HOW TO ORDER

Use the bold characters from the chart below to construct a product code.

SERIES
V6: Flotect® mini-size flow switches

CONSTRUCTION
EP: Explosion proof

BODY
B-B: Brass
S-S: SS

CIRCUIT (SWITCH)
S-S:
B-B:

OPTIONS
- CSA: CSA approved construction with junction box
- AT: ATEX compliant construction with junction box
- IECEX: IECEX certified construction with junction box
- MV: Gold contacts on snap switch for dry circuits (see specifications for ratings)
- MT: High temperature option rated 400°F (205°C) (see specifications for ratings)
- VT: Fluorobalastomer O-rings in place of Buna-N on low flow models

TEE OR PROCESS CONNECTION SIZE
- 1-1/2˝ NPT
- 3/4˝ NPT
- 1/2˝ NPT

TEE OR PROCESS CONNECTION TYPE
BLANK: NPT
E: BSPT or tee process connection and M25 conduit connection or junction box models

APPROXIMATE ACTUATION/DEACTUATION FLOW RATES FOR COLD WATER; GPM (LPM)

<table>
<thead>
<tr>
<th>Pipe Size</th>
<th>Actuate</th>
<th>Deactuate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2˝</td>
<td>10.0 (300)</td>
<td>8.00 (240)</td>
</tr>
<tr>
<td>1</td>
<td>14.0 (420)</td>
<td>12.0 (360)</td>
</tr>
<tr>
<td>1-1/4˝</td>
<td>21.0 (600)</td>
<td>16.0 (480)</td>
</tr>
<tr>
<td>1-1/2˝</td>
<td>33.0 (960)</td>
<td>30.0 (840)</td>
</tr>
<tr>
<td>2˝</td>
<td>43.0 (1200)</td>
<td>38.0 (1050)</td>
</tr>
</tbody>
</table>

APPROXIMATE ACTUATION/DEACTUATION FLOW RATES FOR AIR; SCFM (LPM)

<table>
<thead>
<tr>
<th>Pipe Size</th>
<th>Actuate</th>
<th>Deactuate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2˝</td>
<td>1.00 (3.0)</td>
<td>0.80 (2.3)</td>
</tr>
<tr>
<td>3/4˝</td>
<td>2.00 (5.7)</td>
<td>1.25 (4.7)</td>
</tr>
<tr>
<td>1</td>
<td>3.00 (11.3)</td>
<td>1.75 (6.7)</td>
</tr>
<tr>
<td>1-1/4˝</td>
<td>4.00 (15.7)</td>
<td>3.00 (11.3)</td>
</tr>
<tr>
<td>1-1/2˝</td>
<td>6.00 (22.7)</td>
<td>5.00 (18.9)</td>
</tr>
<tr>
<td>2˝</td>
<td>10.00 (27.0)</td>
<td>8.50 (22.2)</td>
</tr>
</tbody>
</table>

APPLICATIONS
- Protects pumps, motors and other equipment against low or no flow
- Controls sequential operation of pumps
- Automatically starts auxiliary pumps and engines
- Limits liquid cooled engines, machines and processing when coolant flow is interrupted
- Shuts down burner when air flow through heating coil fails
- Controls dampers according to flow
- Signals alarm when emergency shower or eyewash station in use

FEATURES/BENEFITS
- Unique magnetically actuated switching design gives superior performance
- Features a free-swinging vane which attracts a magnet within the solid metal switch body, actuating a snap switch by means of a simple lever arm with no bellows, springs, or seals to fail
- Leak proof body machined from bar stock
- Electrical assembly can be easily replaced without removing the unit from installation so that the process does not have to be shut down
- Choice of models in a tee with calibrated vane or field adjustable trimmable vane
- Easy installation with simple pipe insert via tee and simple electrical switch connections
- High pressure rating of 1000 psig (69 bar) with the brass body and 2000 psig (138 bar) with the 316 SS body
- Low flow model offers field adjustable set point

DESCRIPTION
The Series V6 Flotect® Mini-Size Flow Switches are surprisingly compact, and specifically engineered to monitor liquid, gas, or air flows. Time tested in thousands of pipeline installations and processing plants around the world, this Series is Weatherproof, designed to meet NEMA 4 and Explosion-proof (listing included in specifications). Tees are available for installation in pipelines from 1/2˝ to 2˝. With bushings added the unit is easily adapted to 1/4˝ and 3/8˝ piping.

