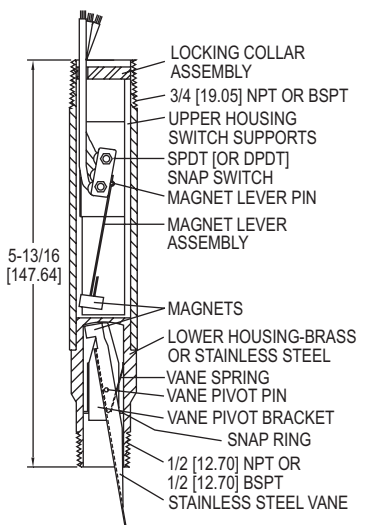


# FLOTECT® MINI-SIZE FLOW SWITCHES

Monitor Flow in 1/2" to 2" (12.70 to 50.80 mm) Pipe, Explosion-Proof, Compact



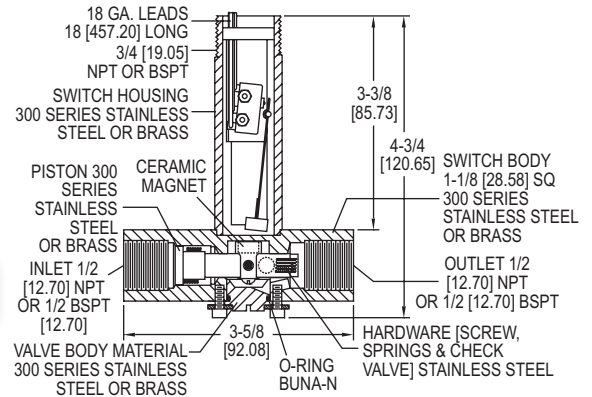
V6 with Tee



OVERALL LENGTH WITH 1-1/4" TEE CONNECTION APPROXIMATELY 8" [31.75 to 203.20 MM]



V6 Low Flow



The **SERIES V6** Flotect® Flow Switches is 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" (12.70 to 50.80 mm). With bushings added the unit is easily adapted to 1/4" and 3/8" (6.35 and 9.53 mm) piping.

## 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 dampers according to flow
- Signals alarm when emergency shower or eyewash station in use

## 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, Fluoroelastomer 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:** Weatherproof and Explosion-proof. Listed with UL and CSA for Class I, Groups A, B, C and D; Class II, Groups E, F, and G. (Group A on stainless steel body models only).

ATEX II 2 G Ex d IIC T6 Gb Process Temp ≤75°C Alternate Temperature Class T5 Process Temp ≤90°C, 115°C (T4) Process Temp ≤105°C consult factory. EC-type Certificate No.: KEMA 04ATEX2128.

ATEX Standards: EN 60079-0: 2009; EN 60079-1: 2007.

IECEx Certified: For Ex d IIC T6 Gb Process Temp ≤75°C Alternate Temperature Class T5 Process Temp ≤90°C, 115°C (T4) Process Temp ≤105°C consult factory. IECEx Certificate of Conformity: IECEx DEK 11.0039;

IECEx Standards: IEC 60079-0: 2007; IEC 60079-1: 2007;

Korean Certified (KC) for: Ex d IIC T6 Gb Process Temp ≤75°C;

KTL Certificate Number: 2012-2454-75.

**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" (457.20 mm) long. ATEX/CSA / IECEx models: terminal block.

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

**Conduit Connections:** 3/4" (19.05 mm) male NPT standard, 3/4" (19.05 mm) female NPT or M25 with BSPT option on junction box models.

**Process Connection:** 1/2" (12.70 mm) male NPT or 1/2" (12.70 mm) male BSPT on models without a tee.

**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. See set point charts.

**Weight:** 2 to 6 lb (.9 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, KTL, UL.

USA: California Proposition 65

⚠WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

●Set Point Charts: See page 291 (Series V6)

