of the selected Actuated Valve Package part number configured in Step 1 & 2 to designate that the accessories are assembled with the valve package.

**A separate part number is used for each accessory ordered.** Select the desired Accessory Part Number from the selection tables for each accessory.

**Example:** An electric actuated valve is desired with a heater and thermostat, an SPDT limit switch set and a 0-5 VDC signal positioner board. From Table 7, the following Accessory part numbers should be ordered with the actuated valve package: Heater & Thermostat = **A-H1**, Limit Switch Set = **A-LS1**, Positioner Board = **A-PB2**

**Contact Spears® for any desired accessories or functions not specified in the Accessory Selection Tables.**

**Selection Table 7: Diaphragm Valve Premium Electric Actuator Accessories**

Accessory	Description	Accessory Part Number
Heater	Heater & Thermostat - On @ 41° F, Off @ 60.8°F	<b>A-H1</b>
	Heater & Thermostat - On @ 62.6°F, Off @ 80.6°F	<b>A-H2</b>
Auxiliary Limit Switches	2-SPDT Limit Switch Set (1/2" shaft cam)	<b>A-LS1</b>
	2-SPDT Limit Switch Set (3/8" shaft cam3)	<b>A-LS2</b>
	2-SPDT Limit Switch Set for Electric Spring Return	<b>A-LS3</b>
Position Indicators	LED Indicator Lights	<b>A-P2</b>
Modulating Positioner Boards	115 VAC 4-20 mA	<b>A-PB1</b>
	115 VAC 0-5 VDC	<b>A-PB2</b>
	115 VAC 0-10 VDC	<b>A-PB3</b>
	230 VAC 4-20 mA	<b>A-PB4</b>
	230 VAC 0-5 VDC	<b>A-PB5</b>
	230 VAC 0-10 VDC	<b>A-PB6</b>
	24 VAC 4-20 mA	<b>A-PB7</b>
	24 VAC 0-5 VDC	<b>A-PB8</b>
	24 VAC 0-10 VDC	<b>A-PB9</b>
	24 VDC 4-20 mA	<b>A-PB10</b>
	24 VDC 0-5 VDC	<b>A-PB11</b>
	24 VDC 0-10 VDC	<b>A-PB12</b>
	115 VAC 4-20MA For Electric Spring Return Actuator	<b>A-PB13</b>
Transmitter	4-20mA	<b>A-T1</b>
Torque Sensors	Adjustable Electronic Torque Sensor	<b>A-TS1</b>
Speed Controller	Variable Speed Controller	<b>A-SC1</b>
"2-Wire" Control <sup>1</sup> (operates as solenoid valve)	Control Relay Switch Setup 115 VAC- Normally Closed	<b>A-CR1</b>
	Control Relay Switch Setup 115 VAC- Normally Open	<b>A-CR2</b>
	Control Relay Switch Setup 24 VAC- Normally Closed	<b>A-CR3</b>
	Control Relay Switch Setup 24 VAC- Normally Open	<b>A-CR4</b>
	Control Relay Switch Setup 230 VAC- Normally Closed	<b>A-CR5</b>
	Control Relay Switch Setup 230 VAC- Normally Open	<b>A-CR6</b>
	Control Relay Switch Setup 12 VDC- Normally Closed	<b>A-CR7</b>
	Control Relay Switch Setup 12 VDC- Normally Open	<b>A-CR8</b>
	Control Relay Switch Setup 24 VDC- Normally Closed	<b>A-CR9</b>
	Control Relay Switch Setup 24 VDC- Normally Open	<b>A-CR10</b>
Friction Brake <sup>2</sup>	Mechanical Brake	<b>A-FB1</b>
Lockout Switch	Power disconnect switch activated when manual override is in use	<b>A-LK1</b>

**Note:**

- 1 - "2-Wire" Control is not applicable to Diaphragm Valves
- 2 - Friction Brake are standard on Butterfly Valve and not applicable to Diaphragm Valves
- 3 - The A-LS2 is used on 1/2" - 2" basic Ball Valve packages; A-LS1 used on all other.

