The AME 25 series of low voltage electronic actuators are proportionally controlled and internally incorporate a safety spring function. In the event of power loss, the actuator will return to either a normally open or normally closed position depending on the style selected (spring up-SU or spring down-SD). These series of actuators are mounted to ABQM valves in sizes of 1-½” to 4” valves.

Ordering:

<table>
<thead>
<tr>
<th>Code No.</th>
<th>Style</th>
<th>Description</th>
<th>Signal</th>
</tr>
</thead>
<tbody>
<tr>
<td>082H3041</td>
<td>AME 25SU</td>
<td>Electric actuator with safety spring open function</td>
<td>Proportional &amp; 3-point floating</td>
</tr>
<tr>
<td>082H3038</td>
<td>AME25SD</td>
<td>Electric actuator with safety spring down function</td>
<td></td>
</tr>
</tbody>
</table>

* code no. 003Z0694 adapter is required to mount to the AB-QM valve

Technical Data:

<table>
<thead>
<tr>
<th></th>
<th>AME 25SU</th>
<th>AME 25SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power supply</td>
<td>24 VAC, +10…-15%</td>
<td></td>
</tr>
<tr>
<td>Power consumption</td>
<td>14 VA</td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td>50 Hz / 60 Hz</td>
<td></td>
</tr>
<tr>
<td>Control input, Y</td>
<td>0…10VDC (2…10VDC) Ri=24kΩ 0…20mA (4…20mA) Ri=500Ω</td>
<td>3-point Floating</td>
</tr>
<tr>
<td>Output signal, X</td>
<td>0…10V (2…10V)</td>
<td></td>
</tr>
<tr>
<td>Safety function</td>
<td>Normally open</td>
<td>Normally closed</td>
</tr>
<tr>
<td>Actuator force</td>
<td>101.1 lbf (450N)</td>
<td></td>
</tr>
<tr>
<td>Max. stroke</td>
<td>15 mm</td>
<td></td>
</tr>
<tr>
<td>Speed</td>
<td>15 s/mm</td>
<td></td>
</tr>
<tr>
<td>Max. medium temperature</td>
<td>302°F (150°C)</td>
<td></td>
</tr>
<tr>
<td>Enclosure rating</td>
<td>NEMA 2</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>5.1 lb (2.3 kg)</td>
<td></td>
</tr>
</tbody>
</table>
Data sheet
Electric Actuators with Spring Function
For ABQM, Pressure Independent Control Valve
AME25SU, AME25SD

Installation Orientation: The actuator should be mounted with the valve stem either horizontal or pointing upwards. Use a 4 mm Allen key (not supplied) to fit the actuator to the valve body. Allow necessary clearance for maintenance purposes. During commissioning, the movement of the actuator (e.g. opens for heat) can be indicated by fitting red and blue pins (supplied) at either end of the position indication scale.

Manual Override: On spring versions manual override is achieved by disconnecting the power supply, removing the cover and inserting a 5 mm Allen key (not supplied) into the top of the positioning spindle and turning the key against the spring. Observe the direction of rotation symbol. To hold a manual override position, the key must be wedged.

If manual override has been used then X and Y signal are not correct until the actuator reaches its end position. Another alternative to correct this is to reset the actuator.

Dimensions:
**Automatic self stroking feature**
When power is first applied, the actuator will automatically adjust to the length of the valve stroke. Subsequently, the self stroking feature can be reset by pressing the reset button once (located under the cover).

**Diagnostic LED**
The red diagnostic LED is located on the pcb under the cover. It provides indication of three operational states: Actuator Healthy (Permanently ON), Self Stroking (Flashes once per second), Error (Flashes 3 times per second - seek technical assistance).
Data sheet  Electric Actuators with Spring Function
For ABQM, Pressure Independent Control Valve
AME25SU, AME25SD

AME25SU/
AME25SD
Proportional DIP
switch setting

The actuator has a function selection DIP switch under the removable cover. In particular, if SW6 is set to ON, the actuator will perform as 3-point actuator.

The switch provides the following functions:

- **SW1: U/I - Input signal type selector:**
  If set to OFF position, voltage input is selected. If set to ON position, current input is selected.

- **SW2: 0/2 - Input signal range selector:**
  If set to OFF position, the input signal is in the range from 2 V to 10 V (voltage input) or from 4 mA to 20 mA (current input). If set to ON position, the input signal is in the range from 0 to 10 V (voltage input) or from 0 mA to 20 mA (current input).

- **SW3: D/I - Direct or Reverse acting selector:**
  If set to OFF position, the actuator is direct acting (stem lowers as voltage increases). If actuator is set to ON position the actuator is reverse acting (stem raises as voltage increases).

- **SW4: —/Seq - Input signal range in sequential mode:**
  If set to OFF position, the actuator is working in range 0(2)...10 V or 0(4)...20 mA. If set to ON position, the actuator is working in sequential range; 0(2)...5 (6) V or (0(4)...10 (12) mA) or (5(6)...10 V) or (10(12)...20 mA).

- **SW5: 0…5V/5…10V - Normal or sequential mode selector:**
  If set to OFF position, the actuator is working in range 0(2)...5 (6) V or 0(4)...10 (12) mA. If set to ON position, the actuator is working in sequential range; 5(6)...10 V or 10(12)...20 mA.

- **SW6: Prop./3-pnt - Modulating or 3-point mode selector:**
  If set to OFF position, the actuator is working normally according to control signal. If set to ON position, the actuator is working as 3-point actuator.

- **SW7: LOG/LIN - Equal percentage or linear flow through valve selector:**
  If set to OFF position, the flow through valve is equal percentage. If set to ON position, the flow through valve is linear according to control signal.

- **SW8: 100% Cv/Reduced Cv - Flow reduction through valve selector:**
  Leave in the OFF position (not required when in combination with AB-QM).

- **SW9: Reset:**
  Changing this switch position will cause the actuator to go through a self stroking cycle.