# FLOTECT® MINI-SIZE FLOW SWITCHES

Monitor Flow in 1/2" to 2" (12.70 to 50.80 mm) Pipe, Explosion-Proof, Compact

MODEL CHART									
Example	V6	EP	B-B	-S	-2	-B	-MT	V6EPB-B-S-2-B-MT	
Series	V6							Flow switch	
Construction		EP						Explosion proof	
Body			B-B S-S					Brass SS	
Circuit (Switch)				S D				SPDT DPDT	
Tee Connection Size+					1 2 3 4 5 6 LF LF			1/2" (12.70 mm) 3/4" (19.50 mm) 1" (25.40 mm) 1-1/4" (31.75 mm) 1-1/2" (38.10 mm) 2" (50.80 mm) Low flow model (1/2" connection-brass) Low flow model (1/2" connection-SS)	
Process Connection						- E		NPT BSPT	
Tee Material+						MI FS B S O		Iron Forged steel Brass SS No tee, field trimmable vane** (For LF model no tee material chosen, tee material matches body choice)	
Options							CSA AT IEC MV MT VIT	CSA approved construction with junction box* ATEX compliant construction with junction box IECEX certified construction with junction box Gold contacts on snap switch for dry circuits (see specifications for ratings) High temperature option rated 400°F (205°C) (see specifications for ratings)* Fluoroelastomer O-rings in place of Buna-N on low flow models	

+Additional adders dependent on tee connection size and tee material consult factory for these adders.  
\*Options that do not have ATEX.  
\*\*Vane will be trimmed to the connection size. If full field trimmable vane is desired, must select with tee connection size 6.

MODEL CHART			
Model	Size/Connection	Body	Tee
V6EPB-B-S-1-B	1/2" (12.70 mm) NPT	Brass	Brass
V6EPB-B-S-2-B	3/4" (19.50 mm) NPT	Brass	Brass
V6EPB-B-S-3-B	1" (25.40 mm) NPT	Brass	Brass
V6EPB-B-S-4-B	1-1/4" (31.75 mm) NPT	Brass	Brass
V6EPB-B-S-5-B	1-1/2" (38.10 mm) NPT	Brass	Brass
V6EPB-B-S-6-B	2" (50.80 mm) NPT	Brass	Brass
V6EPB-B-S-1-MI	1/2" (12.70 mm) NPT	Brass	Iron
V6EPB-B-S-2-MI	3/4" (19.50 mm) NPT	Brass	Iron
V6EPB-B-S-3-MI	1" (25.40 mm) NPT	Brass	Iron
V6EPB-B-S-4-MI	1-1/4" (31.75 mm) NPT	Brass	Iron
V6EPB-B-S-5-MI	1-1/2" (38.10 mm) NPT	Brass	Iron
V6EPB-B-S-6-MI	2" (50.80 mm) NPT	Brass	Iron
V6EPS-S-S-1-FS	1/2" (12.70 mm) NPT	SS	FS
V6EPS-S-S-2-FS	3/4" (19.50 mm) NPT	SS	FS
V6EPS-S-S-3-FS	1" (25.40 mm) NPT	SS	FS
V6EPS-S-S-4-FS	1-1/4" (31.75 mm) NPT	SS	FS
V6EPS-S-S-5-FS	1-1/2" (38.10 mm) NPT	SS	FS
V6EPS-S-S-6-FS	2" (50.80 mm) NPT	SS	FS
V6EPS-S-S-1-S	1/2" (12.70 mm) NPT	SS	SS
V6EPS-S-S-2-S	3/4" (19.50 mm) NPT	SS	SS
V6EPS-S-S-3-S	1" (25.40 mm) NPT	SS	SS
V6EPS-S-S-4-S	1-1/4" (31.75 mm) NPT	SS	SS
V6EPS-S-S-5-S	1-1/2" (38.10 mm) NPT	SS	SS
V6EPS-S-S-6-S	2" (50.80 mm) NPT	SS	SS
V6EPB-B-S-6-0	No tee	Brass	None
V6EPS-S-S-6-0	No tee	SS	None
V6EPB-B-S-LF	1/2" (12.70 mm) NPT	Brass	LF, brass
V6EPS-S-S-LF	1/2" (12.70 mm) NPT	SS	LF, SS
V6EPB-B-S-LFE	1/2" (12.70 mm) BSPT	Brass	Brass
V6EPB-B-S-1E-B	1/2" (12.70 mm) BSPT	Brass	Brass
V6EPB-B-S-2E-B	3/4" (19.50 mm) BSPT	Brass	Brass
V6EPB-B-S-3E-B	1" (25.40 mm) BSPT	Brass	Brass
V6EPB-B-S-4E-B	1-1/4" (31.75 mm) BSPT	Brass	Brass
V6EPB-B-S-5E-B	1-1/2" (38.10 mm) BSPT	Brass	Brass
V6EPB-B-S-6E-B	2" (50.80 mm) BSPT	Brass	Brass
V6EPB-B-S-6E-0	No tee	Brass	Brass
V6EPS-S-S-LFE	1/2" (12.70 mm) BSPT	SS	SS
V6EPS-S-S-1E-S	1/2" (12.70 mm) BSPT	SS	SS
V6EPS-S-S-2E-S	3/4" (19.50 mm) BSPT	SS	SS
V6EPS-S-S-3E-S	1" (25.40 mm) BSPT	SS	SS
V6EPS-S-S-4E-S	1-1/4" (31.75 mm) BSPT	SS	SS
V6EPS-S-S-5E-S	1-1/2" (38.10 mm) BSPT	SS	SS
V6EPS-S-S-6E-S	2" (50.80 mm) BSPT	SS	SS
V6EPS-S-S-6E-0	No tee	SS	SS