SERIES V6 | W.E. ANDERSON FLOTECT® MINI-SIZE FLOW SWITCHES

V6 with tee
V6 low flow

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• Signals alarm when emergency shower or eyewash station in use
• Controls dampers according to flow
• Automatically starts auxiliary pumps and engines
• Protects pumps, motors and other equipment against low or no flow
• Shuts down burner when air flow through heating coil fails
• Low flow model offers field adjustable set point

V6 set point charts - Factory installed tee
V6 low flow set point chart

OFFICEONLINE TODAY!
**SPECIFICATIONS**

**Service**
- Gases or liquids compatible with wetted materials.

**Wetted Materials**
- Standard V6 Models: Vane: 301 SS; Lower Body: brass or 303 SS; Magnet: Ceramic; Other: 301, 302 SS; Tee: Brass, iron, forged steel, or 304 SS. V6 Low Flow Models: Lower body: Brass or 303 SS; Tee: Brass or 304 SS; Magnet: Ceramic; O-ring: Buna-N standard, Fluorelastomer optional; Other: 301, 302 SS.

**Temperature Limits**
- -4 to 220°F (-20 to 105°C) Standard, MT high temperature option 400°F (205°C) (MT not UL, CSA, ATEX, IECEx or KC)
- ATEX Compliant AT, IECEx IEC Option and KC (KC Option), Ambient Temperature -4 to 167°F (-20 to 75°C) Process Temperature -4 to 220°F (-20 to 105°C).

**Pressure Limit**
- Brass lower body with no tee models 1000 psig (69 bar), 303 SS lower body with no tee models 2000 psig (138 bar). Brass tee models 250 psi (17.2 bar), iron tee models 1000 psi (69 bar), forged and stainless steel tee models 2000 psi (138 bar), low flow models 1450 psi (100 bar).

**Enclosure Rating**

**Electrical Rating**
- UL models: 5 A @ 125/250 VAC. CSA, ATEX and IECEx models: 5 A @ 125/250 VAC (V~); 5 A res., 3 A ind. @ 30 VDC (V-). MV option: .1 A @ 125 VAC (V~). MT option: 5 A @ 125/250 VAC (V~). [MT option not UL, CSA, ATEX or IECEx].

**Electrical Connections**
- UL models: 18 AWG, 18˝ (457.20 mm) long. ATEX/CSA/IECEx models: terminal block.

**Upper Body**
- Brass or 303 stainless steel.

**Conduit Connection**
- 3/4˝ male NPT standard, 3/4˝ female NPT or M25 with BSPP option on junction box models.

**Mounting Orientation**
- Switch can be installed in any position but the actuation/deactuation flow rates in the charts are based on horizontal pipe runs and are nominal values.

**Set Point Adjustment**
- Standard V6 models none. Without tee models vane is trimmable. Low flow models are field adjustable in the range shown.

**Weight**
- 2 to 9 lb (1 to 2.7 kg), depending on construction.

**Options not Shown**
- Custom calibration, bushings, PVC tee, reinforced vane, DPDT relays.

**Agency Approvals**
- ATEX, CE, CSA, IECEx, KC, UL.

**DIMENSIONS**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>V6 with tee</th>
<th>V6 low flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Length with 1-1/4˝ tee connection</td>
<td>5-13/16˝ [147.64]</td>
<td>5-3/4˝ [147.44]</td>
</tr>
<tr>
<td>18 GA. Leads</td>
<td>18 [457.20] long</td>
<td>18 [457.20] long</td>
</tr>
<tr>
<td>Switch Housing</td>
<td>300 SERIES STAINLESS STEEL OR BRASS</td>
<td>300 SERIES STAINLESS STEEL OR BRASS</td>
</tr>
<tr>
<td>Valve Body Material</td>
<td>300 SERIES STAINLESS STEEL OR BRASS</td>
<td>300 SERIES STAINLESS STEEL OR BRASS</td>
</tr>
<tr>
<td>Upper Housing</td>
<td>300 SERIES STAINLESS STEEL OR BRASS</td>
<td>300 SERIES STAINLESS STEEL OR BRASS</td>
</tr>
<tr>
<td>Switch Supports</td>
<td>SPDT [OR DPDT] SNAP SWITCH</td>
<td>SPDT [OR DPDT] SNAP SWITCH</td>
</tr>
<tr>
<td>Magnet Lever</td>
<td>MAGNET LEVER PIN</td>
<td>MAGNET LEVER PIN</td>
</tr>
<tr>
<td>Lower Housing</td>
<td>BRASS OR STAINLESS STEEL</td>
<td>BRASS OR STAINLESS STEEL</td>
</tr>
<tr>
<td>Magnet Piston Assembly</td>
<td>CERAMIC</td>
<td>CERAMIC</td>
</tr>
<tr>
<td>Valve Body</td>
<td>1/2 NPT OR 1/2 BSPT</td>
<td>1/2 NPT OR 1/2 BSPT</td>
</tr>
<tr>
<td>Valve</td>
<td>STAINLESS STEEL VANE</td>
<td>STAINLESS STEEL VANE</td>
</tr>
<tr>
<td>Overall Length</td>
<td>APPROXIMATELY 8˝</td>
<td>APPROXIMATELY 8˝</td>
</tr>
</tbody>
</table>
**SPECIFICATIONS**

