



## Model AB-QM Pressure Independent Balancing and Control Valve

### Actuator Submittal, Modulating AME 85QM

DATE		SPEC. SECTION		PAGE		OF	
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<b>PROJECT</b>	<b>ARCHITECT/ENGINEER</b>	<b>APPROVALS</b>			
		<b>AGENCY</b>	<b>REPRESENTATIVE</b>	<b>DATE</b>	<b>NOTES</b>
		<b>ARCHITECT</b>			
		<b>ENGINEER</b>			
		<b>CONTRACTOR 1</b>			
		<b>CONTRACTOR 2</b>			
		<b>(OTHER)</b>			
		<i>NOTE</i>	<i>COMMENT</i>		
<b>SUPPLIER</b>	<b>CONTRACTOR</b>				
<b>ORDER NO.</b>					



*Description*

AME 85QM actuator is specifically used with the AB-QM 2-way valve bodies in sizes ranging from 8" to 10". This actuator receives a modulating input signal or 3-point floating and can provide an output signal for feedback. Other features of the AME 85QM include:

- Load related 'Switch Off' function to ensure actuator and valve is not exposed to overload
- LED visual operation feedback
- Automatic stem travel calibration
- Selectable linear or equal percentage actuator characteristic
- Manual override

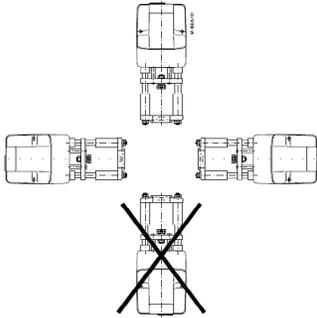
Model	Number	Unit Tag	Qty
AME 85QM			

<b>Code No.</b>	<b>082H1453</b>
Power supply	24 VAC; +10...-15%
Power consumption	12.5 VA
Frequency	50 Hz/60 Hz
Control input Y	0...10 V (2...10 V) Ri = 24 kΩ 0...20 mA (4...20 mA) Ri = 500 Ω
	3-point Floating
Output signal X	0...10V (2...10V)
Close of force	1124 lbf (5000 N) Linear force
Max. actuator travel	40 mm
Speed	8 s/mm
Max. medium temperature	392°F (200 °C)
Ambient temperature	32 ... 131 °F (0 ... 55 °C)
Degree of protection	IP 54, NEMA 2
Weight	21.6 lb (9.8 kg)

*Specification*

The motorized actuator shall be 24VAC powered and mount directly to the AB-QM valve body through Allen screws. The actuator shall be capable of calibrating its travel to the required stem travel of the set valve. The motorize actuator shall also have the ability of an output signal providing feedback regarding the actuator's position. The operation of the actuator shall be determined based upon DIP switches located beneath the cover of the actuator that provides the options of signal input, direction, and actuator characteristic. The motorized actuator shall have a visible LED feedback to provide operation information and a manual override located on the top of the actuator.

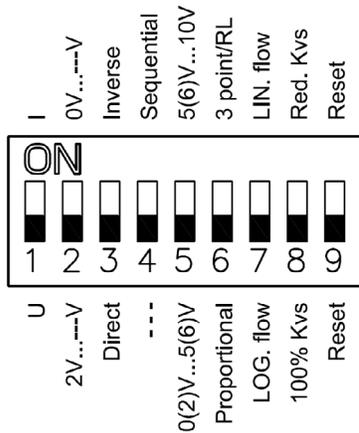
## Orientation



Installation of the valve with the actuator is allowed in a horizontal or pointing in an upwards position. The installation of the actuator pointing down is not allowed.

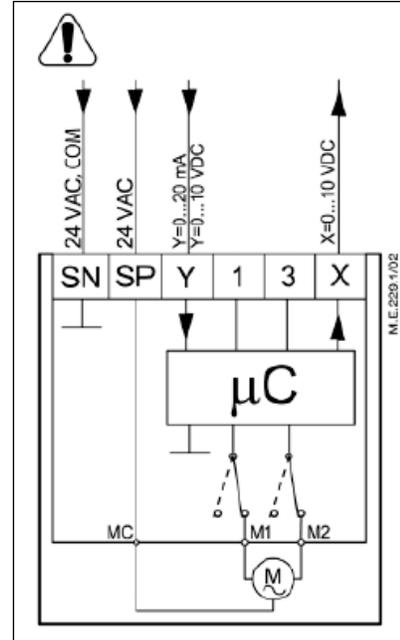
## DIP switches

- **SW 1:** Not used
- **SW 2:** Input signal range selector
  - 0-10 V / 2-10 V
  - 0-20 mA / 4-20 mA
- **SW 3:** Direct or Inverse reaction
  - Valve opens as input signal increases
  - Valve closes as input signal increases
- **SW 4:** Splitting the signal for actuator operation
- **SW 5:** Designation of actuator input signal operation
- **SW 6:** Input signal
  - 3-point Floating
  - Proportional
- **SW 7:** Actuator characteristic
  - Linear or equal-percentage
- **SW 8:** Not used
- **SW 9:** Reset learning of stem travel

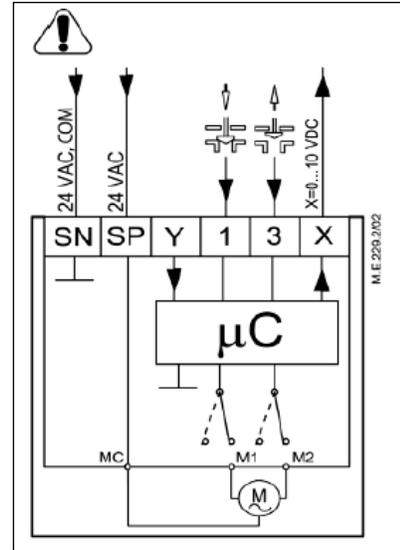


## Wiring

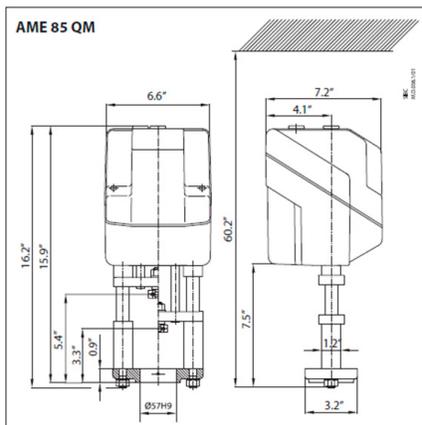
### Proportional



### 3-point Floating



## Dimensions



- SP** 24 VAC/DC ..... Power supply
- SN** Neutral ..... Common
- Y** 0-10 V ..... Input signal  
(2-10 V)  
0-20 mA  
(4-20 mA)
- X** 0-10 V ..... Output signal  
(2-10 V)
- 1,3** Override input signal  
(can not be used for 3-point control)