### V6 SET POINT CHARTS - FACTORY INSTALLED TEE

APPROXIMATE ACTUATION/DEACTUATION FLOW RATES FOR AIR; SCFM (LPM)		
Pipe Size	Actuate	Deactuate
1/2"	6.50 (180)	5.00 (120)
3/4"	10.0 (300)	8.00 (240)
1"	14.0 (420)	12.0 (360)
1-1/4"	21.0 (600)	18.0 (540)
1-1/2"	33.0 (960)	30.0 (840)
2"	43.0 (1200)	36.0 (1020)

APPROXIMATE ACTUATION/DEACTUATION FLOW RATES FOR COLD WATER; GPM (LPM)		
Pipe Size	Actuate	Deactuate
1/2"	1.50 (5.667)	1.00 (3.83)
3/4"	2.00 (7.5)	1.25 (4.67)
1"	3.00 (11.33)	1.75 (6.67)
1-1/4"	4.00 (15.17)	3.00 (11.3)
1-1/2"	6.00 (22.67)	5.00 (18.9)
2"	10.00 (37.83)	8.50 (32.2)

### V6 LOW FLOW SET POINT CHART

MIN-MAX FLOW RATES IN 1/2" PIPE		
Media	Actuate	Deactuate
GPM-water	.04-0.75	.03-0.60
LPM-water	.15-2.84	.11-2.27
SCFM-air	.18-2.70	.15-2.0
LPS-air	.09-1.3	.07-.95

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

USA: California Proposition 65  
 ⚠️ WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov



## Series V6 FLOTECT® Flow Switch

### Specifications - Installation and Operating Instructions



The Series V6 FLOTECT® Flow Switch is an inexpensive, explosion-proof flow switch for use on air, water or other compatible gases and liquids. Three configurations are available - 1. Factory installed in a tee. 2. With a trimmable vane for field adjustment and installation in a suitable tee. 3. Low flow models with an integral tee and adjustable valve. All are available with an optional enclosure which is UL and CSA listed, or Directive 2014/34/EU (ATEX) compliant for

CE II 2 G Ex db IIC T6 Gb

Process Temp ≤75°C or IECEx compliant for Ex db IIC T6 Gb Process Temp ≤ 75°C.

#### INSTALLATION

Unpack and remove any packing material found inside lower housing or tee.

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. For more precise settings, units can be factory calibrated to specific flow rates.

**V6 Models with Tee** are supplied in 1/2" - 2" NPT sizes. Install in piping with arrow pointing in direction of flow.

**V6 Low Flow Models** have 1/2" NPT connections and are field adjustable. Install in piping with arrow pointing in direction of flow. To adjust, loosen the four socket head cap screws on bottom. The adjustment valve rotates 90° between "O" (open) and "C" (closed). See flow charts for approximate ranges. Tighten screws once the required flow rate has been set.

**V6 with Field Trimmable Vane.** These models enable the installer to choose approximate actuation/deactuation points by trimming the full size vane at appropriate letter-designated marks on a removable template. Flows are defined in the following charts. Note that the charts are based on either brass or cast iron reducing tees or stainless or forged steel straight tees with bushings where necessary. Install in piping with arrow pointing in direction of flow.

When bushings are used, they must be back drilled to allow proper clearance for unrestricted vane travel. Bore the I.D. to 13/16" (20 mm) on 1/2" x 3/4" bushings or 1" (25 mm) on larger bushings. The depth of the bore must leave internal threads 9/16" (14 mm) high for proper engagement between the lower housing of the switch and the bushing. Check for proper vane travel and switch operation after installation.

#### 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, Fluoroelastomer 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:** Weatherproof and Explosion-proof. Listed with UL and CSA for Class I, Groups A, B, C and D; Class II, Groups E, F, and G. (Group A on stainless steel body models only).

