



## PRIMARY FLUID SYSTEMS INC.

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# Product Engineering Guide

For up-to-date product literature, including 2D drawings and 3D models, please consult our website:

[www.PrimaryFluid.com](http://www.PrimaryFluid.com)

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Primary Fluid Systems Inc. is a leading manufacturer of metering pump accessories, with applications in the water & wastewater treatment industries, as well as oil & gas, agricultural, pharmaceutical, and food & beverage. In twenty years, Primary Fluid Systems has expanded its customer base across the globe, with regular customers in the United States, Australia, United Kingdom, Norway, and the United Arab Emirates.

Constantly innovating, PFS always welcomes requests for custom products in order to better meet the needs of our customers. With 70+ years combined experience in this industry, our sales team can always find a solution to your technical problem.

Our products are certified to a variety of standards, including Canadian Registration Number (CRN) and CE Marking.

For more information on our products, including literature, dimensional drawings, and 3D models, please visit our website: [www.PrimaryFluid.com](http://www.PrimaryFluid.com)

# CRN

# CE

## TOP VALVE – Back Pressure Valve

### General

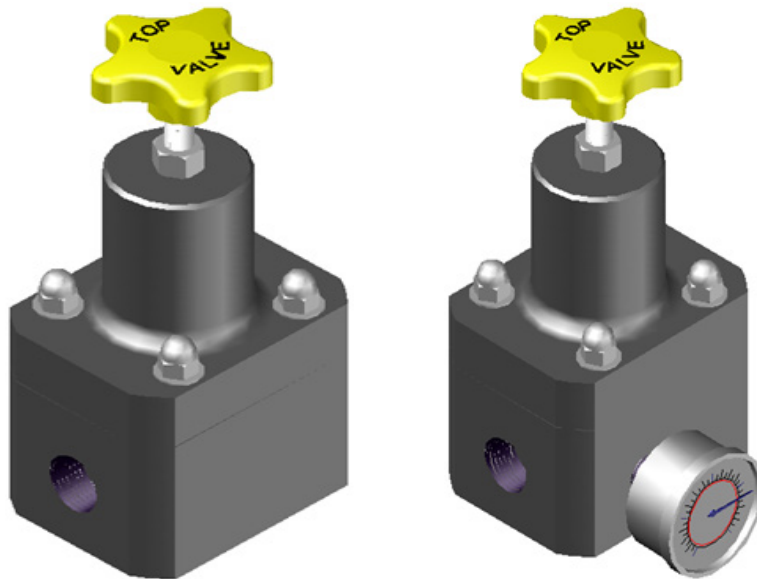
The Back Pressure Valve shall be an in-line diaphragm-style back pressure (anti-siphon) control valve with a built-in air release to help prevent air locking. It will have a standard maximum temperature of 140°F (60°C) with PVC bodies, 180°F (82°C) with Polypropylene bodies, and 200°F (93°C) with Corzan® CPVC / PVDF / S/S / HastC / Alloy bodies. It will be available in sizes ranging from ¼” to 2”.

The valve will have an adjustable pressure range of 15 to 150 PSIG\*. The spring-retaining top will be made of Corzan® CPVC; designed for higher ambient temperatures. The valve will have colour-coded handles with adjustable turn down that will limit the maximum pressure setting to 150 PSIG. The handle will also allow for fine pressure adjustment by hand, minimizing the requirements for tools. The valve will be factory set at 50 PSIG, with a locking nut to prevent unwanted adjustment. The valve will come with a Teflon®-laminated EPDM diaphragm or optional Viton or EPDM, plus a 3-year limited valve warranty. As manufactured by Primary Fluid Systems Inc.

\*Pressures under 15 PSIG require rubber elastomeric diaphragm.

### Optional Features

- Canadian Registration Number (CRN)
- Optional 1/4” gauge port, located on the side of the valve for straightforward pressure reading
- Connections of NPT or BSP thread, ASTM or DIN Socket, and ANSI, DIN, or JIS Flange.



For downloadable **2D CAD drawings** of our Top Valve products, please visit:

[www.primaryfluid.com/Top\\_Valve\\_CAD\\_Drawings.html](http://www.primaryfluid.com/Top_Valve_CAD_Drawings.html)

For downloadable **3D CAD models** of our plastic Top Valve products, please visit:

[www.primaryfluid.com/3D\\_TV\\_plastic\\_back\\_pressure.htm](http://www.primaryfluid.com/3D_TV_plastic_back_pressure.htm)

**CRN**  
Available

## TOP VALVE – High Pressure Back Pressure Valve

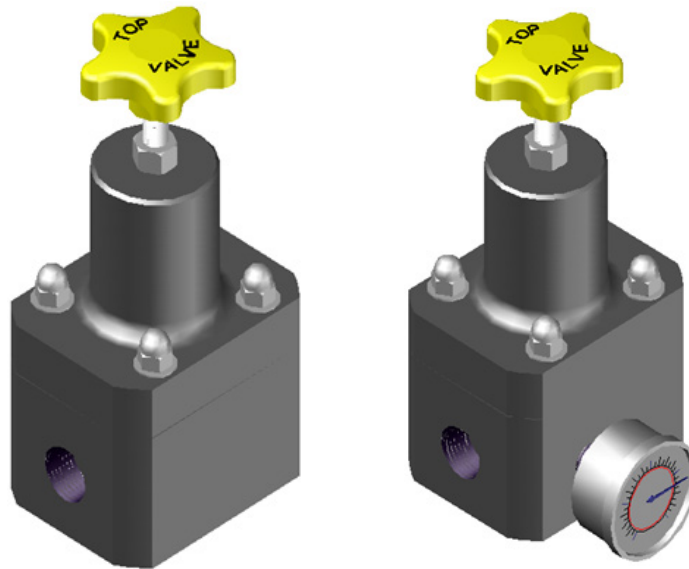
### **General**

The Back Pressure Valve shall be an in-line diaphragm-style back pressure (anti-siphon) control valve with a built-in air release to help prevent air locking. They will have a standard maximum temperature of 300°F (149°C) with S/S / HastC / Alloy bodies only. The valve will have an adjustable pressure range of 50 to 350 PSIG. They will be available in sizes ranging from ¼” to 2”. The spring-retaining top will be made of Aluminum. The valve will have a stainless steel socket-head cap screw with adjustable turn down that will limit the maximum pressure setting to 350 PSIG. The cap screw will also allow for fine pressure adjustment. The valve will be factory set at 100 PSIG, with a locking nut to prevent unwanted adjustment. The valve will come with a long-life Viton diaphragm, plus a 3-year limited valve warranty.

As manufactured by Primary Fluid Systems Inc.

### **Optional Features**

- Canadian Registration Number (CRN)
- Optional 1/4” gauge port, located on the side of the valve for straightforward pressure reading
- Other metallic materials for Top available upon request
- Connections of NPT or BSP thread, ASTM or DIN Socket, and ANSI, DIN, or JIS Flange.



