EV215B is a direct-operated 2/2-way solenoid valve for use in steam applications.

The design is based on a PTFE valve plate, ensuring high reliable function even in connection with contaminated steam.

Valve body in stainless steel for ensuring a long life even in connection with aggressive steam media.

Features and versions

- 2/2-way
- Specifically designed for steam applications, 160 °C or 185 °C
- Direct operated
- Ambient temperature: Up to 40 °C
- Thread connections: G 1/4"
- Stainless steel valve body
- DN 3
- NC (normally closed)
- EV215B used with BQ coil AC voltage up to 185 °C
- EV215B used with BN coil DC voltage up to 160 °C
- EV215B used with BB coil AC voltage up to 160 °C DC voltage up to 140 °C
- Connection: ISO 228/1

Approvals

All valves are UL/UR approved:
Stainless steel valve body, NC

<table>
<thead>
<tr>
<th>Connection ISO228/1</th>
<th>Seal material</th>
<th>Orifice size [mm]</th>
<th>$K_v$ - value [m³/N]</th>
<th>Differential pressure min. to max. [bar]</th>
<th>Media temperature min. to max. [°C]</th>
<th>Code no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>G 1/4</td>
<td>PTFE</td>
<td>3</td>
<td>0.3</td>
<td>0 – 10</td>
<td>0 – 10</td>
<td>032U3801</td>
</tr>
</tbody>
</table>

Technical data, NC

<table>
<thead>
<tr>
<th>Main type</th>
<th>EV215B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time to open [ms]</td>
<td>20</td>
</tr>
<tr>
<td>Time to close [ms]</td>
<td>20</td>
</tr>
</tbody>
</table>

1) The times are indicative. The exact times will depend on the pressure conditions.

Installation

<table>
<thead>
<tr>
<th>Vertical solenoid system is recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. working pressure (MWP)</td>
</tr>
<tr>
<td>Max. test pressure</td>
</tr>
<tr>
<td>Ambient temperature</td>
</tr>
<tr>
<td>Viscosity</td>
</tr>
</tbody>
</table>

Materials

- Valve body: Stainless steel, W. no. 1.4404
- Armature / armature stop: Stainless steel, W. no. 1.4105 / AISI 430FR
- Spring: Stainless steel, W. no. 1.4306 / AISI 304L
- Armature tube: Stainless steel, W. no. 1.4310 / AISI 301
- Valve plate: PTFE
- External gasket: O-ring AFLAS

Dimensions and weight

<table>
<thead>
<tr>
<th>Type</th>
<th>L [mm]</th>
<th>B [mm]</th>
<th>H [mm]</th>
<th>H1 [mm]</th>
<th>H2 [mm]</th>
<th>Weight with coil BQ, BB [Kg]</th>
<th>Weight with coil BN [Kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>EV215B</td>
<td>35</td>
<td>35</td>
<td>87</td>
<td>125</td>
<td>74.5</td>
<td>0.51</td>
<td>0.79</td>
</tr>
</tbody>
</table>

Mounting angle

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Data sheet | Direct-operated 2/2-way solenoid valves for steam, Type EV215B

Coil type BQ AC
Steam coil to 185 °C

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BQ024CS</td>
<td>-40 – 40</td>
<td>24</td>
<td>-15%, 10%</td>
<td>50</td>
<td>10</td>
<td>US</td>
<td>018F4517</td>
</tr>
<tr>
<td>BQ120BS</td>
<td>-40 – 40</td>
<td>110 / 120</td>
<td>-15%, 6%</td>
<td>60</td>
<td>13.5</td>
<td>US</td>
<td>018F4519</td>
</tr>
<tr>
<td>BQ240CS</td>
<td>-40 – 40</td>
<td>230</td>
<td>-15%, 6%</td>
<td>50</td>
<td>10</td>
<td>US</td>
<td>018F4511</td>
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</table>

Coil type BN DC
Steam coils to 160 °C

<table>
<thead>
<tr>
<th></th>
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<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BN024DS</td>
<td>-40 – 50</td>
<td>24</td>
<td>±10%</td>
<td>DC</td>
<td>20</td>
<td>US</td>
<td>018F6968</td>
</tr>
</tbody>
</table>

Coil type BB AC
Steam coils to 160 °C

Type BB DC
Steam coils to 140 °C

Technical data
Type BQ, BN, BB
Insulation of coil windings
Class H according to IEC 85
Connection
GDM 2011 (grey)
Cable plug according to DIN 43650-A PG11
Coil enclosure, IEC 529
IP65
Ambient temperature
Max. 40 °C
Duty rating
Continuous

Accessories:
Cable plug

<table>
<thead>
<tr>
<th>Type</th>
<th>Code no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDM 2011 (grey), cable plug according to DIN 43650-A PG11</td>
<td>042N0156</td>
</tr>
</tbody>
</table>
Spare part kit

<table>
<thead>
<tr>
<th>Type</th>
<th>Code number</th>
</tr>
</thead>
<tbody>
<tr>
<td>EV215B</td>
<td>032U3170</td>
</tr>
</tbody>
</table>

Spare parts kit comprises:
- Armature with valve plate
- Spring
- O-ring

Function NC

Coil voltage disconnected (closed):
When the voltage is disconnected, the closing spring (4) with the valve plate (2) is pressed down against the pilot orifice (3) by the closing spring (4) and the medium’s pressure. The valve will be closed for as long as the voltage to the coil is disconnected.

Coil voltage connected (open):
When voltage is applied to the coil (1), the closing spring (4) with the valve plate (2) is lifted clear of the orifice (3). The valve is now open for flow and will be open for as long as there is voltage to the coil.

1. Coil
2. Valve plate
3. Orifice
4. Closing spring
Steam capacity diagrams

Example
Capacity for EV225 10 BD;
inlet pressure (p₁) of 6 bar absolute;
differential pressure at 1 bar:
Approx. 100 kg / h / 80 kW