Model AB-QM Pressure Independent Balancing and Control Valve

Actuator Submittal, Modulating AME 55QM

DATE		SPEC. SECTION			PAGE		OF	

PROJECT	ARCHITECT/ENGINEER	APPROVALS			
		AGENCY	REPRESENTATIVE	DATE	NOTES
		ARCHITECT			
		ENGINEER			
		CONTRACTOR 1			
		CONTRACTOR 2			
SUPPLIER	CONTRACTOR	(OTHER)			
		NOTE	*COMMENT*		
ORDER NO.					

Description

AME 55QM actuator is specifically used with the AB-QM 2-way valve bodies in sizes ranging from 5" to 6". This actuator receives a modulating input signal or 3-point floating and can provide an output signal for feedback. Other features of the AME 55QM 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
- Adjustment of actuator characteristic under equal percentage
- Manual override

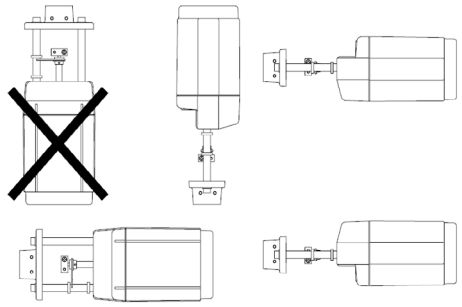
Model	Number	Unit Tag	Qnty
AME 55QM			

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 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 overide located on the top of the actuator.

Code No.	**082H3078**
Power supply	24 VAC; +10...-15%
Power consumption	9 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	450 lbf (2000 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	8.4 lb (3.8 kg)

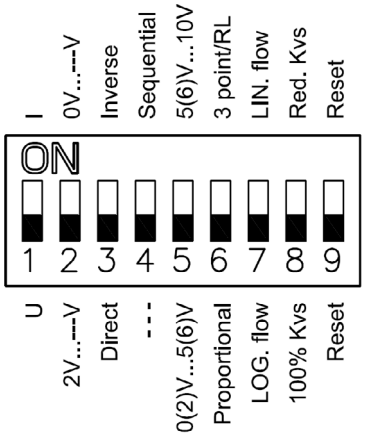
Orientation



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.

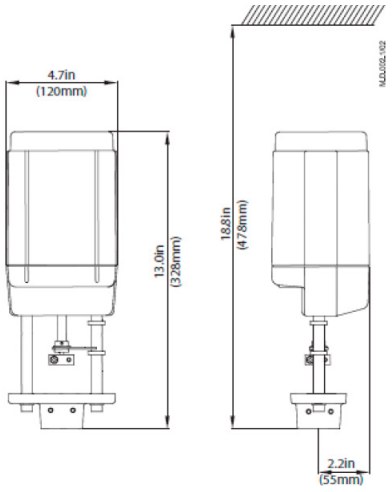
DIP switches

- **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



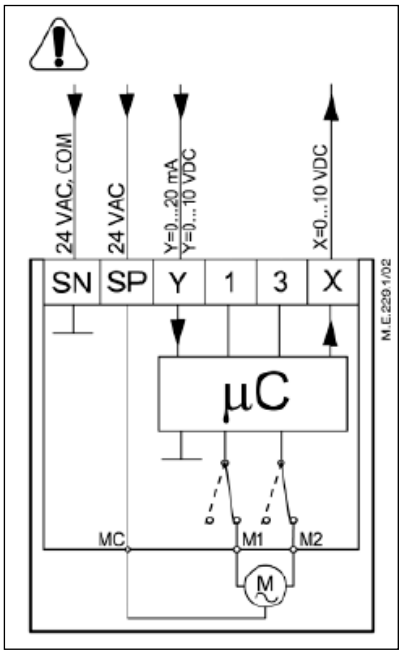
- **SW 7**: Actuator characteristic
  - Linear or equal-percentage
- **SW 8**: Not used
- **SW 9**: Reset learning of stem travel

Dimensions

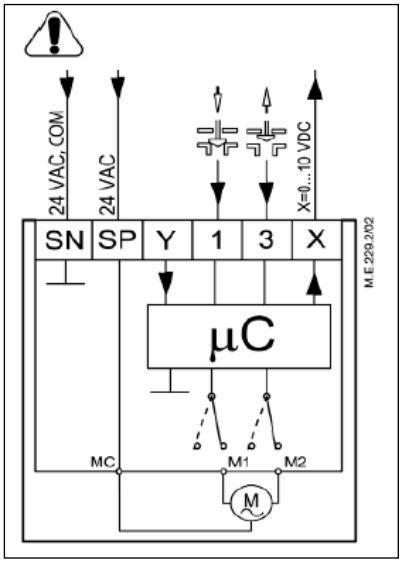


Wiring

Proportional



3-point Floating



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)*