For downloadable **2D CAD drawings** of our Top Valve products, please visit:

[www.primaryfluid.com/Top\\_Valve\\_CAD\\_Drawings.html](http://www.primaryfluid.com/Top_Valve_CAD_Drawings.html)

For downloadable **3D CAD models** of our metallic Top Valve products, please visit:

[www.primaryfluid.com/3D\\_TV\\_metallic\\_back\\_pressure.htm](http://www.primaryfluid.com/3D_TV_metallic_back_pressure.htm)

**CRN**  
Available

## TOP VALVE – High Temperature Back Pressure Valve

### General

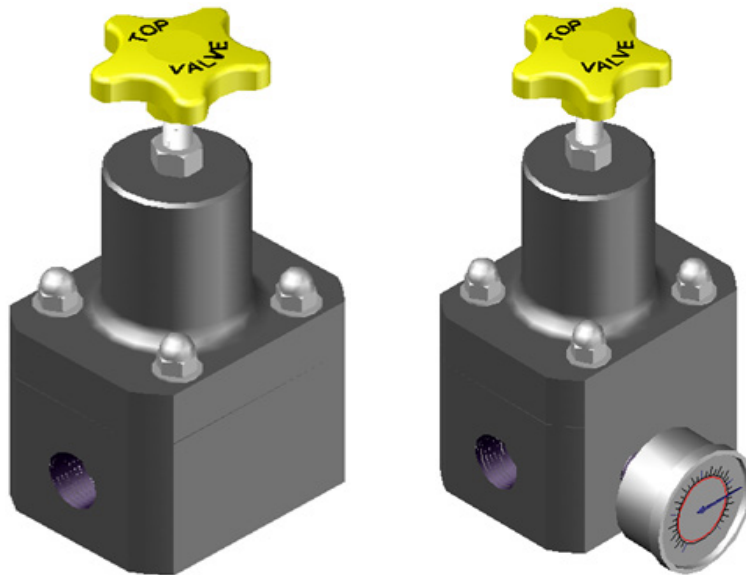
The Back Pressure Valve shall be an in-line diaphragm-style back pressure (anti-siphon) control valve with a built-in air release to help prevent air locking. They will have a standard maximum temperature of 300°F (149°C) with S/S / HastC / Alloy bodies only. They will be available in sizes ranging from ¼” to 2”. The valve will have an adjustable pressure range of 15 to 350 PSIG\*. The spring-retaining top will be made of Aluminum. The valve will have colour-coded handles with adjustable turn down that will limit the maximum pressure setting to 150 PSIG. The handle allows for fine pressure adjustment by hand, minimizing the requirements for tools. The valve will be factory set at 50 PSIG, with a locking nut to prevent unwanted adjustment.

The valve will come with a long-life Viton diaphragm, plus a 3-year limited valve warranty.  
As manufactured by Primary Fluid Systems Inc.

\*Pressures under 15 PSIG require rubber elastomeric diaphragm.

### Optional Features

- Canadian Registration Number (CRN)
- Optional 1/4” gauge port, located on the side of the valve for straightforward pressure reading
- Other metallic materials for Top available upon request
- Connections of NPT or BSP thread, ASTM or DIN Socket, and ANSI, DIN, or JIS Flange.



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For downloadable **3D CAD models** of our metallic Top Valve products, please visit:

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**CRN**  
Available

## TOP VALVE – Pressure Relief Valve

### General

The Pressure Relief Valve shall be an in-line diaphragm-style pressure relief control valve with a bottom port as relief discharge plus a built-in air release to help prevent air locking. They will have a standard maximum temperature of 140°F (60°C) with PVC bodies, 180°F (82°C) with Polypropylene bodies, and 200°F (93°C) with Corzan® CPVC / PVDF / S/S / HastC / Alloy bodies. The valves will have an adjustable pressure range of 15 to 150 PSIG\*. They will be available in sizes ranging from ¼” to 2”.

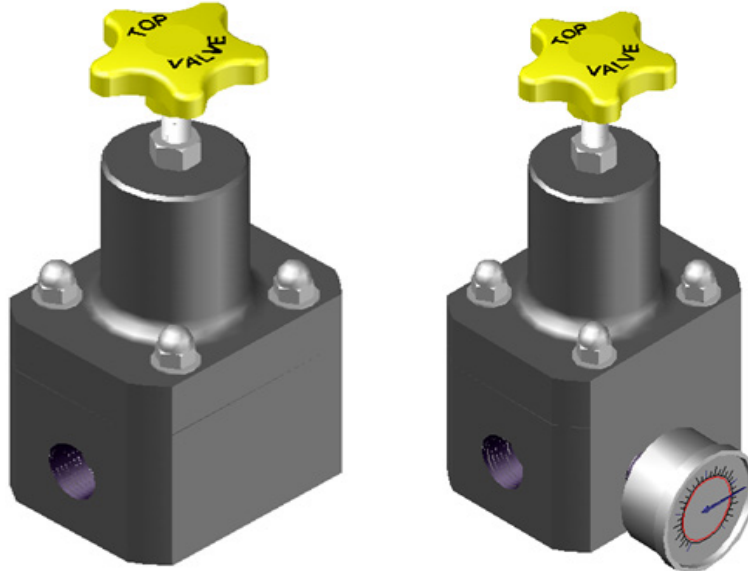
The spring-retaining top will be made of Corzan® CPVC; designed for higher ambient temperatures. The valve will have colour-coded handles with adjustable turn down that will limit maximum pressure setting to 150 PSIG. The handle will also allow for fine pressure adjustment by hand, minimizing the requirements for tools. The valve will be factory set at 50 PSIG, with a locking nut to prevent unwanted adjustment. The valve will come with a Teflon®-laminated EPDM diaphragm or optional Viton or EPDM, plus a 3-year limited valve warranty.

As manufactured by Primary Fluid Systems Inc.

\*Pressures under 15 PSIG require rubber elastomeric diaphragm.

### Optional Features

- Canadian Registration Number (CRN)
- Optional 1/4” gauge port, located on the side of the valve for straightforward pressure reading
- Connections of NPT or BSP thread, ASTM or DIN Socket, and ANSI, DIN, or JIS Flange.



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For downloadable **3D CAD models** of our metallic Top Valve products, please visit:

[www.primaryfluid.com/3D\\_TV\\_plastic\\_relief\\_valve.htm](http://www.primaryfluid.com/3D_TV_plastic_relief_valve.htm)

**CRN**  
Available

## TOP VALVE – High Pressure Relief Valve

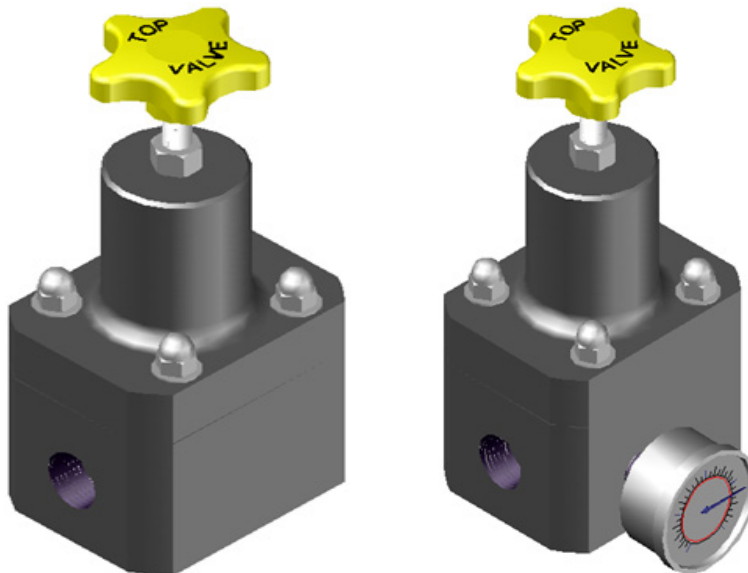
### **General**

The Pressure Relief Valve shall be an in-line diaphragm-style pressure relief control valve with a bottom port as relief discharge plus a built-in air release to help prevent air locking. They will have a standard maximum temperature of 300°F (149°C) with S/S / HastC / Alloy bodies only. The valve will have an adjustable pressure range of 50 to 350 PSIG. They will be available in sizes ranging from ¼” to 2”. The spring-retaining top will be made of Aluminum. The valve will have a stainless steel socket-head cap screw with adjustable turn down that will limit maximum pressure setting to 350 PSIG. The screw will also allow for fine pressure adjustment. The valve will be factory set at 100 PSIG, with a locking nut to prevent unwanted adjustment.

The valve will come with a long-life Viton diaphragm, plus a 3-year limited valve warranty. As manufactured by Primary Fluid Systems Inc.

### **Optional Features**

- Canadian Registration Number (CRN)
- Optional 1/4” gauge port, located on the side of the valve for straightforward pressure reading
- Other metallic materials for Top available upon request
- Connections of NPT or BSP thread, ASTM or DIN Socket, and ANSI, DIN, or JIS Flange.



