



Model 119

The Model 119 has a very specific purpose: to shut off the flow of fuel through a filter separator in the event of high water levels in the filter separator sump. To perform this task, the Model 119 must operate in conjunction with one of the OCV 800 series interface float pilots.

SERIES FEATURES

- High capacity pilot system provides quick closing
- Can be maintained without removal from the line
- Factory tested
- Valve position indicator

OPERATION

With little or no water in the sump of the filter separator, the float of the interface pilot is down. The float pilot routes vessel pressure to the bonnet of the three-way auxiliary pilot. This positions the three-port auxiliary pilot to connect the bonnet of the main valve downstream, allowing the valve to open.

With a high water level in the sump of the filter separator, the float of the interface pilot is up. The float pilot vents pressure from the bonnet of the three-way auxiliary pilot, shifting it to apply full inlet pressure to the bonnet of the main valve and drives the valve fully and tightly closed.

COMPONENTS

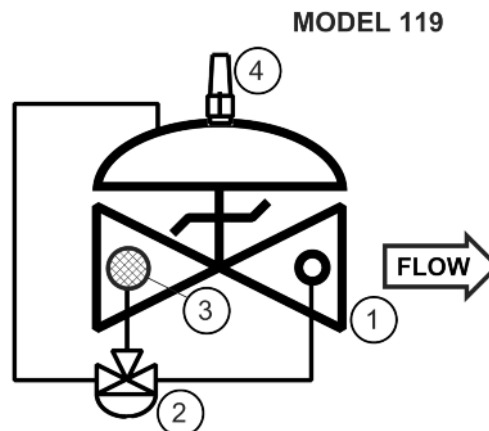
The Model 119 consists of the following components, arranged as shown on the schematic diagram:

- 1.) Model 65 Basic Control Valve (Fail Closed)
- 2.) Model A224 Accelerator Pilot
- 3.) 123 Inline Strainer
- 4.) Model 155L Visual Indicator

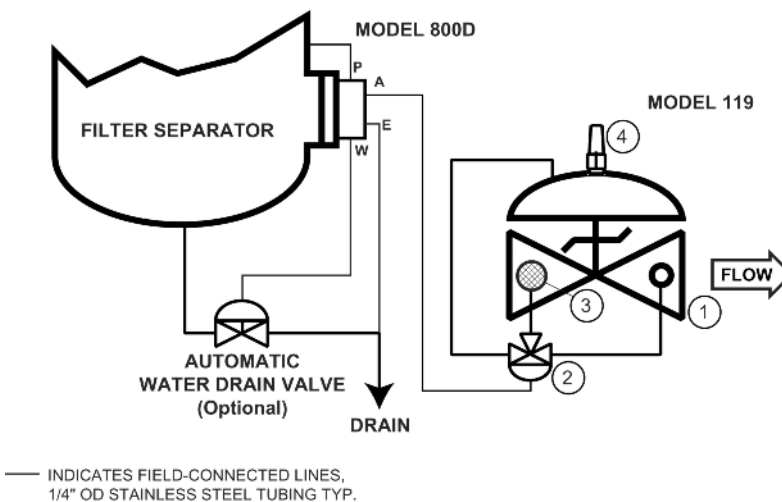
SIZING

Sizing of the Model 119 is typically the same size as the filter separator discharge connection. Consult the factory for assistance.

SCHEMATIC



RECOMMENDED INSTALLATION



MAX. PRESSURE

Maximum pressure is determined by that of the interface float pilot.

| END CONNECTIONS | DUCTILE IRON | STEEL/STN STL | ALUMINUM |
|-----------------|--------------|---------------|----------|
| Threaded | 300 psi | 300 psi | 285 psi |
| Grooved | 300 psi | 300 psi | 200 psi |
| 150# Flanged | 250 psi | 285 psi | 285 psi |
| 300# Flanged | 300 psi | 300 psi | --- |

(The pressures listed here are maximum working pressures at 100°F.)