CE 0518 II 2 G Ex db IIC T6 Gb Process Temp ≤75°C Alternate Temperature Class T5 Process Temp ≤90°C, 115°C (T4) Process Temp ≤105°C consult factory. EC-type Certificate No.: KEMA 04ATEX2128.

ATEX Standards: EN 60079-0: 2011 + A11:2013; EN 60079-1: 2014.

**IECEx Certified:** For Ex db IIC T6 Gb Process Temp ≤75°C Alternate Temperature Class T5 Process Temp ≤90°C, 115°C (T4) Process Temp ≤105°C consult factory.

**IECEx Certificate of Conformity:** IECEx DEK 11.0039; IECEx Standards: IEC 60079-0: 2011; IEC 60079-1: 2014; Korean Certified (KC) for: Ex d IIC T6 Gb Process Temp ≤75°C; KTL Certificate Number: 12-KB4BO-0091.

**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: 0.1 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 Connections:** 3/4" male NPT standard, 3/4" female NPT on junction box models. M25 x 1.5 with BSPT option.

**Process Connection:** 1/2" male NPT on models without a tee.

**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. See set point charts on opposite page.

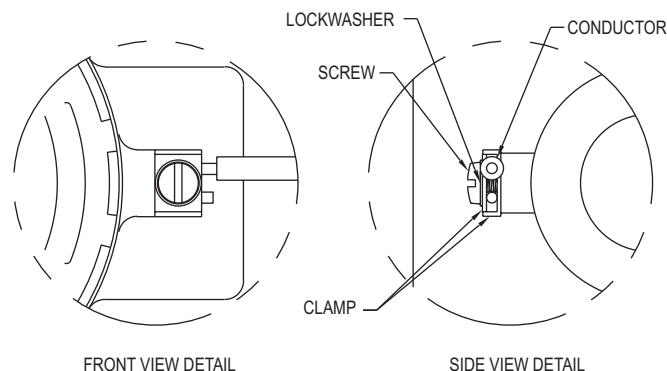
**Weight:** 2 to 6 lb (.9 to 2.7 kg) depending on construction.

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

#### ELECTRICAL CONNECTIONS

Connect wire leads in accordance with local electrical codes and switch action required. N.O. contacts will close and N.C. contacts will open when flow increases to the actuation point. They will return to "normal" condition when flow decreases to the deactuation point. Black = Common, Blue = Normally Open and Red = Normally Closed.

For units supplied with both internal ground and external bonding terminals, the ground screw inside the housing must be used to ground the control. The external bonding screw is for supplementary bonding when allowed or required by local code. When external bonding conductor is required, conductor must be wrapped a minimum of 180° about the external bonding screw. See below. Some CSA listed models are furnished with a separate green ground wire. Such units must be equipped with a junction box, not supplied but available on special order.



**EC-Type Certificate, IECEx and KC Installation Instructions:**

**Cable Connection**

The cable entry device shall be certified in type of explosion protection flameproof enclosure "d", suitable for conditions of use and correctly installed. For Ta ≥ 65°C cable and cable gland rated ≥ 90°C shall be used.

**Conduit Connection**

An Ex d certified sealing device such as a conduit seal with setting compound shall be provided immediately to the entrance of the valve housing. For Ta ≥ 65°C wiring and setting compound, in the conduit seal, rated ≥ 90°C shall be used.

**Note:** ATEX, IECEx and KC units only: The temperature class is determined by the maximum ambient and or process temperature. Units are intended to be used in ambient of -20°C ≤ Tamb ≤ 75°C. Units may be used in process temperatures up to 105°C providing the enclosure and switch body temperature do not exceed 75°C. The standard Temperature Class is T6 Process Temp ≤ 75°C. Alternate Temperature Class of T5 Process Temp ≤ 90°C and 115°C (T4) Process Temp ≤ 105°C are available consult factory.

Refer to Certificate No: IECEx DEK 11.0039 for conditions of safe use for IECEx compliant units.

All wiring, conduit and enclosures must meet applicable codes for hazardous areas. Conduits and enclosures must be properly sealed. For outdoor or other locations where temperatures vary widely, precautions should be taken to prevent condensation inside switch or enclosure. Electrical components must be kept dry at all times.

**CAUTION:** To prevent ignition of hazardous atmospheres, disconnect the device from the supply circuit before opening. Keep assembly tightly closed when in use.