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For downloadable **3D CAD models** of our metallic Top Valve products, please visit:

[www.primaryfluid.com/3D\\_TV\\_pmetallic\\_relief\\_valve.htm](http://www.primaryfluid.com/3D_TV_pmetallic_relief_valve.htm)

**CRN**  
Available



## TOP VALVE – High Temperature Pressure Relief Valve

### General

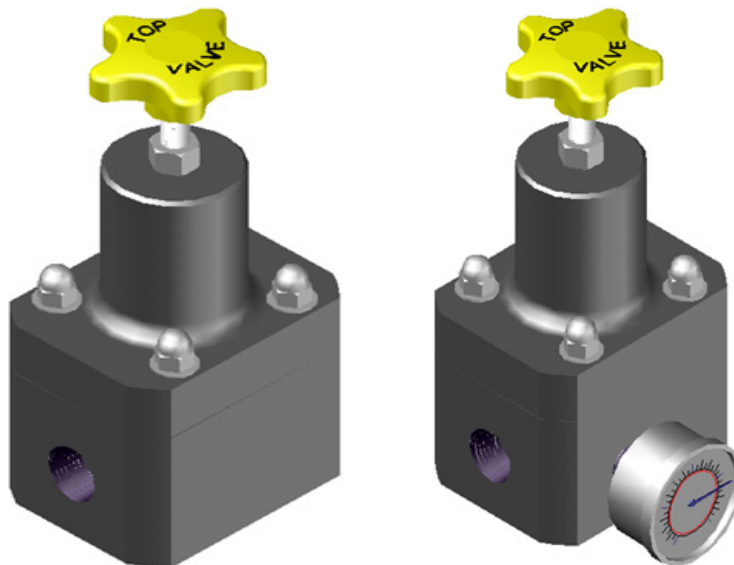
The Pressure Relief Valve shall be an in-line diaphragm-style pressure relief control valve with a bottom port as relief discharge plus a built-in air release to help prevent air locking. They will have a standard maximum temperature of 300°F (149°C) with S/S / Hastelloy bodies only. The valve will have an adjustable pressure range of 15 to 350 PSIG\*. They will be available in sizes ranging from ¼” to 2”. The spring-retaining top will be made of Aluminum. The valve will have colour-coded handles with adjustable turn down that will limit maximum pressure setting to 150 PSIG. The handle will also allow for fine pressure adjustment by hand, minimizing the requirements for tools. The valve will be factory set at 50 PSIG, with a locking nut to prevent unwanted adjustment.

The valve will come with a long-life Viton diaphragm, plus a 3-year limited valve warranty. As manufactured by Primary Fluid Systems Inc.

\*Pressures under 15 PSIG require rubber elastomeric diaphragm.

### Optional Features

- Canadian Registration Number (CRN)
- Optional 1/4” gauge port, located on the side of the valve for straightforward pressure reading
- Other metallic materials for Top available upon request
- Connections of NPT or BSP thread, ASTM or DIN Socket, and ANSI, DIN, or JIS Flange.



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**CRN**  
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## ACCUDRAW® – Polypropylene Calibration Cylinders

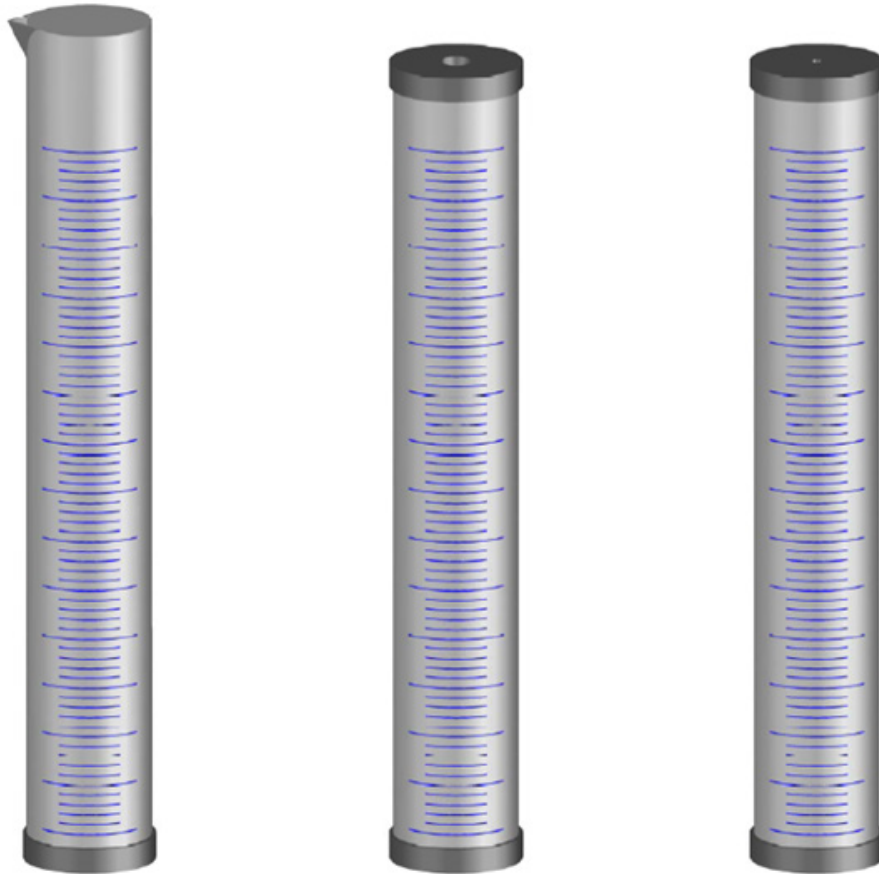
### **General**

The Calibration Cylinder shall be manufactured from highly-translucent polypropylene (PP) material. Graduations shall be easy-to-read ultraviolet blue printing with a PP coating to ensure ink lettering is chemical resistant. As well, the cylinders will be shatter resistant, which minimizes breakage and the potential for injury. The cylinder will be chemically resistant to most acids, bases, and many commonly used solvents. The calibration cylinders shall be available with end cap connections of NPT (Female), but optional connection types are listed below. All connections will be CNC machined from PP material. All bottom connections will come with NPT (Female) threading. The top connection will be a pouring spout, NPT threaded end cap, or removable vented dust cap that is CNC machined from PP material. The calibration cylinders with both end cap connections will be tested against leaks.

As manufactured by Primary Fluid Systems Inc., to ISO 6706.

### **Optional Features**

- End cap connections of BSP thread, ASTM or DIN Socket, and ANSI, DIN, or JIS Flange.



For downloadable **2D CAD drawings** of our Accudraw calibration cylinders, please visit:

[www.primaryfluid.com/Accudraw\\_CAD\\_Drawings.html](http://www.primaryfluid.com/Accudraw_CAD_Drawings.html)

For downloadable **3D CAD models** of our Accudraw calibration cylinders, please visit:

[www.primaryfluid.com/3D\\_Accudraw.htm](http://www.primaryfluid.com/3D_Accudraw.htm)