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**(Selection Table 7: Premium Electric Actuator Accessories - continued)**

Accessory	Description	Accessory Part Number
Remote/Off/Local Control Switch	Remote/off/local, open/close momentary contact push buttons, red (close) and green (open) position indicating lights	A-RS1
Special Hardware	Titanium Bolts	A-B1
ID TAG	Type 316 Stainless Steel ID Tag 1/2" x 3" (3-lines, 12-characters & spaces)	TAG3-015
Stem Extension	Ball Valve Stem Extension <sup>4</sup>	A-BVSE-xxx-000
	True Union 2000 Ball Valve Stem Extension	A-BVSE2-xxx-000
	Butterfly Valve Stem Extension	A-BFSE-xxx-000
	Diaphragm Valve Stem Extension	A-DESE-xxx-000

4 - Stem Extension Part Numbers: Enter size code for "xxx" in part number. Replace "000" with desired length code in part number; length is from top of valve to bottom of actuator.

**(Selection Table 8: Ball Valve & Butterfly Valve Premium Pneumatic Actuator Accessories)**

Accessory	Description			Accessory Part Number
PNEUMATIC POSITIONERS	3-15 psi	NEMA 4	Flat-Top Indicator	A-PP1
	3-15 psi	NEMA 4	Dome Indicator	A-PP2
	3-15 psi	NEMA 4	Dome Indicator Integrated 2-SPDT Mech. Switches	A-PP3
ELECTRO PNEUMATIC POSITIONERS WITH INDICATOR	4-20mA	NEMA 4	Flat-Top Indicator	A-EP1
	4-20mA	NEMA 4	Dome Indicator	A-EP2
	4-20 mA	NEMA 4	Dome Indicator Integrated 2-SPDT Mech. Switches	A-EP3
	4-20mA	NEMA 7	Flat-Top Indicator	A-EP4
	4-20mA	Intrinsically Safe (CSA/UL)	Flat-Top Indicator	A-EP5
	4-20mA	NEMA 7	Dome Indicator	A-EP6
	4-20mA	Intrinsically Safe w/2-SPST	Proximity Switches	A-EP22
SOLENOID VALVES	3 & 4-way	115 VAC	NEMA 4/4x	A-SV1
	3 & 4-way	230 VAC	NEMA 4/4x	A-SV2
	3 & 4-way	24 VAC	NEMA 4/4x	A-SV3
	3 & 4-way	12 VDC	NEMA 4/4x	A-SV4
	3 & 4-way	24 VDC	NEMA 4/4x	A-SV5
	3 & 4-way	115 VAC	NEMA 4/4x/7/9	A-SV6
	3 & 4-way	230 VAC	NEMA 4/4x/7/9	A-SV7
	3 & 4-way	24 VAC	NEMA 4/4x/7/9	A-SV8
	3 & 4-way	12 VDC	NEMA 4/4x/7/9	A-SV9
	3 & 4-way	24 VDC	NEMA 4/4x/7/9	A-SV10
	Dual Coil 3 & 4-way	115 VAC	NEMA 4/4x	A-SV11
	Dual Coil 3 & 4-way	230 VAC	NEMA 4/4x	A-SV12
	Dual Coil 3 & 4-way	24 VAC	NEMA 4/4x	A-SV13
	Dual Coil 3 & 4-way	12 VDC	NEMA 4/4x	A-SV14
	Dual Coil 3 & 4-way	24 VDC	NEMA 4/4x	A-SV15
	Dual Coil 3 & 4-way	115 VAC	NEMA 7/9	A-SV16
	Dual Coil 3 & 4-way	230 VAC	NEMA 7/9	A-SV17
	Dual Coil 3 & 4-way	24 VAC	NEMA 7/9	A-SV18
	Dual Coil 3 & 4-way	12 VDC	NEMA 7/9	A-SV19
	Dual Coil 3 & 4-way	24 VDC	NEMA 7/9	A-SV20
		Stainless Steel 3 & 4-way 115VAC NEMA 4/4x		A-SV21
		3-Way 24 VDC Hi Temperature (Class H) NEMA 4x		A-SV22
	3 & 4-way	230 VAC	NEMA 4/4x 1/2" NPT Din Connector	A-SV23
LIMIT SWITCH & TRANSMITTER COMBINATION	4-20mA	2-SPDT	NEMA 4/4x/7/9	A-LS20
	4-20mA	2-SPDT	NEMA 4/4x/7/9 w/ Visual Indicator	A-LS21
	4-20mA	2-DPDT	NEMA 4/4x/7/9	A-LS22
	4-20mA	2-DPDT	NEMA 4/4x/7/9 w/ Visual Indicator	A-LS23
	4-20mA	2-Proximity	NEMA 4/4x/7/9	A-LS24
	4-20mA	2-Proximity	NEMA 4/4x/7/9 w/ Visual Indicator	A-LS25