**MAINTENANCE**

Inspect and clean wetted parts at regular intervals. The cover should be in place at all times to protect, the internal components from dirt, dust and weather and to maintain hazardous location ratings. Disconnect device from the supply circuit before opening to prevent ignition of hazardous atmosphere. Repairs to be conducted by Dwyer Instruments, Inc. Units in need of repair should be returned to the factory prepaid.

<b>Example</b>	V6	EP	BB	D	1	B	AT	Series V6EPB-B-D-1-B-AT Flotect® Mini-Size Flow Switch, brass body, DPDT, 1/2" brass tee, with ATEX approval.
<b>Series</b>	V6							Flotect® Mini-Size Flow Switch
<b>Construction</b>		EP						Explosion Proof
<b>Body</b>			BB					Brass Stainless Steel
<b>Switch Type</b>				D				DPDT SPDT
<b>Tee Connection Size</b>					1 2 3 4 5 6 LF 1E 2E 3E 4E 5E 6E LFE			1/2" NPT 3/4" NPT 1" NPT 1-1/4" NPT 1-1/2" NPT 2" NPT Low Flow with 1/2" NPT Inlet and Outlet 1/2" BSPT ++ 3/4" BSPT ++ 1" BSPT ++ 1-1/4" BSPT ++ 1-1/2" BSPT ++ 2" BSPT ++ Low Flow with 1/2" BSPT Inlet and Outlet ++
<b>Tee Type and Material</b>						B S O		Brass Stainless Steel NO Tee with Field Trimmable Vane
<b>Options</b>							18 20 22 022A 31 AT BUSH2 BUSH3 BUSH4 BUSH5 BUSH6 BUSH7 BUSH8 BUSH9 BUSH10 BUSH11 CSA CV FTR GL ID IEC JCTLH KC MT MV NN ORFB ORFS PT RV ST TBC VIT	0.018 Spring for Low Flow .020 Spring for Low Flow .022 Spring for Low Flow .022 Spring for Low Flow with Alnico Magnet .031 Spring for Low Flow ATEX Approval 1/2" NPT x 3/4" NPT Bushing 1/2" NPT x 1" NPT Bushing 1/2" NPT x 1-1/4" NPT Bushing 1/2" NPT x 1-1/2" NPT Bushing 1/2" NPT x 2" NPT Bushing 1/2" BSPT x 3/4" BSPT Bushing, M25 X 1.5 Conduit Connection ++ 1/2" BSPT x 1" BSPT Bushing, M25 X 1.5 Conduit Connection ++ 1/2" BSPT x 1-1/4" BSPT Bushing, M25 X 1.5 Conduit Connection ++ 1/2" BSPT x 1-1/2" BSPT Bushing, M25 X 1.5 Conduit Connection ++ 1/2" BSPT x 2" BSPT Bushing, M25 X 1.5 Conduit Connection ++ CSA* Custom Vane Flow Test Report Ground Lead* Custom Nameplate IECEx Approval Junction Box with Left Side Conduit Korean Certified* High Temperature* Gold Contacts No Nameplate* Brass Orifice Stainless Steel Orifice Paper Tag Reinforced Vane Stainless Steel Tag Terminal Block Connector* Flouroelstomer Seals

\*Options that do not have ATEX or IECEx  
++ BSPT options not compatible with KC option

**V6 With Tee**

**Cold Water - Factory Installed Tee**

Approximate actuation/deactuation low Rates

GPM upper, M<sup>3</sup>/HR lower

1/2" NPT	3/4" NPT	1" NPT	1-1/4" NPT	1-1/2" NPT	2" NPT
1.5 1.0	2.0 1.25	3.0 1.75	4.0 3.0	6.0 5.0	10.0 8.5
0.34 0.23	0.45 0.28	0.68 0.40	0.91 0.68	1.36 1.14	2.27 1.93

**Air-Factory Installed Tee**

Approximate actuation/deactuation flow rates

SCFM upper, NM<sup>3</sup>/M lower

1/2" NPT	3/4" NPT	1" NPT	1-1/4" NPT	1-1/2" NPT	2" NPT
6.5 5.0	10.0 8.0	14 12	21 18	33 30	43 36
.18 .14	.28 .23	.40 .34	.59 .51	.93 .85	1.19 1.02

**V6 Low Flow, Field Adjustable**

Cold Water - Low Flow Models

Approximate actuation/deactuation flow rates

GPM upper, M<sup>3</sup>/HR lower

Minimum	Maximum
.04 .03	.75 0.60
.009 .007	0.17 0.14

**Air - Low Flow Models**

Approximate actuation/deactuation flow rates

SCFM upper, NM<sup>3</sup>/M lower

Minimum	Maximum
.18 .15	2.70 2.0
.005 .004	.08 .06

**Attention:** Units without the "AT" suffix are not Directive 2014/34/EU (ATEX) compliant. These units are not intended for use in potentially hazardous atmospheres in the EU. These units may be CE marked for other Directives of the EU.