## ACCUDRAW® – PVC Calibration Cylinders

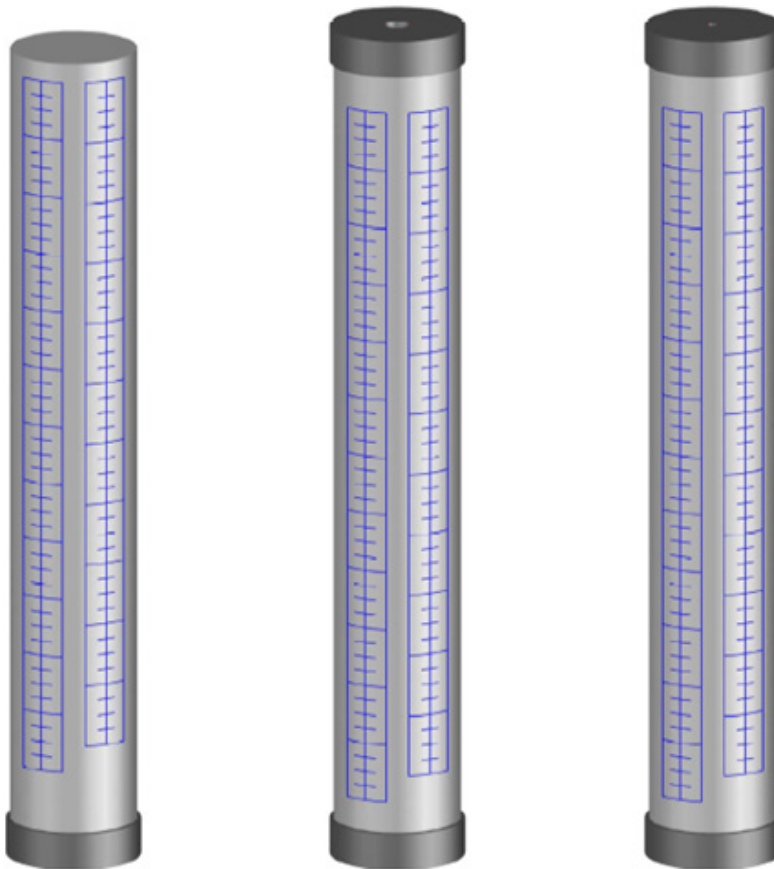
### General

The Calibration Cylinder shall be manufactured from highly-translucent polyvinyl chloride (PVC) material. Graduations shall be easy-to-read imprinted blue lettering with PP coating to ensure chemical resistance. Graduations shall have dual-scale USGPH and mL, with ascending and descending increments. The calibration cylinder shall be available with end cap connections of NPT (Female), but optional connection types are listed below. All connections will be CNC machined or injection moulded from PVC material. All bottom connections will come with NPT (Female) threading. The top connection will be either open, NPT threaded end cap, removable vented dust cap or removable NPT threaded end cap that is CNC machined or injection moulded from PVC material. Calibration cylinders with the removable top end cap (PV#4) are convenient for cleaning the cylinder and will include a highly-visible float to improve graduation measurement.

As manufactured by Primary Fluid Systems Inc., to ISO 6706.

### Optional Features

- End cap connections of BSP thread, ASTM or DIN Socket, and ANSI, DIN, or JIS Flange.
- Highly-visible float for PV#1 and PV#3 products.



For downloadable **2D CAD drawings** of our Accudraw calibration cylinders, please visit:

[www.primaryfluid.com/Accudraw\\_CAD\\_Drawings.html](http://www.primaryfluid.com/Accudraw_CAD_Drawings.html)

For downloadable **3D CAD models** of our Accudraw calibration cylinders, please visit:

[www.primaryfluid.com/3D\\_Accudraw.htm](http://www.primaryfluid.com/3D_Accudraw.htm)

**ACCUDRAW® – ACS#2 Calibration Cylinders**  
(Glass and Teflon Construction)

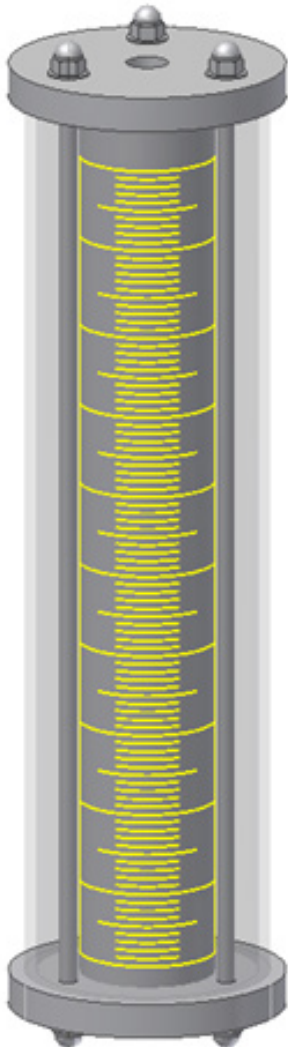
**General**

The Calibration Cylinder shall be manufactured from highly-translucent and durable polycarbonate outer shield, and a tempered glass inner calibrated cylinder. The polycarbonate shield shall be UV-protected and act as a temporary secondary containment area. Graduations shall be easy-to-read imprinted blue markings (in mL graduations), baked onto the glass surface, which ensures the ink markings are chemical resistance. The calibration cylinder shall be manufactured standard with end cap connections of NPT (Female), but optional connection types are listed below. Top and bottom connections will be CNC machined from 3/4" thick glass-filled TFE material. Viton O-rings will be used for sealing the graduated glass cylinder, and Buna-N O-rings will be used for sealing the polycarbonate shield. The unit will be secured using threaded stainless steel rods, which facilitates disassembly for cleaning. Each cylinder will be tested against leakage.

As manufactured by Primary Fluid Systems Inc., to ISO 6706.

**Optional Features**

- End cap connections of BSP thread, ASTM or DIN Socket, and ANSI, DIN, or JIS Flange.



For downloadable **2D CAD drawings** of our Accudraw calibration cylinders, please visit:  
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For downloadable **3D CAD models** of our Accudraw calibration cylinders, please visit:  
[www.primaryfluid.com/3D\\_Accudraw.htm](http://www.primaryfluid.com/3D_Accudraw.htm)

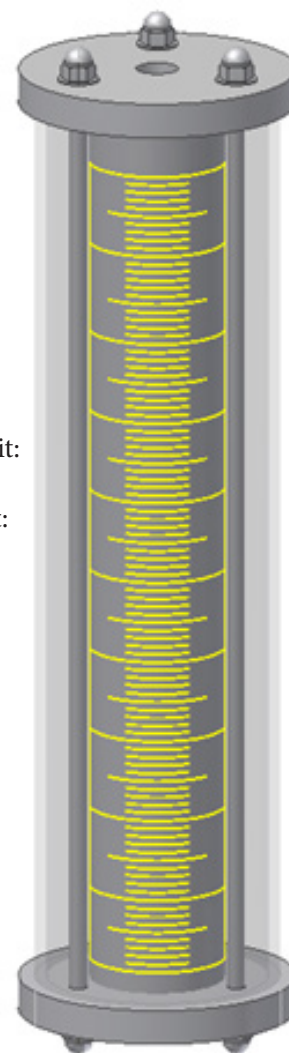
**ACCUDRAW® – ACS#2 Calibration Cylinders**  
(Glass and PVDF Construction)

**General**

The Calibration Cylinder shall be manufactured from highly-translucent and durable polycarbonate outer shield, and a tempered glass inner calibrated cylinder. The polycarbonate shield shall be UV-protected and act as a temporary secondary containment area. Graduations shall be easy-to-read imprinted blue markings (in mL graduations), baked onto the glass surface, which ensures the ink markings are chemical resistance. The calibration cylinder shall be manufactured standard with end cap connections of NPT (Female), but optional connection types are listed below. Top and bottom connections will be CNC machined from 3/4" thick PVDF material. Viton O-rings will be used for sealing the graduated glass cylinder, and Buna-N O-rings will be used for sealing the polycarbonate shield. The unit will be secured using threaded stainless steel rods, which facilitates disassembly for cleaning. Each cylinder will be tested against leakage. As manufactured by Primary Fluid Systems Inc., to ISO 6706.

**Optional Features**

- End cap connections of BSP thread, ASTM or DIN Socket, and ANSI, DIN, or JIS Flange.



