





The Model 115-1NY is used in a water supply line in conjunction with fire sprinkler piping. Its basic purpose is to divert the potable water usage to the fire sprinkler line.

# **SERIES FEATURES**

- ► Electrically operated solenoid allows valve to open when energized and close when deenergized
- Solenoid includes manual operator
- ► Adjustable response speed
- ▶ Pilot system exhausts to atmosphere
- ► Valve opens fully regardless of pressure differential
- Can be maintained without removal from the line
- Factory tested

# **OPERATION**

Located in the domestic water system line, the 115-1NY is fully open by the voltage supplied to the solenoid from the fire line flow switch. This allows flow through the potable water system. When the 115-1NY valve is open, the water in the diaphragm chamber is exhausted to atmosphere.

In the event of flow through the fire system, the flow switch contact is open, deenergizing the 115-1NY solenoid. Valve inlet pressure is routed to the main valve diaphragm chamber, causing the valve to close and divert water flow to the fire system.

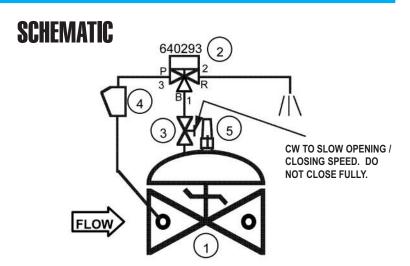
# **COMPONENTS**

The Model 115-1NY consists of the following components, arranged as shown on the schematic diagram:

- 1.) Model 65 Basic Valve Assembly
- 2.) Model 452 Three-way Solenoid Pilot
- 3.) Model 141-2 Needle Valve
- 4.) Model 159 Y-strainer
- 5.) Model 155 Visual Indicator (Optional)

### **SIZING**

Definitive sizing information can be found in the OCV Catalog, Series 115 section and Engineering section Performance Charts. Consult the factory for assistance and a copy of the OCV ValveMaster Sizing program.



# RECOMMENDED INSTALLATION

- Install the valve with adequate space above and around the valve to facilitate servicing. Refer to the Dimension table.
- Valve should be installed with the bonnet (cover) at the top, particularly 8" and larger valves, and any valve with a limit switch.
- Shut-off valves should be installed upstream and downstream of the control valve. These are used to isolate the valve during startup and maintenance.
- Wire the valve solenoid via conduit appropriate to the application.

# MAX. PRESSURE

The 115-1NY maximum pressure is limited by the solenoid to 170 psi (at 100°F).

**TOLL FREE 1.888.628.8258** • phone: (918)627.1942 • fax: (918)622.8916 • 7400 East 42nd Place, Tulsa, Ok 74145 email: sales@controlvalves.com • website: www.controlvalves.com

# **Model 115-1NY**





#### SIZES

GLOBE/ANGLE

Screwed Ends 1-1/4"-3"

Grooved Ends 1-1/4"-3" (globe or angle) Flanged Ends 1-1/4"-3" (globe or angle)

#### FLUID OPERATING TEMPERATURE RANGE

(Valve Elastomers) ÈPDM 32° F - 230°F\*

**MATERIALS** Consult factory for others.

#### **Body/Bonnet**:

Ductile Iron (epoxy coated), Stainless Steel, low-lead Bronze -Others available (consult factory)

Seat Ring:

low-lead Bronze, Stainless Steel Stem: Stainless Steel, Monel Spring: Stainless Steel Diaphragm: EPDM\* Seat Disc: EPDM\*

Tubing & Fittings: Copper/Brass, Stainless Steel

Solenoid:

Enclosure: Weatherproof NEMA 4X

Body: Brass Voltages: 120 VAC

\*Others available upon request.

\*\*Valves 1-1/4" through 24" are certified to NSF/ANSI
372. Valves 4" through 24" are also certified to

NSF/ANSI 61-G.

# **SPECIFICATIONS** (Typical Water Application)

The solenoid shut-off valve shall open and close via discrete electrical signals. The valve shall be equipped with a three-way solenoid valve that will allow the valve to open when <energized> and close when <deenergized>.

The solenoid valve shall be a single-seated, line pressure operated, diaphragm actuated 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 pistons be used as an operating means. It shall include a needle valve, Y-strainer, and solenoid valve. The solenoid 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 per ASTM A536, Grade 65-45-12. All ferrous surfaces shall be coated with 4 mils of epoxy. The main valve seat ring shall be low-lead Bronze. Elastomers (diaphragms, resilient seats and O-rings) shall be EPDM. The needle valve shall be brass, and control line tubing shall be copper. The solenoid shall have a brass body, weatherproof enclosure and be suitable for operation on <voltage>.

#### **OPERATING CONDITIONS**

The solenoid shut-off valve shall be suitable for pressures of  $\langle X \rangle$  psi at flow rates up to < X > gpm.

#### ACCEPTABLE PRODUCTS

The solenoid shut-off valve shall be a <size> Model 115-1NY, <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 1/2  | 2     | 2 1/2  | 3      |
|------------|-----------|--------|-------|--------|--------|
| А          | SCREWED   | 8 3/4  | 9 7/8 | 10 1/2 | 13     |
|            | GROOVED   | 8 3/4  | 9 7/8 | 10 1/2 | 13     |
|            | 150# FLGD | 8 1/2  | 9 3/8 | 10 1/2 | 12     |
|            | 300# FLGD | 8 3/4  | 9 7/8 | 11 1/8 | 12 3/4 |
| C<br>ANGLE | SCREWED   | 4 3/8  | 4 3/4 | 6      | 6 1/2  |
|            | GROOVED   | 4 3/8* | 4 3/4 | 6      | 6 1/2  |
|            | 150# FLGD | 4 1/4  | 4 3/4 | 6      | 6      |
|            | 300# FLGD | 4 3/8  | 5     | 6 3/8  | 6 3/8  |
| D<br>ANGLE | SCREWED   | 3 1/8  | 3 7/8 | 4      | 4 1/2  |
|            | GROOVED   | 3 1/8* | 3 7/8 | 4      | 4 1/2  |
|            | 150# FLGD | 3      | 3 7/8 | 4      | 4      |
|            | 300# FLGD | 3 1/8  | 4 1/8 | 4 3/8  | 4 3/8  |
| Е          | ALL       | 6      | 6     | 7      | 6 1/2  |
| Н          | ALL       | 10     | 11    | 11     | 11     |

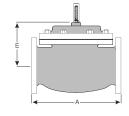
<sup>\*</sup>GROOVED END NOT AVAILABLE IN 1 1/4"

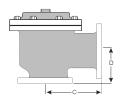
A routine inspection & maintenance program should be established and conducted yearly by a qualified technician. Consult our factory @ 1-888-628-8258 for parts and service.

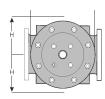
### How to order your Model 115-1NY valve

When Ordering please provide:

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









Represented by:

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