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Model 119 (Aviation Fueling)



SIZES

GLOBE/ANGLE

Screwed Ends - 1 1/4" - 3"

Grooved Ends - 1 1/2" - 6" (globe)
1-1/2" - 6" (angle)

Flanged Ends - 1 1/4" - 24" (globe)
1 1/4" - 16" (angle)

FLUID OPERATING TEMPERATURE

RANGE (Valve Elastomers)

Buna-N -20°F to 180°F

Viton 20°F to 230°F

Fluorosilicone -40°F to 150°F

EPDM 0°F to 230°F

MATERIALS

Consult factory for others.

Body/Bonnet: Ductile Iron (epoxy coated), Carbon Steel (epoxy coated), Stainless Steel, Aluminum

Seat Ring: Stainless Steel, Bronze

Stem: Stainless Steel, Monel

Spring: Stainless Steel

Diaphragm: Buna-N, Viton, (Nylon reinforced)

Seat Disc: Buna-N, Viton

Pilot: Stainless Steel, Bronze

Other pilot system components:

Stainless Steel, Bronze/Brass

Tubing & Fittings: Stainless Steel, Copper/Brass

SPECIFICATIONS (Typical Aviation Fueling Application)

The filter separator shut-off valve shall open and close via hydraulic signals from the interface float pilot.

DESIGN

The filter separator shut-off valve shall be a single-seated, line pressure operated, diaphragm actuated, pilot controlled globe valve. The valve shall seal by means of a corrosion-resistant seat and a resilient, rectangular seat disc. These, and other parts, shall be replaceable without removing the valve from the line. The stem of the main valve shall be guided top and bottom by integral bushings. Alignment of the body, bonnet and diaphragm assembly shall be by precision dowel pins. The diaphragm shall not be used as a seating surface, nor shall the pistons be used as an operating means. The pilot system shall be furnished complete and installed on the main valve. It shall include an inline strainer, 3-way auxiliary pilot, and valve position indicator. The filter separator shut-off valve shall be operationally and hydrostatically tested prior to shipment.

MATERIALS OF CONSTRUCTION

The main valve body and bonnet shall be ductile iron. All ferrous surfaces shall be coated with 4 mils of epoxy. The main valve seat ring shall be stainless steel. Elastomers (diaphragms, resilient seats and O-rings) shall be Buna-N. The auxiliary pilot, control line tubing and fittings shall be stainless steel.

OPERATING CONDITIONS

The filter separator shut-off valve shall be suitable for pressures of <X to X> psi at flow rates up to <X> gpm.

ACCEPTABLE PRODUCTS

The filter separator shut-off valve shall be a <size> Model 119, <globe pattern, angle pattern>, with <150# flanged, 300# flanged, threaded, grooved> end connections, as manufactured by OCV Control Valves, Tulsa, Oklahoma, USA.