For downloadable **2D CAD drawings** of our Accudraw calibration cylinders, please visit:

[www.primaryfluid.com/Accudraw\\_CAD\\_Drawings.html](http://www.primaryfluid.com/Accudraw_CAD_Drawings.html)

For downloadable **3D CAD models** of our Accudraw calibration cylinders, please visit:

[www.primaryfluid.com/3D\\_Accudraw.htm](http://www.primaryfluid.com/3D_Accudraw.htm)

**ACCUDRAW® – ACS#2 Calibration Cylinders**  
(Glass and Corzan® CPVC Construction)

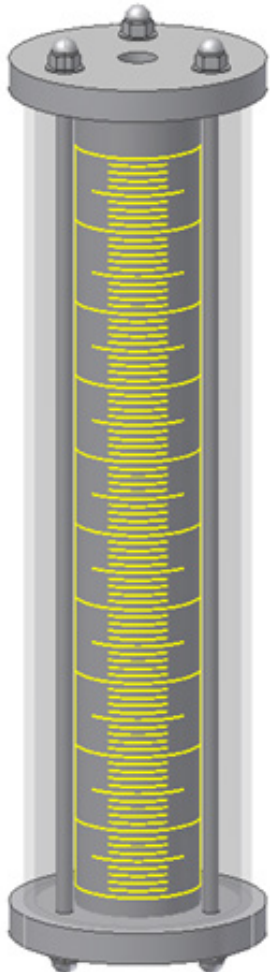
**General**

The Calibration Cylinder shall be manufactured from highly-translucent and durable polycarbonate outer shield, and a tempered glass inner calibrated cylinder. The polycarbonate shield shall be UV-protected and act as a temporary secondary containment area. Graduations shall be easy-to-read imprinted blue markings (in mL graduations), baked onto the glass surface, which ensures the ink markings are chemical resistance. The calibration cylinder shall be manufactured standard with end cap connections of NPT (Female), though optional connection types are listed below. Top and bottom connections will be CNC machined from 3/4" thick Corzan® CPVC material. Viton O-rings will be used for sealing the graduated glass cylinder, and Buna-N O-rings will be used for sealing the polycarbonate shield. The unit will be secured using threaded stainless steel rods, which facilitates disassembly for cleaning. Each cylinder will be tested against leakage.

As manufactured by Primary Fluid Systems Inc., to ISO 6706.

**Optional Features**

- End cap connections of BSP thread, ASTM or DIN Socket, and ANSI, DIN, or JIS Flange.



For downloadable **2D CAD drawings** of our Accudraw calibration cylinders, please visit:  
[www.primaryfluid.com/Accudraw\\_CAD\\_Drawings.html](http://www.primaryfluid.com/Accudraw_CAD_Drawings.html)

For downloadable **3D CAD models** of our Accudraw calibration cylinders, please visit:  
[www.primaryfluid.com/3D\\_Accudraw.htm](http://www.primaryfluid.com/3D_Accudraw.htm)



**ACCUDRAW® – ACS#2 Calibration Cylinders**  
(Glass and 316 Stainless Steel Construction)

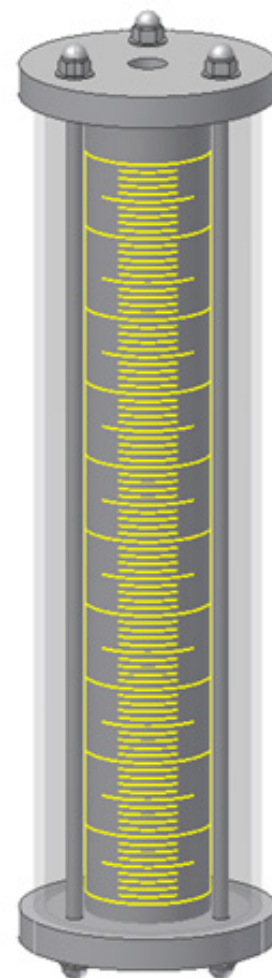
**General**

The Calibration Cylinder shall be manufactured from highly-translucent and durable polycarbonate outer shield, and a tempered glass inner calibrated cylinder. The polycarbonate shield shall be UV-protected and act as a temporary secondary containment area. Graduations shall be easy-to-read imprinted blue markings (in mL graduations), baked onto the glass surface, which ensures the ink markings are chemical resistance. The calibration cylinder shall be manufactured standard with end cap connections of NPT (Female), though optional connection types are listed below. Top and bottom connections will be CNC machined from 1/2" thick 316 S/S material. Viton O-rings will be used for sealing the graduated glass cylinder, and Buna-N O-rings will be used for sealing the polycarbonate shield. The unit will be secured using threaded stainless steel rods, which facilitates disassembly for cleaning. Each cylinder will be tested against leakage.

As manufactured by Primary Fluid Systems Inc., to ISO 6706.

**Optional Features**

- End cap connections of BSP thread, ASTM or DIN Socket, and ANSI, DIN, or JIS Flange.



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[www.primaryfluid.com/3D\\_Accudraw.htm](http://www.primaryfluid.com/3D_Accudraw.htm)

## ACCUPULSE – Pulsation Dampeners

### **General**

The Pulsation Dampener shall be a hydropneumatic, bladder-type that is oriented vertically. The pulsation dampener shall be constructed with two chambers – a fluid chamber and a pressure chamber, separated by an elastomeric bladder. The two chambers shall be secured with metal bolts on all metal units. API plastic units shall be secured with metal bolts or threaded. APII and APIII plastic units shall be secured using a ring flange. The dampener shall be designed with a minimum safety factor of 4:1 burst pressure to maximum working pressure. The pulsation dampener shall be capable of handling the pump's maximum stroke volume. The dampener shall be available with a bottom NPT (Female) connection, but optional connection types are listed below. Pulsation dampener shall be fitted with an automotive-type gas fill valve with high- pressure core and cap. Also, the pulsation dampener shall be fitted with a pressure gauge. As supplied by Primary Fluid Systems Inc.

### **Optional Features**

- Canadian Registration Number (CRN) available on Stainless Steel models.
- Connections of BSP thread, ASTM or DIN Socket, and ANSI, DIN, or JIS Flange.



For downloadable **2D CAD drawings** of our AccuPulse products, please visit:

[www.primaryfluid.com/Accupulse\\_CAD\\_Drawings.html](http://www.primaryfluid.com/Accupulse_CAD_Drawings.html)