**V6 With Field Trimmable Vane**  
**Cold Water - Brass or Cast Iron Reducing Tee**  
 Approximate actuation/deactuation flow rates  
 GPM upper, M<sup>3</sup>/HR lower

**Air - Brass or Cast Iron Reducing Tee**  
 Approximate actuation/deactuation flow rates  
 SCFM upper, NM<sup>3</sup>/M lower

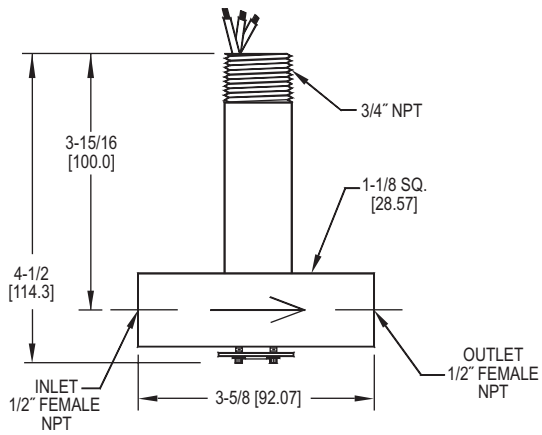
Vane	1/2" NPT	3/4" NPT	1" NPT	1-1/4" NPT	1-1/2" NPT	2" NPT	1/2" NPT	3/4" NPT	1" NPT	1-1/4" NPT	1-1/2" NPT	2" NPT
Full Size						9.0 8.5						39.0 37.0
a						2.0 1.9						1.10 1.05
						9.5 9.0						40.0 38.0
						2.2 2.0						1.13 1.08
b						10.0 9.3						42.0 40.0
						2.3 2.1						1.19 1.13
c						11.0 10.0						50.0 44.0
						2.5 2.3						1.42 1.25
d					6.2 5.5	12.0 10.0					27.0 25.0	55.0 46.0
					1.4 1.2	2.7 2.3					0.76 0.71	1.56 1.30
e					7.0 6.5	13.0 11.0						30.0 28.0
					1.6 1.5	3.0 2.5						0.85 0.79
f				4.3 3.9	7.6 7.1	14.0 12.0				20.0 18.0	32.0 30.0	
				1.0 0.9	1.7 1.6	3.2 2.7				0.57 0.51	0.91 0.85	
g				4.9 4.4	8.0 7.3					21.0 19.0	34.0 32.0	
				1.1 1.0	1.8 1.7					0.59 0.54	0.96 0.91	
h				5.5 5.0	9.0 8.2					23.0 21.0	37.0 34.0	
				1.2 1.1	2.0 1.9					0.65 0.59	1.05 0.96	
i			3.5 3.1	6.0 5.6	10.0 9.0				16.0 15.0	24.0 22.0	39.0 36.0	
			0.8 0.7	1.4 1.3	2.3 2.0				0.45 0.42	0.68 0.62	1.10 1.02	
j			4.0 3.5	7.0 6.6	13.0 11.0				18.0 16.0	28.0 25.0	51.0 45.0	
			0.9 0.8	1.6 1.5	3.0 2.5				0.51 0.45	0.79 0.71	1.44 1.27	
k			4.6 4.2	8.0 7.6	15.0 13.0				19.0 17.0	33.0 30.0	69.0 57.0	
			1.04 0.95	1.8 1.7	3.4 3.0				0.54 0.48	0.93 0.85	1.95 1.61	
l		2.6 2.3	5.6 5.2	10.0 9.0					13.0 12.0	22.0 20.0	38.0 35.0	
		0.6 0.5	1.3 1.2	2.3 2.0					0.37 0.34	0.62 0.57	1.08 0.99	
m	1.6 1.3	3.5 3.1	6.3 6.1	12.0 10.0			6.4 3.8	15.0 14.0	25.0 23.0	45.0 42.0		
	0.4 0.3	0.8 0.7	1.43 1.39	2.7 2.3			0.18 0.11	0.42 0.40	0.71 0.65	1.27 1.19		
n	2.2 1.8	4.3 3.8	8.0 7.5				10.0 7.0	20.0 16.0	32.0 28.0			
	0.5 0.4	1.0 0.9	1.8 1.7				0.28 0.20	0.57 0.45	0.91 0.79			
o	3.0 2.4						12.0 9.0					
	0.7 0.5						0.34 0.25					