U.S. DIMENSIONS - INCHES

| DIM | END CONN. | 1 1/4-1 1/2 | 2 | 2 1/2 | 3 | 4 | 6 | 8 | 10 | 12 | 14 | 16 | 24 |
|---------|-----------|-------------|-------|--------|--------|---------|----------|----------|---------|--------|--------|----------|--------|
| A | SCREWED | 8 3/4 | 9 7/8 | 10 1/2 | 13 | -- | -- | -- | -- | -- | -- | -- | -- |
| | GROOVED | 8 3/4 | 9 7/8 | 10 1/2 | 13 | 15 1/4 | 20 | -- | -- | -- | -- | -- | -- |
| | 150# FLGD | 8 1/2 | 9 3/8 | 10 1/2 | 12 | 15 | 17 3/4** | 25 3/8 | 29 3/4 | 34 | 39 | 40 3/8 | 62 |
| | 300# FLGD | 8 3/4 | 9 7/8 | 11 1/8 | 12 3/4 | 15 5/8 | 18 5/8** | 26 3/8 | 31 1/8 | 35 1/2 | 40 1/2 | 42 | 63 3/4 |
| C | SCREWED | 4 3/8 | 4 3/4 | 6 | 6 1/2 | -- | -- | -- | -- | -- | -- | -- | -- |
| | GROOVED | 4 3/8* | 4 3/4 | 6 | 6 1/2 | 7 5/8 | -- | -- | -- | -- | -- | -- | -- |
| | 150# FLGD | 4 1/4 | 4 3/4 | 6 | 6 | 7 1/2 | 10 | 12 11/16 | 14 7/8 | 17 | -- | 20 13/16 | -- |
| | 300# FLGD | 4 3/8 | 5 | 6 3/8 | 6 3/8 | 7 13/16 | 10 1/2 | 13 3/16 | 15 9/16 | 17 3/4 | -- | 21 5/8 | -- |
| D | SCREWED | 3 1/8 | 3 7/8 | 4 | 4 1/2 | -- | -- | -- | -- | -- | -- | -- | -- |
| | GROOVED | 3 1/8* | 3 7/8 | 4 | 4 1/2 | 5 5/8 | -- | -- | -- | -- | -- | -- | -- |
| | 150# FLGD | 3 | 3 7/8 | 4 | 4 | 5 1/2 | 6 | 8 | 11 3/8 | 11 | -- | 15 11/16 | -- |
| | 300# FLGD | 3 1/8 | 4 1/8 | 4 3/8 | 4 3/8 | 5 13/16 | 6 1/2 | 8 1/2 | 12 1/16 | 11 3/4 | -- | 16 1/2 | -- |
| E | ALL | 6 | 6 | 7 | 6 1/2 | 8 | 10 | 11 7/8 | 15 3/8 | 17 | 18 | 19 | 27 |
| F (OPT) | ALL | 3 7/8 | 3 7/8 | 3 7/8 | 3 7/8 | 3 7/8 | 3 7/8 | 6 3/8 | 6 3/8 | 6 3/8 | 6 3/8 | 6 3/8 | 8 |
| H | ALL | 10 | 11 | 11 | 11 | 12 | 13 | 14 | 17 | 18 | 20 | 20 | 28 1/2 |

*GROOVED END NOT AVAILABLE IN 1 1/4"

**Note: for military fueling valves, 6" 150# flanges have 20" face to face dimensions and 6" 300# flanges have 20-7/8" face to face dimensions.

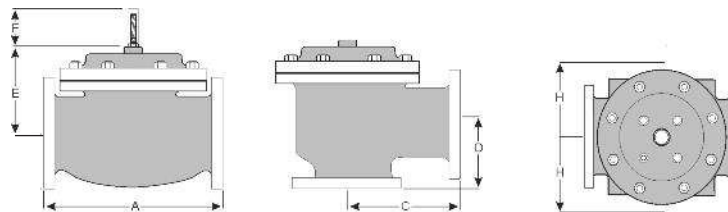
For maximum efficiency, the OCV control valve should be mounted in a piping system so that the valve bonnet (cover) is in the top position. Other positions are acceptable but may not allow the valve to function to its fullest and safest potential. In particular, please consult the factory before installing 8" and larger valves, or any valves with a limit switch, in positions other than described. Space should be taken into consideration when mounting valves and their pilot systems.

A routine inspection & maintenance program should be established and conducted yearly by a qualified technician. Consult our factory @ 1-888-628-8258 for parts and service.

How to order your Model 119 valve

When ordering please provide:

Fluid to be controlled - Model Number - Size
- Globe or Angle - End Connection - Body
Material - Trim Material - Elastomers - Special
Requirements/ Installation Requirements



QUALITY SYSTEM
REGISTERED TO
ISO 9001

United States/Canada Joint
Certification Program (JCP)
Certification Number 0073030

Represented by:

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