FEATURES
• Leak proof body machined from bar stock
• Choice of custom vane calibrated for your application, Model V4, or field adjustable
multilayer vane, Model V4-2-U (see set point chart)
• Weatherproof, designed to meet NEMA 4
• Explosion-proof (listing included in specifications)
• Installs directly and easily into pipeline with a threadlet, tee, or flange (see application drawings)
• Can be used in pipes 1-1/2" and up
• Electrical assembly can be easily replaced without removing the unit from installation so that the process does not have to be shut down
• High pressure rating of 1000 psig (69 bar) with the brass body and 2000 psig (138 bar) available with 316 SS body and SPDT snap switch only.
• Electrical assembly can be replaced without removing the unit from installation so that the process does not have to be shut down
• Weatherproof, designed to meet NEMA 4
• Explosion-proof (listing included in specifications)
• Installs directly and easily into pipeline with a threadlet, tee, or flange (see application drawings)
• Can be used in pipes 1-1/2" and up
• Electrical assembly can be easily replaced without removing the unit from installation so that the process does not have to be shut down
• High pressure rating of 1000 psig (69 bar) with the brass body and 2000 psig (138 bar) available with 316 SS body and SPDT switch only.
• Enclosure Rating: Weatherproof and explosion-proof. Listed with UL and CSA for Class I, Groups C and D, Class II, Groups E, F, and G.
• ATEX: E034 G II G Ex d IIB T6 Gb -20°C≤Tamb≤73°C. Process Temperature 4 to 135°C.
• IECEx: Certificate of Conformity: IECEx Certificate No.: KEMA 03 ATEX 2383.
• Agency Approvals: FM, IECEx, UL.

SPECIFICATIONS
Service: Gases or liquids compatible with wetted materials.
Wetted Materials:
• Vane: 316 SS;
• Body: Brass or 316 SS standard; Magnet Keeper: 430 SS standard, 316 SS optional.
• Options: Other materials also available, consult factory (e.g. PVC, Hastelloy, Nickel, Monel, Titanium).

SIZES.
Model Description Price
V4-2-U Brass body, universal vane $261.50
V4-SS-2-U 316SS* body, universal vane 377.50
V4 Brass body, custom vane 306.00
V4-SS 316SS* body, custom vane 422.00

*316SS body with 430SS magnet keeper.
Consult factory for price and availability of fittings for V4 installation. Thredolets, bushings, and tees are available in a variety of sizes and materials.

For custom vane models, please supply factory with following information: pipe size, flow direction (horizontal, up), mounting, pressure, temperature, specific gravity, flow rates (maximum normal, actuation/deactuation*), etc.

*When both values are supplied, note which is critical.

OPTIONS (add as a suffix to the model number):
-D, DPDT contacts ........................................... add $3.00
-MV, Gold Plated Contacts, options for dry circuits
(see electrical rating in specifications, no listings or approvals) ........................................... add $10.50
-MT, High Temperature, option rated 400°F (204°C)
(see electrical rating in specifications, no listings or approvals) ........................................... add $31.50
-TRI (increasing flow), -TRD (decreasing flow), Time Delay Relay, option with 2 SPDT contacts, adjustable from 0-1 to 0-31 minutes
(no listings or approvals) ........................................... add $417.00
-V, Vertical Up Flow, option for upward flow in vertical pipe ........................................... add $44.50
-AT, ATEX compliant construction ........................................... add $6.50
-IEC, IECEx certified construction ........................................... add $6.00

Options for custom vane models:
-D, DPDT contacts ........................................... add $3.00
-MV, Gold Plated Contacts, options for dry circuits
(see electrical rating in specifications, no listings or approvals) ........................................... add $10.50
-MT, High Temperature, option rated 400°F (204°C)
(see electrical rating in specifications, no listings or approvals) ........................................... add $31.50
-TRI (increasing flow), -TRD (decreasing flow), Time Delay Relay, option with 2 SPDT contacts, adjustable from 0-1 to 0-31 minutes
(no listings or approvals) ........................................... add $417.00
-V, Vertical Up Flow, option for upward flow in vertical pipe ........................................... add $44.50
-AT, ATEX compliant construction ........................................... add $6.50
-IEC, IECEx certified construction ........................................... add $6.00
V4 Universal Vane Flow Charts

Values shown in both charts are nominal. If normal flows exceed actuation rates by less than 10%, custom vanes are recommended. Figures are based on standard vertical installation in a 1-1/2” Threaded Branch Connection in a horizontal run of pipe.