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**CRN**  
Available

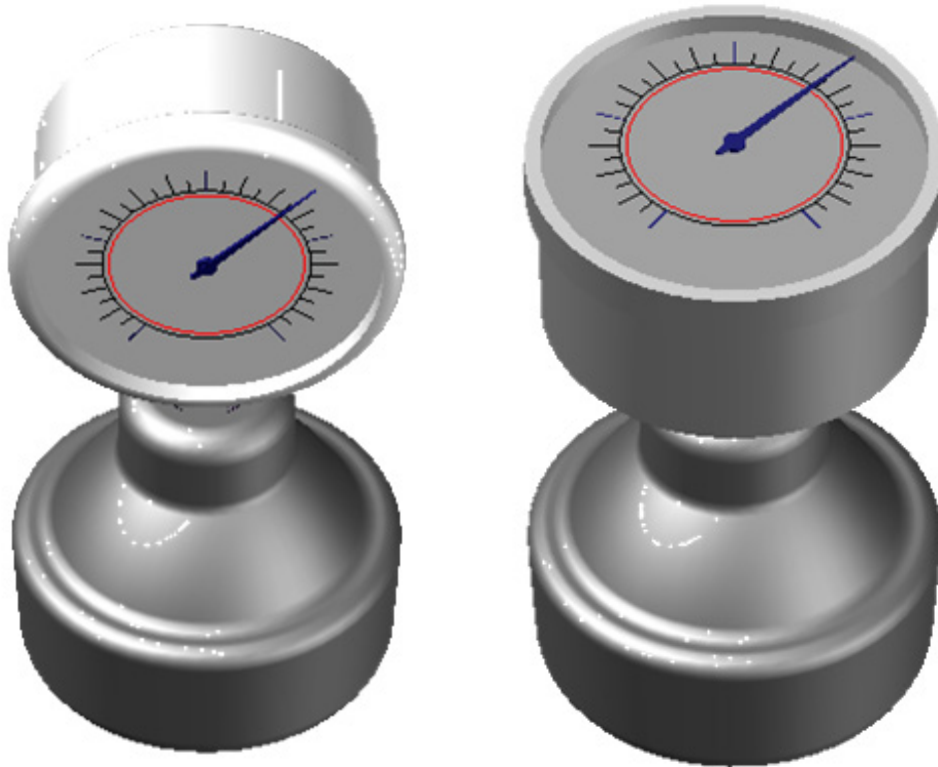


## ACCUGAUGE – Gauge with Diaphragm Isolators

### **General**

The Gauge and diaphragm isolator is designed to be mounted into a system to accurately set and monitor system pressures. The diaphragm isolator protects the mounted pressure gauge from corrosive or slurry-laden process fluids. Wetted body shall be made of either PVC, polypropylene, PVDF, 316 S/S, Alloy20 or Hastelloy C. Diaphragm isolator shall be made of Viton, Teflon, or 316 S/S for optimized chemical resistance to the process fluid. The diaphragm isolator shall be filled with temperature stable glycerine. The diaphragm isolator shall be available with a 1/4" NPT (Female) connection only. Pressure gauge measurement range will be from 0 to 160 PSI.

As supplied by Primary Fluid Systems Inc.



## PFS INJECTION QUILLS

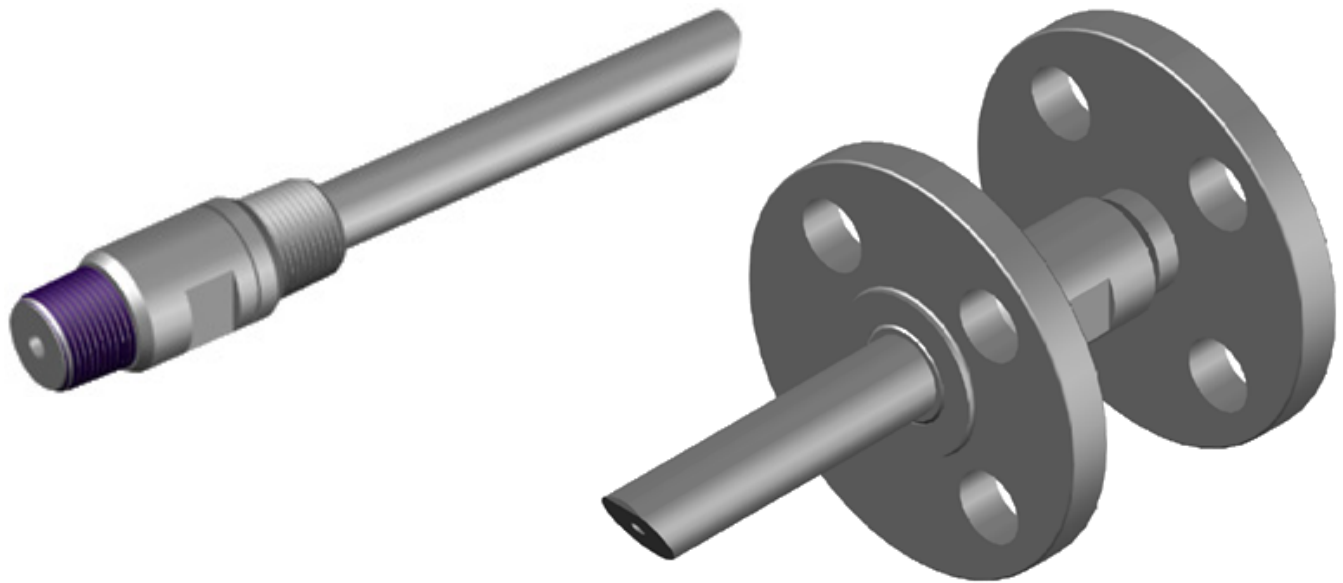
Male x Male Connection

### **General**

The injection quill body shall be used for center stream chemical injection. The quill shall have a maximum pressure rating up to 3000 PSIG and maximum temperature up to 5000 F. (2600 C.) dependent on material. The quill shall have male inlet and outlet NPT connections, with optional connection styles. The Quill shall have a built-in spring loaded check valve to reduce siphoning. The check valve is field repairable. The injection quill shall be available in various insertion lengths. The standard discharge orifice is 1/8" for higher velocity discharge, with optional orifice diameters for higher capacity flow. The injection quill shall have a 45 degree tip.

### **Optional Features**

- Canadian Registration Number (CRN)
- Connections of BSP thread, ASTM or DIN Spigot, and ANSI, DIN, or JIS Flange.



For downloadable **2D CAD drawings** of our MxM Injection Quills, please visit:

[www.primaryfluid.com/Injection\\_Quills\\_CAD\\_Draw.html](http://www.primaryfluid.com/Injection_Quills_CAD_Draw.html)

For downloadable **3D CAD models** of our MxM Injection Quills, please visit:

[www.primaryfluid.com/3D\\_Injection\\_Quills.htm](http://www.primaryfluid.com/3D_Injection_Quills.htm)

**CRN**  
Available

## PFS INJECTION QUILLS

Female x Male Connection

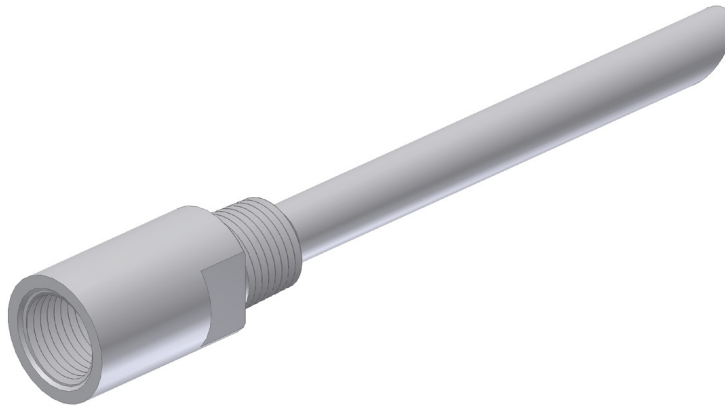
### **General**

The injection quill body shall be used for center stream chemical injection. The quill shall have a maximum pressure rating up to 3000 PSIG and maximum temperature up to 5000 F. (2600 C.) dependent on material. The quill shall have a female inlet and male outlet NPT connection, with optional connection styles as listed below.

The Quill shall have a built-in spring loaded check valve to reduce siphoning. The check valve is field repairable. The injection quill shall be available in various insertion lengths. The standard discharge orifice is 1/4" for higher velocity discharge, with optional orifice diameters for higher capacity flow. The injection quill shall have a 45 degree tip.

### **Optional Features**

- Connections of BSP thread, ASTM or DIN Spigot, and ANSI, DIN, or JIS Flange.