**Note:** Pneumatic and Electro-Pneumatic positioners include brass gauges: 1 input gauge @0-30 psi and 2 output gauges @ 0-160 psi. Stainless steel gauges may be ordered separately.

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**(Table 8: Ball Valve & Butterfly Valve Premium Pneumatic Actuator Accessories - continued)**

Accessory	Description	Accessory Part Number
LIMIT SWITCHES	2-SPDT NEMA 4/4x	A-LS40
	2-SPDT NEMA 4/4x w/ Visual Indicator	A-LS41
	2-SPDT NEMA 4/4x w/ Green/Red Dome Indicator	A-LS41D
	2-SPDT NEMA 4/4x w/ Low Profile Indicator	A-LS41L
	2-DPDT NEMA 4/4x	A-LS42
	2-DPDT NEMA 4/4x w/ Visual Indicator	A-LS43
	2-Proximity NEMA 4/4x	A-LS44
	2-Proximity NEMA 4/4x w/Low Profile Indicator NOTE - Requires user supplied intrinsic barrier	A-LS44L
	2-Proximity NEMA 4/4x w/ Visual Indicator	A-LS45
	2-Proximity NEMA 7/9	A-LS46
	2-Proximity NEMA 7/9 w/ Visual Indicator	A-LS47
	2-Proximity NEMA 7/9 w/ Low Profile Indicator	A-LS47L
	2-SPDT NEMA 4/4x/7/9	A-LS48
	2-SPDT NEMA 4/4x 7/9 w/ Visual Indicator	A-LS49
	2-DPDT NEMA 4/4x/7/9	A-LS50
	2-DPDT NEMA 4/4x/7/9 w/ Visual Indicator	A-LS51
4-SPDT NEMA 4/4x w/ 180° Indicator	A-LS52	
INDICATORS	Dome Indicator	A-V2
TRANSMITTER	4-20mA Output Transmitter	A-PT1
PRESSURE GAUGE SET	Stainless steel case, 3-gauge set for use with positioners: 1 - input pressure gauge 0-30 psi, 2- output gauges 0-160 psi	A-G1
	Plastic case, 3-gauge set for use with positioners: 1 - input pressure gauge 0-30 psi, 2- output gauges 0-160 psi	A-G2
AIR MUFFLERS	Standard Sintered Bronze, 40 micron, 1/8" NPT	A-M18
	Standard Sintered Bronze, 40 micron, 1/4" NPT	A-M14
	Speed Control Muffler (Adjustable Air Flow) 1/8" NPT	A-M2V18
	Speed Control Muffler (Adjustable Air Flow) 1/4" NPT	A-M2V14
ID TAG	Type 316 Stainless Steel ID Tag 1/2" x 3" (3-lines, 12-characters & spaces)	TAG3-015
Stem Extension	Ball Valve Stem Extension <sup>1</sup>	A-BVSE-xxx-000
	True Union 2000 Ball Valve Stem Extension <sup>1</sup>	A-BVSE2-xxx-000
	Butterfly Valve Stem Extension <sup>1</sup>	A-BFSE-xxx-000

**Note:**1 - Stem Extension Part Numbers: Enter size code for "xxx" in part number. Replace "000" with desired length code in part number; length is from top of valve to bottom of actuator.

