Model AB-QM Pressure Independent Balancing and Control Valve

Actuator Submittal, 3-Point Floating AMV 435

Description
AMV 435 actuator is specifically used with the AB-QM 2-way valve bodies in sizes ranging from 1½" to 4". This actuator receives a 3-point floating input signal and can provide an output signal for position indication. Other features of the AMV 435 include:

- No tool requirement for installation
- LED visual operation feedback
- Selectable stem travel speed
- Selectable linear or equal percentage actuator characteristic
- Automatic stem travel calibration

Code No. 082H0162

- Power supply 24 VAC/DC; +10%...-15%
- Power consumption 2 VA
- Frequency 50 Hz/60 Hz
- Control input, ter. 1 & 3 3-point floating
- Output signal, ter. 4 & 5 Position indication
- Close of force 400 N
- Max. actuator travel 20 mm
- Speed 7.5 s/mm or 15 s/mm selectable
- Max. medium temperature 248°F (120 °C)
- Ambient temperature 32 … 131 °F (0 … 55 °C)
- Degree of protection IP 54, NEMA 2
- Weight 1.0 lb (0.45 kg)

- marking in accordance with standards

Low Voltage Directive (LVD) 2006/95/EC: EN 60730-1, EN 60730-2-14
EMC Directive 2004/108/EC: EN 61000-6-2, EN 61000-6-3

Specification
The motorized actuator shall be 24VAC/DC powered and mount directly to the AB-QM valve body. The actuator shall mount to the valve through an integrated mechanism that does not require any tools. The actuator shall be capable of calibrating its travel to the required stem travel of the valve. The stem travel speed of the actuator shall be determined based upon a DIP switch located beneath the cover of the actuator. The motorized actuator shall have a visible LED feedback to provide operation information and a manual knob for override adjustment of the actuator.
Mounting
No tool is required to mount the actuator to the valve. The mounting mechanism is integrated into the design 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.

The actuator may be rotated 360° with respect to the valve’s mounting base stem by loosening the mounting mechanism. Once properly rotated, re-engage the mounting mechanism.

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**: Not used
- **SW 4**: Not used

Wiring

<table>
<thead>
<tr>
<th>SN</th>
<th>Neutral .................................. Common</th>
</tr>
</thead>
<tbody>
<tr>
<td>1, 3</td>
<td>Open valve, input signal, 24V</td>
</tr>
<tr>
<td>1, 3</td>
<td>Close valve, input signal, 24V</td>
</tr>
<tr>
<td>4, 5</td>
<td>Output position indication</td>
</tr>
</tbody>
</table>

Dimensions

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.8&quot; (147 mm)</td>
<td>Width</td>
</tr>
<tr>
<td>3.3&quot; (82.5 mm)</td>
<td>Height</td>
</tr>
<tr>
<td>6.3&quot; (160 mm)</td>
<td>Depth</td>
</tr>
</tbody>
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