For downloadable **2D CAD drawings** of our FxM Injection Quills, please visit:

[www.primaryfluid.com/Injection\\_Quills\\_female\\_male\\_CAD\\_Draw.html](http://www.primaryfluid.com/Injection_Quills_female_male_CAD_Draw.html)

For downloadable **3D CAD models** of our FxM Injection Quills, please visit:

[www.primaryfluid.com/injection\\_quills\\_female\\_male\\_3d-CAD\\_Draw.html](http://www.primaryfluid.com/injection_quills_female_male_3d-CAD_Draw.html)

**CRN**  
Available

## PFS CORPORATION STOPS

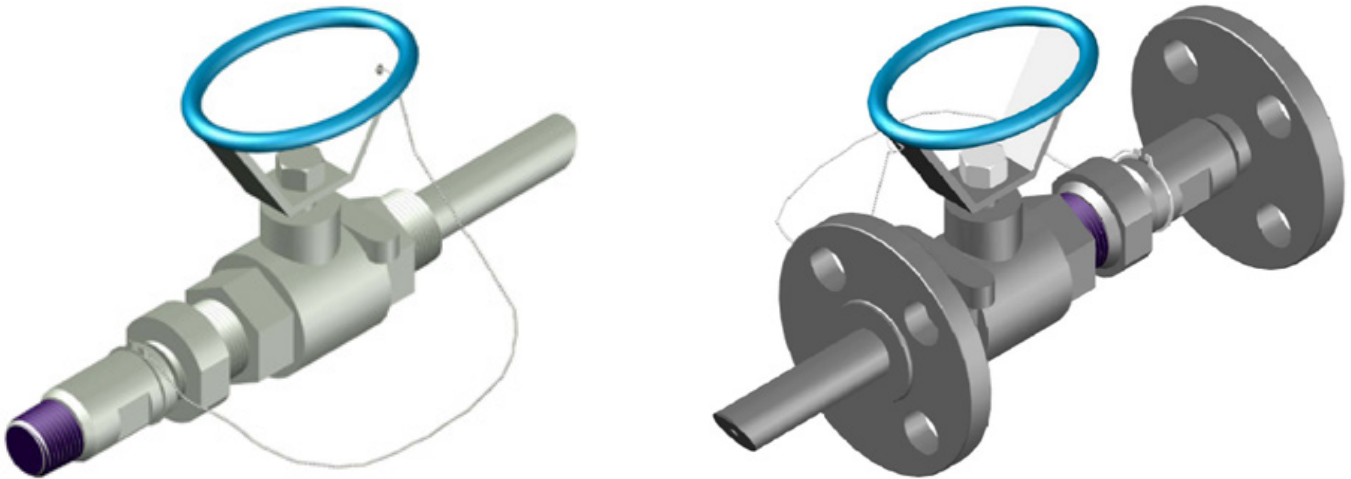
### **General**

The corporation stop is designed to provide simplified maintenance through the use of an isolation valve and gland arrangement for safe quill extraction from low pressurized systems. The injection quill is designed for injection of chemicals into the centre stream of a process line, providing for improved homogeneous mixing in the pipeline. Each quill shall have a built-in check valve to reduce back siphoning. The injection quill body shall be manufactured from PVC, Corzan® CPVC, Polypropylene, PVDF, 316 S/S, and Hastelloy C. Maximum temperature range is 140 °F (60 °C) to 350 °F (176 °C), depending on body material. The injection quills shall be between 10-1/2" to 12-1/4" overall length (suitable for 4" to 6" pipe), or between 12-1/2" to 14-1/4" overall length (suitable for 8" to 10" pipe). Longer quill lengths are available – please contact our office for custom inquiries. The injection quill will be available with connections of NPT (Male), but optional connection types are listed below.

As manufactured by Primary Fluid Systems Inc.

### **Optional Features**

- Canadian Registration Number (CRN)
- Connections of BSP thread, ASTM or DIN Spigot, and ANSI, DIN, or JIS Flange.



For downloadable **2D CAD drawings** of our Corporation Stops, please visit:

[www.primaryfluid.com/Corporation\\_Stops\\_CAD\\_Draw.html](http://www.primaryfluid.com/Corporation_Stops_CAD_Draw.html)

For downloadable **3D CAD models** of our Corporation Stops, please visit:

[www.primaryfluid.com/3D\\_Corporation\\_Stops.htm](http://www.primaryfluid.com/3D_Corporation_Stops.htm)

**CRN**  
Available

## PFS RETRACTABLE CORPORATION STOPS

### **General**

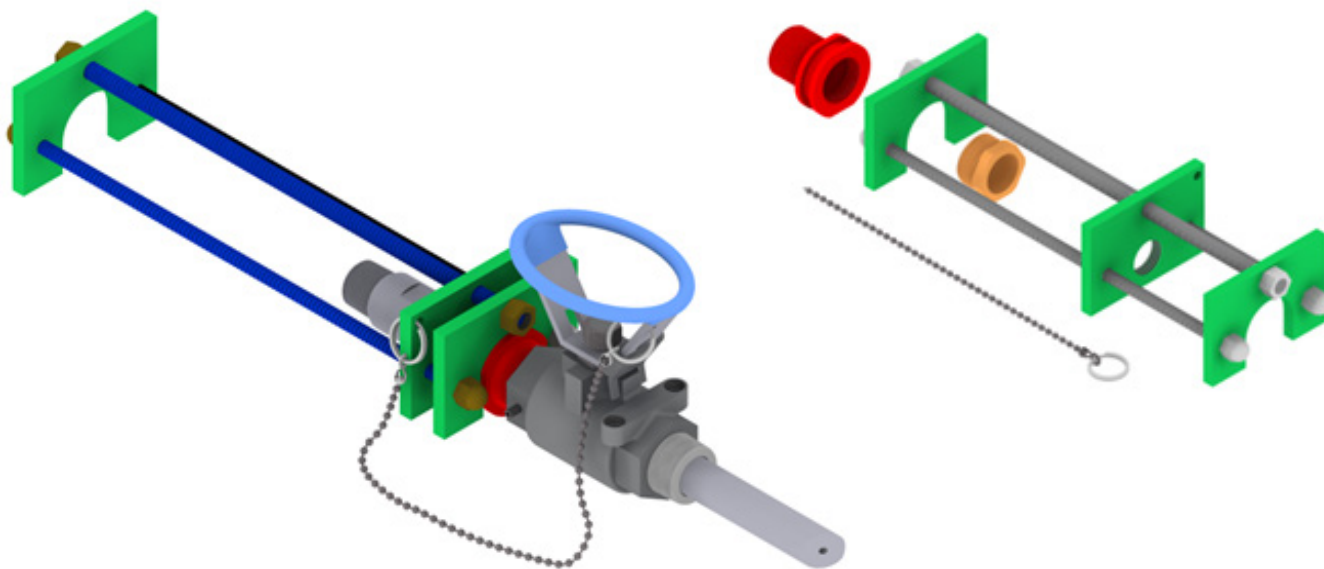
The retractable corporation stop shall be used for center stream chemical injection. The retractable corporation stop adds a restraint frame to allow safe quill extraction from pressurized systems up to 1500 PSI. The retractable frame shall be manufactured from stainless steel and titanium Gr.5. The quill shall be extracted by using a standard wrench. The isolation valve and quill body are available in alloy materials only. The Quill shall have a built-in spring loaded check valve to reduce siphoning. The check valve is field repairable with non metallic or metallic internal components.

The overall length of the standard MNPT x MNPT injection quill shall be between 10-1/2" to 12-1/4" for 4" to 6" pipe or between 12-1/2" to 14-1/4" for 8" to 10" pipe. Longer quill lengths are also available.

As manufactured by Primary Fluid Systems Inc.

### **Optional Features**

- Retrofit kit available for currently installed PFS corporation stops.
- Connections of BSP thread, ASTM or DIN Spigot, and ANSI, DIN, or JIS Flange.