**Table 9: Diaphragm Valve Premium Pneumatic Actuator Accessories (Not applicable to Diaphragm Valves with Plastic Actuator Housing)**

Accessory	Description	Accessory Part Number
PNEUMATIC POSITIONERS	3-15 psi NEMA 4x w/ Visual Indicator Top Loading (no gauge)	A-DPP1
	3-15 psi NEMA 4x w/ Visual Indicator Top Loading w/ gauges (3)	A-DPP2
	3-15 psi NEMA 4x w/ Visual Indicator Bottom Loading (no gauge)	A-DPP3
	3-15 psi NEMA 4x w/ Visual Indicator Bottom Loading w/ gauges (3)	A-DPP4
ELECTRO PNEUMATIC POSITIONERS	4-20mA (3-15 psi) NEMA 4 x w/Visual Indicator (up to 2")	A-DEP1
	4-20mA (3-15 psi ) NEMA 4 x w/ Visual Indicator w/SS Gauges (up to 2" )	A-DEP2
	4-20mA (3-15 psi ) NEMA 4 x w/Visual Indicator (2-1/2" & up)	A-DEP3
	4-20mA (3-15 psi) NEMA 4 x w/ Visual Indicator w/SS Gauges (2-1/2" & up)	A-DEP4
	4-20mA (3-15 psi) NEMA 4 x w/ Dome Indicator w/2-SPDT Limit Switches (2-1/2"& up)	A-DEP5
3-WAY SOLENOID VALVES	115 VAC NEMA 4/4x	A-DSV1
	230 VAC NEMA 4/4x	A-DSV2
	24 VAC NEMA 4/4x	A-DSV3
	12 VDC NEMA 4/4x	A-DSV4
	24 VDC NEMA 4/4x	A-DSV5
	115 VAC NEMA 7/9	A-DSV6
	230 VAC NEMA 7/9	A-DSV7
	24 VAC NEMA 7/9	A-DSV8
	12 VDC NEMA 7/9	A-DSV9
	24 VDC NEMA 7/9	A-DSV10

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**Table 9: Diaphragm Valve Premium Pneumatic Actuator Accessories (Not applicable to Diaphragm Valves with Plastic Actuator Housing)**

Accessory	Description		Accessory Part Number
4-WAY SOLENOID VALVES	115 VAC	NEMA 4/4x	A-DSV11
	230 VAC	NEMA 4/4x	A-DSV12
	24 VAC	NEMA 4/4x	A-DSV13
	12 VDC	NEMA 4/4x	A-DSV14
	24 VDC	NEMA 4/4x	A-DSV15
	115 VAC	NEMA 7/9	A-DSV16
	230 VAC	NEMA 7/9	A-DSV17
	24 VAC	NEMA 7/9	A-DSV18
	12 VDC	NEMA 7/9	A-DSV19
	24 VDC	NEMA 7/9	A-DSV20
MICRO <sup>2</sup> LIMIT SWITCHES	2-SPDT	NEMA 4 w/ 180° Visual Indicator	A-DLS20
	2-SPDT	NEMA 7/9 w/ 180° Visual Indicator	A-DLS25
PROXIMITY LIMIT SWITCHES	2-SPDT	NEMA 4/4x	A-DLS23
LIMIT SWITCHES <sup>3</sup>	2-SPDT	NEMA 4	A-DLS24
SPEED CONTROLLER	Variable Speed Controller		A-DPSC1
ID TAG	Type 316 Stainless Steel ID Tag 1/2" x 3" (3-lines, 12-characters & spaces)		TAG3-015
Stem Extensions	Diaphragm Valve Stem Extension <sup>1</sup>		A-DPSE-xxx-000
HANDWHEEL OVERRIDE	Handwheel override for 1/2" to 2" Linear Diaphragm Actuators		A-DHW1
	Handwheel override for 2-1/2" to 6" Linear Diaphragm Actuators		A-DHW2

**Note:** 1 - Stem Extension Part Numbers: Enter size code for "xxx" in part number. Replace "000" with desired length code in part number; length is from top of valve to bottom of actuator.

2 - Micro Limit Switches used on valve sizes 1/2" through 2".

3 - Limit Switches used on valve sizes 2-1/2" & larger.