**Service**
Gases or liquids compatible with wetted materials.

**Wetted Materials**
- Standard V6 Models: Vane: 301 SS; Lower Body: brass or 303 SS; Magnet: Ceramic; Other: 301, 302 SS; Tee: Brass or 304 SS. V6 Low Flow Models: Lower body: Brass or 303 SS; Tee: Brass or 304 SS; Magnet: Ceramic; O-ring: Buna-N standard, Fluonelastomer optional; Other: 301, 303 SS.

**Temperature Limits**
- -4 to 220°F (-20 to 105°C) Standard. MT High Temperature option: 400°F (205°C) (MT not UL, CSA, ATEX, IECEx or KC). ATEX Compliant AT, IECEx IEC Option and KC (KC Option). Ambient Temperature: -4 to 167°F (-20 to 75°C) Process Temperature: -4 to 220°F (-20 to 105°C).

**Pressure Limit**

**Enclosure Rating**

**Switch Type**
- SPDT snap switch standard, DPDT snap switch optional.

**Electrical Rating**
- UL models: 5 A @ 125/250 VAC. CSA, ATEX and IECEx models: 5 A @ 125/250 VAC (V~); 5 A res., 3 A ind. @ 30 VDC (V). MV option: .1 A @ 125 VAC (V~). MT option: 5 A @ 125/250 VAC (V~). [MT option not UL, CSA, ATEX or IECEx].

**Electrical Connections**
- UL models: 18 AWG, 18˝ (460 mm) long. ATEX/CSA/IECEx models: terminal block.

**Upper Body**
- Brass or 303 stainless steel.

**Conduit Connection**
- 3/4” male NPT standard, 3/4” female NPT or M25 with BSFPP option on junction box models.

**Mounting Orientation**
- Switch can be installed in any position but the actuation/deactuation flow rates in the charts are based on horizontal pipe runs and are nominal values.

**Set Point Adjustment**
- Standard V6 models none. Without tee models vane is trimmable. Low flow models are field adjustable in the range shown.

**Options not Shown**
- Custom calibration, bushings, PVC tee, reinforced vane, DPDT relays.

**Agency Approvals**
- ATEX, CE, CSA, IECEx, KTL, UL.

**DIMENSIONS**

**V6 with tee**

- **LOCKING COLLAR**
  - 3/4 NPT
- **ASSEMBLY**
  - Upper Housing
  - Switch Supports
  - Snap Switch
  - Magnet Lever Pin
  - Magnet Lever Assembly
- **MAGNETS**
- **LOWER HOUSING**
  - Brass or Stainless Steel
- **VANE**
  - Stainless Steel
- **INLET**
  - 1/2 NPT or 1/2 BSPT
- **OUTLET**
  - 1/2 NPT or 1/2 BSPT
- **STAINLESS STEEL VANE**
  - 4-3/4 [120.65] with 1-1/8 [28.58] SQ
- **SPDT [OR DPDT] SNAP SWITCH**
- **SPRING**
- **SUPPORT**
- **FLEXIBLE IMPORTS**
- **SWITCH HOUSING**
  - 300 Series Stainless Steel or Brass
- **OVERALL LENGTH**
  - With 1-1/4˝ Tee connection approximately 8˝
- **INLET**
  - 1/2 NPT or 1/2 BSPT
- **OUTLET**
  - 1/2 NPT or 1/2 BSPT
- **SWITCH BODY**
  - 1-1/8 [28.58] SQUARE
- **STAINLESS STEEL**
- **PROCESS VANE**
  - 300 Series Stainless Steel or Brass
- **VANES**
  - Stainless Steel
- **OVERALL LENGTH**
  - With 1-1/4˝ Tee connection approximately 8˝
- **SPRING**
- **SUPPORT**
- **SWITCH HOUSING**
  - 300 Series Stainless Steel or Brass
**How to Order**

Use the bold characters from the chart below to construct a product code.