**Cold Water - Stainless or Forged Steel Straight Tee and Bushing**  
 Approximate actuation/deactuation flow rates  
 GPM upper, M<sup>3</sup>/HR lower

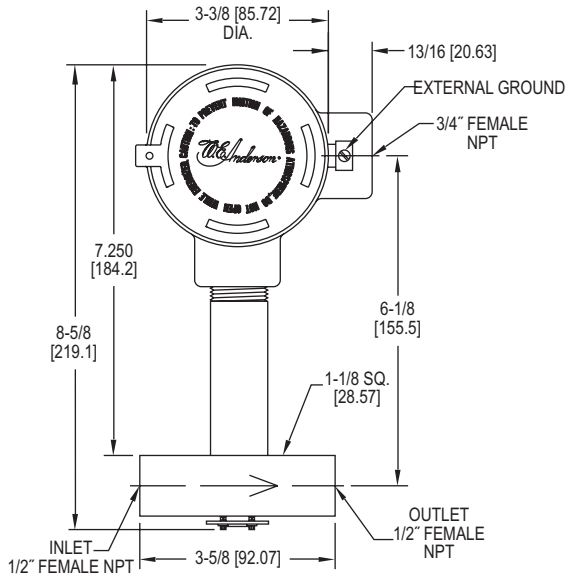
**Air - Stainless or Forged Steel Straight Tee and Bushing**  
 Approximate actuation/deactuation flow rates  
 SCFM upper, NM<sup>3</sup>/M lower

Vane	1/2" NPT	3/4" NPT	1" NPT	1-1/4" NPT	1-1/2" NPT	2" NPT	1/2" NPT	3/4" NPT	1" NPT	1-1/4" NPT	1-1/2" NPT	2" NPT
Full Size				5.0 4.5	8.5 7.8					21.0 18.0	33.0 30.0	
a				1.1 1.0	1.9 1.8					0.59 0.51	0.93 0.85	
				5.5 5.0	9.2 8.6					22.0 20.0	39.0 36.0	
				1.2 1.1	2.1 2.0					0.62 0.57	1.10 1.02	
b				6.2 5.7	9.8 9.0					24.0 22.0	42.0 38.0	
				1.4 1.3	2.2 2.0					0.68 0.62	1.19 1.08	
c				6.8 6.3	12.0 10.0					28.0 26.0	51.0 46.0	
				1.5 1.4	2.7 2.3					0.79 0.74	1.44 1.30	
d			2.8 2.4	8.5 7.8	13.0 11.0				12.0 10.0	33.0 30.0	55.0 50.0	
			0.6 0.5	1.9 1.8	3.0 2.5				0.34 0.28	0.93 0.85	1.56 1.42	
e			3.4 3.0	10.0 9.2					14.0 12.0	37.0 34.0		
			0.8 0.7	2.3 2.1					0.40 0.34	1.05 0.96		
f			4.0 3.6	12.0 10.0					16.0 14.0	43.0 40.0		
			0.91 0.82	2.7 2.3					0.45 0.40	1.22 1.13		
g	2.0 1.5	5.0 4.5							8.0 6.5	19.0 17.0		
	0.5 0.3	1.1 1.0							0.23 0.18	0.54 0.48		
h	2.5 2.0	6.5 6.1							11.0 10.0	26.0 24.0		
	0.6 0.5	1.48 1.39							0.31 0.28	0.74 0.68		
i	3.5 3.0	9.0 8.2							14.0 13.0	32.0 30.0		
	0.8 0.7	2.0 1.9							0.40 0.37	0.91 0.85		
j	7.0 5.5								27.0 24.0			
	1.6 1.2								0.76 0.68			
k	10.0 8.0								39.0 36.0			
	2.3 1.8								1.10 1.02			

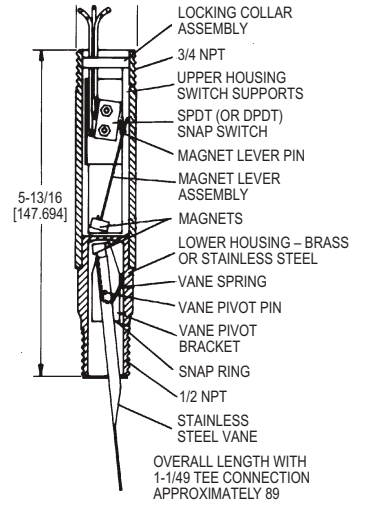
**DIMENSIONS**  
**Series V6 FLOTECT® Flow Switch**