For downloadable **2D CAD drawings** of our Corporation Stops, please visit:

[www.primaryfluid.com/Corporation\\_Stops\\_CAD\\_Draw.html](http://www.primaryfluid.com/Corporation_Stops_CAD_Draw.html)

For downloadable **3D CAD models** of our Corporation Stops, please visit:

[www.primaryfluid.com/3D\\_Corporation\\_Stops.htm](http://www.primaryfluid.com/3D_Corporation_Stops.htm)

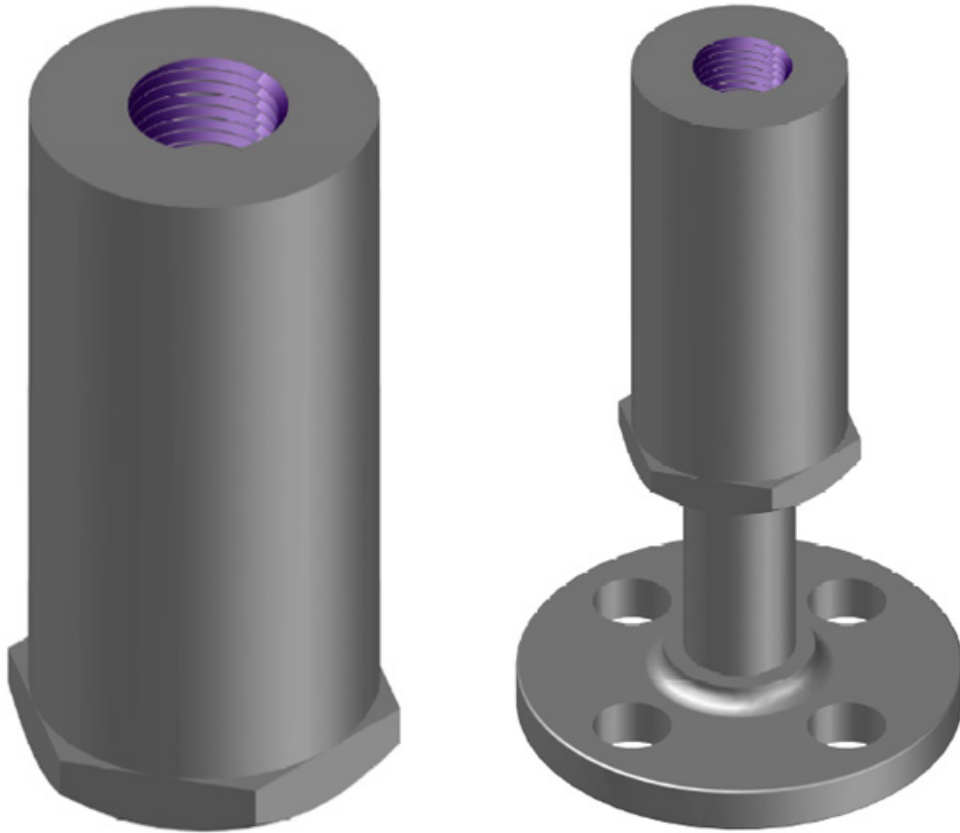
## ACCUVENT – Automatic Degassing Valve

### **General**

The automatic degassing valve is designed to vent gases that cause vapour lock in metering pumps. The degassing valve was designed specifically for applications using sodium hypochlorite, sulphuric acid to 98%, and hydrogen peroxide to 30%. Body material shall be made of CPVC, PVDF, or 316 S/S for optimized chemical resistance. The valve shall be available in various connections and sizes, which are listed below. As manufactured by Primary Fluid Systems Inc.

### **Optional Features**

- Connections of NPT or BSP thread, ASTM or DIN Socket, and ANSI, DIN, or JIS Flange.
- Connection sizes include ¼”, ½”, ¾” and 1”



For downloadable **2D CAD drawings** of Accu-Vent, please visit:

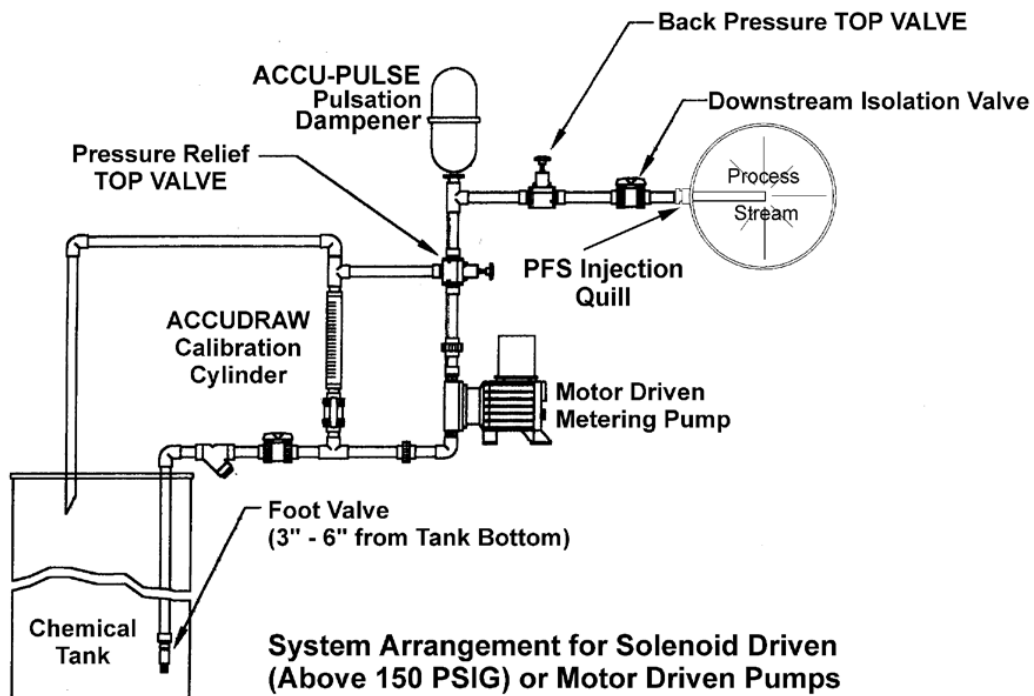
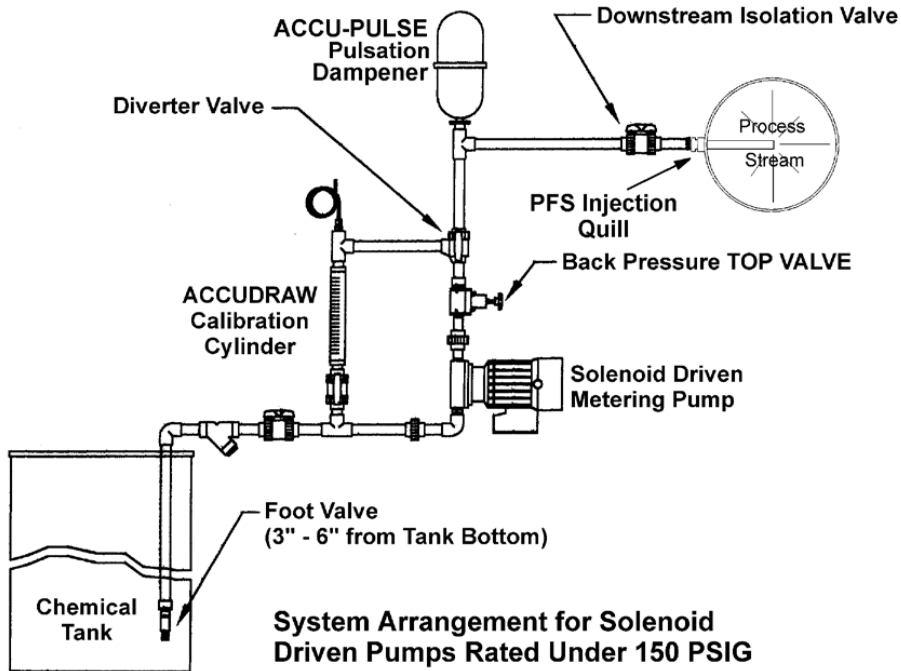
[www.primaryfluid.com/accuvent\\_CAD\\_Drawings.html](http://www.primaryfluid.com/accuvent_CAD_Drawings.html)

For downloadable **3D CAD models** of Accu-Vent, please visit:

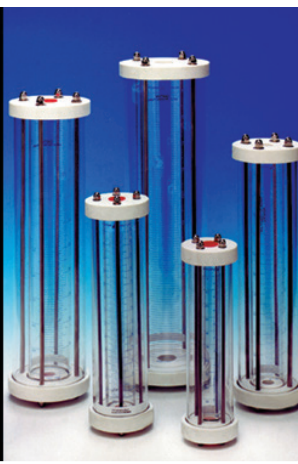
[www.primaryfluid.com/3D\\_ACCU-VENT.htm](http://www.primaryfluid.com/3D_ACCU-VENT.htm)

## Typical Installation

The installations below are typical installation examples only. Consult your Engineering Department for the appropriate installation of your application or call the factory for advice.







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