**Series**
- V6: Flotect® mini-size flow switches

**Construction**
- EP: Explosion proof

**Body**
- B: Brass
- S: SS

**Circuit (Switch)**
- S: Spdt
- B: B-B:

**Tee or Process Connection Size**
- -0: 1/2˝ NPT
- -1: 3/4˝ NPT
- -2: 1˝ NPT
- -3: 1-1/4˝ NPT
- -4: 1-1/2˝ NPT
- -5: 1-1/2˝ NPT
- -6: 2˝ NPT

**Tee or Process Connection Type**
- E: BSPT or tee process connection and M25 conduit connection or junction box models

**Blanks**
- -LF: Low flow model (1/2˝ NPT connections)

**Set Point Charts**

**Approximate Actuation/Deactuation Flow Rates for Air; SCFM (LPM)**

<table>
<thead>
<tr>
<th>Pipe Size</th>
<th>Actuate</th>
<th>Deactuate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2˝</td>
<td>6.00 (180)</td>
<td>6.00 (120)</td>
</tr>
<tr>
<td>3/4˝</td>
<td>10.0 (300)</td>
<td>8.00 (240)</td>
</tr>
<tr>
<td>1˝</td>
<td>14.0 (420)</td>
<td>12.0 (360)</td>
</tr>
<tr>
<td>1-1/4˝</td>
<td>21.0 (600)</td>
<td>16.0 (480)</td>
</tr>
<tr>
<td>1-1/2˝</td>
<td>33.0 (960)</td>
<td>30.0 (840)</td>
</tr>
<tr>
<td>2˝</td>
<td>43.0 (1200)</td>
<td>36.0 (1020)</td>
</tr>
</tbody>
</table>

**Approximate Actuation/Deactuation Flow Rates for Cold Water; GPM (LPM)**

<table>
<thead>
<tr>
<th>Pipe Size</th>
<th>Actuate</th>
<th>Deactuate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2˝</td>
<td>1.56 (5.86)</td>
<td>1.50 (5.25)</td>
</tr>
<tr>
<td>3/4˝</td>
<td>2.00 (7.5)</td>
<td>2.50 (9.47)</td>
</tr>
<tr>
<td>1˝</td>
<td>3.00 (11.3)</td>
<td>1.75 (6.7)</td>
</tr>
<tr>
<td>1-1/4˝</td>
<td>4.00 (15.17)</td>
<td>3.00 (11.3)</td>
</tr>
<tr>
<td>1-1/2˝</td>
<td>6.00 (22.67)</td>
<td>5.00 (18.9)</td>
</tr>
<tr>
<td>2˝</td>
<td>10.00 (37.33)</td>
<td>8.50 (32.2)</td>
</tr>
</tbody>
</table>

**Min-Max Flow Rates in 1/2˝ Pipe**

<table>
<thead>
<tr>
<th>Media</th>
<th>Actuate</th>
<th>Deactuate</th>
</tr>
</thead>
<tbody>
<tr>
<td>GPM-water</td>
<td>0.0-0.75</td>
<td>0.0-0.80</td>
</tr>
<tr>
<td>LPM-water</td>
<td>15-2.64</td>
<td>11-2.27</td>
</tr>
<tr>
<td>SCFM-air</td>
<td>18-2.70</td>
<td>15-2.0</td>
</tr>
<tr>
<td>LPS-air</td>
<td>0.13-2.1</td>
<td>0.07-0.65</td>
</tr>
</tbody>
</table>

**Pressure Drop (Head Loss)**

Pressure drop is a function of both set point and flow rate. Typically, pressure drop at actuation flow rate listed will be 5-10 psi (34-69 bar). Pressure drops at other flow rates will vary in proportion to the change in flow.

**V6 Set point charts - Factory installed tee**

**V6 Low Flow Set point chart**

**Features/Benefits**

- Unique magnetically actuated switching design gives superior performance
- Features a free-swinging vane which attracts a magnet within the solid metal switch body, actuating a snap switch by means of a simple lever arm with no bellows, springs, or seals to fail
- Leak proof body machined from bar stock
- Electrical assembly can be easily replaced without removing the unit from installation so that the process does not have to be shut down
- Choice of models in a tee with calibrated vane or field adjustable trimmable vane
- Easy installation with simple pipe insert via tee and simple electrical switch connections
- High pressure rating of 1000 psig (69 bar) with the brass body and 2000 psig (138 bar) with the 316 SS body
- Low flow model offers field adjustable set point

**Applications**

- Protects pumps, motors and other equipment against low or no flow
- Controls sequential operation of pumps
- Automatically starts auxiliary pumps and engines
- Stops liquid cooled engines, machines and processing when coolant flow is interrupted
- Shuts down burner when air flow through heating coil fails
- Controls damper according to flow
- Signals alarm when emergency shower or eyewash station in use

**Series V6 | W.E. Anderson Flotect® Mini-Size Flow Switches**

**Description**

The Series V6 Flotect® Mini-Size Flow Switches are surprisingly compact, and specifically engineered to monitor liquid, gas, or air flows. Time tested in thousands of pipeline installations and processing plants around the world, this Series is Weatherproof, designed to meet NEMA 4 and Explosion-proof (listing included in specifications). Tees are available for installation in pipelines from 1/2˝ to 2˝. With bushings added the unit is easily adapted to 1/4˝ and 3/8˝ piping.