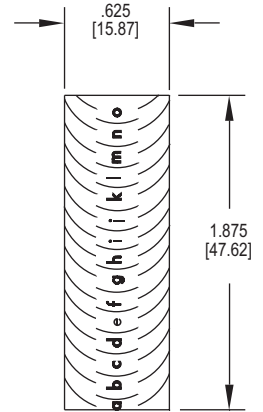
**V6 Low Flow**



**V6 Low Flow with CSA, ATEX Conduit Enclosure**

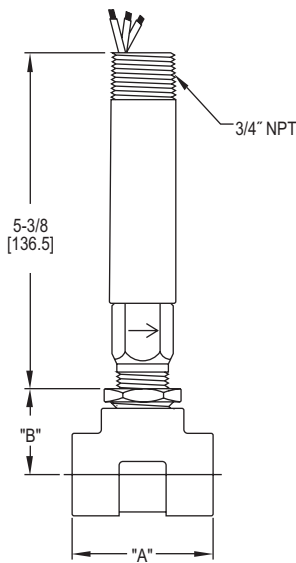


**V6 with Field Trimable Vane**

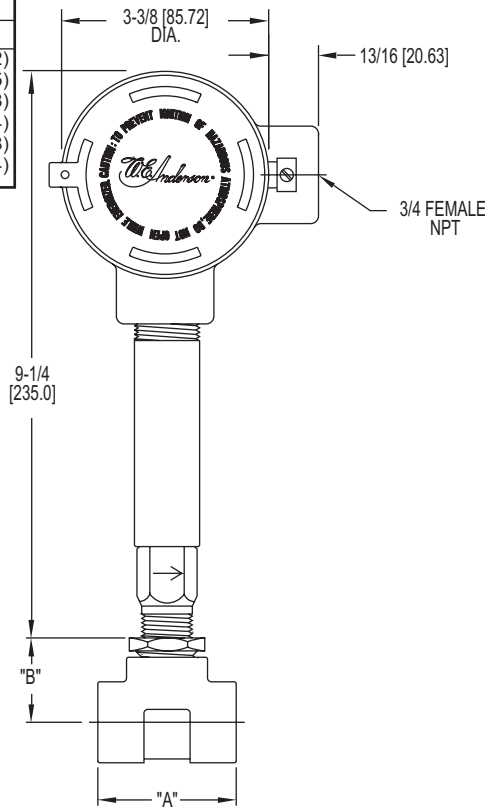


**Trimmable Vane**

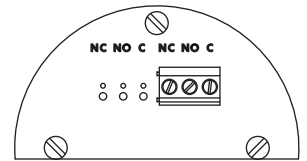
Pipe Size	Brass/Ductile Iron		Forged/Stainless Steel		Malleable Iron	
	Dim. A	Dim. B	Dim. A	Dim. B	Dim. A	Dim. B
1/2"	2-1/4 (57)	1-1/8 (29)	2-1/4 (57)	1-1/8 (29)	2-1/2 (64)	1-1/4 (32)
3/4"	2-3/8 (60)	1-1/4 (32)	2-5/8 (67)	1-7/8 (47)	2-5/8 (67)	1-3/8 (35)
1"	2-1/2 (64)	1-3/8 (35)	3 (76)	2-1/8 (54)	2-7/8 (73)	1-1/2 (38)
1-1/4"	2-5/8 (67)	1-1/2 (38)	3-1/2 (89)	2-1/2 (64)	3 (76)	1-3/4 (44)
1-1/2"	2-7/8 (73)	1-5/8 (41)	4 (102)	2-3/4 (70)	3-1/4 (83)	1-7/8 (48)
2"	3 (76)	1-7/8 (48)	4-3/4 (121)	3-1/8 (79)	3-1/2 (89)	2-1/8 (54)



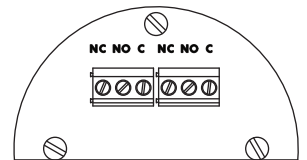
**V6 with Tee**



**V6 with Tee and CSA, ATEX Conduit Enclosure**



**SPDT**



**DPDT**

**Terminal Connections  
 CSA, ATEX Enclosures**