Approximate Actuation/Deactuation Flow Rates for Cold Water.
Upper Figures in GPM. Lower Figures in LPM.

<table>
<thead>
<tr>
<th>Vane Layers</th>
<th>1.5” Pipe</th>
<th>2” Pipe</th>
<th>3” Pipe</th>
<th>4” Pipe</th>
<th>6” Pipe</th>
<th>8” Pipe</th>
<th>10” Pipe</th>
<th>12” Pipe</th>
<th>14” Pipe</th>
<th>16” Pipe</th>
<th>18” Pipe</th>
<th>20” Pipe</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7-3</td>
<td>15-8</td>
<td>26-7-11.67</td>
<td>35-10</td>
<td>45-18</td>
<td>55-25</td>
<td>65-33</td>
<td>75-43</td>
<td>90-55</td>
<td>110-70</td>
<td>140-90</td>
<td>160-120</td>
</tr>
<tr>
<td>1.2</td>
<td>7-3</td>
<td>15-8</td>
<td>26-7-11.67</td>
<td>35-10</td>
<td>45-18</td>
<td>55-25</td>
<td>65-33</td>
<td>75-43</td>
<td>90-55</td>
<td>110-70</td>
<td>140-90</td>
<td>160-120</td>
</tr>
<tr>
<td>1,2,3</td>
<td>11-7</td>
<td>21-14</td>
<td>31-20</td>
<td>41-26</td>
<td>51-33</td>
<td>61-40</td>
<td>71-50</td>
<td>81-60</td>
<td>95-70</td>
<td>115-85</td>
<td>145-100</td>
<td>175-125</td>
</tr>
<tr>
<td>1,2,3,4</td>
<td>12-12</td>
<td>22-45</td>
<td>32-60</td>
<td>42-75</td>
<td>52-90</td>
<td>62-105</td>
<td>72-120</td>
<td>82-135</td>
<td>96-150</td>
<td>116-175</td>
<td>146-200</td>
<td>176-225</td>
</tr>
<tr>
<td>1,2,3,4,5</td>
<td>15-20</td>
<td>25-30</td>
<td>35-45</td>
<td>45-60</td>
<td>55-75</td>
<td>65-90</td>
<td>75-100</td>
<td>85-115</td>
<td>99-135</td>
<td>119-160</td>
<td>149-200</td>
<td>179-225</td>
</tr>
</tbody>
</table>

Actuation rates are based on cold water at a specific gravity of 1.0.

For fluids of different specific gravity, actuation rates may be approximated by dividing the rate shown by the square root of the specific gravity.

Approximate Actuation/Deactuation Flow Rates for Cold Air.
Upper Figures in SCFM. Lower Figures in LPS.

<table>
<thead>
<tr>
<th>Vane Layers</th>
<th>1.5” Pipe</th>
<th>2” Pipe</th>
<th>3” Pipe</th>
<th>4” Pipe</th>
<th>6” Pipe</th>
<th>8” Pipe</th>
<th>10” Pipe</th>
<th>12” Pipe</th>
<th>14” Pipe</th>
<th>16” Pipe</th>
<th>18” Pipe</th>
<th>20” Pipe</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2</td>
<td>40-60</td>
<td>80-120</td>
<td>120-180</td>
<td>160-240</td>
<td>200-300</td>
<td>240-400</td>
<td>300-500</td>
<td>360-600</td>
<td>420-700</td>
<td>500-800</td>
<td>580-980</td>
<td>650-1100</td>
</tr>
<tr>
<td>1,2,3</td>
<td>50-80</td>
<td>100-160</td>
<td>160-240</td>
<td>220-320</td>
<td>300-460</td>
<td>380-600</td>
<td>460-800</td>
<td>540-1000</td>
<td>620-1400</td>
<td>780-1800</td>
<td>940-2200</td>
<td>1100-2600</td>
</tr>
<tr>
<td>1,2,3,4</td>
<td>60-100</td>
<td>120-200</td>
<td>200-320</td>
<td>260-460</td>
<td>360-620</td>
<td>480-900</td>
<td>620-1200</td>
<td>780-1500</td>
<td>940-2000</td>
<td>1100-2500</td>
<td>1260-3000</td>
<td>1520-3500</td>
</tr>
</tbody>
</table>

Actuation rates are based on air at standard conditions. For gases at other pressures, temperatures, or specific gravities, consult factory for equivalent flow approximations.

Application Drawings
For Flotec® Automatic Flow Switches

Threaded Branch Connection Installation. May also be installed using tee, flange or coupling.