



▲ Model 115-1NY

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

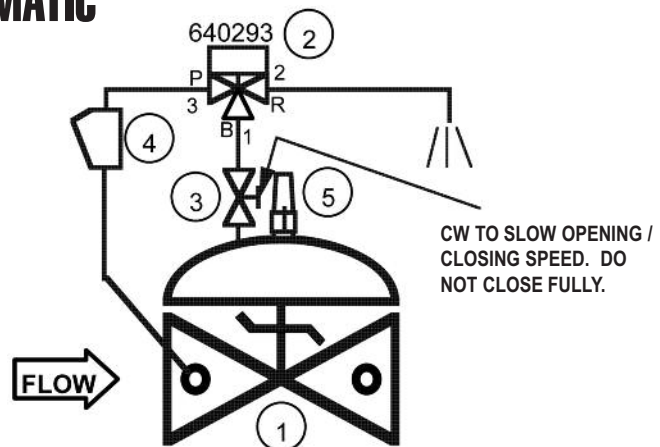
The Model 115-1NY consists of the following components, arranged as shown on the schematic diagram:

- 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.

SCHEMATIC



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.

SIZES

GLOBE/ANGLE

Screwed Ends 1-1/4"-3"

Grooved Ends 1-1/4"-3"

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

TEMPERATURE RANGE (Valve Elastomers)

Buna-N 32° F - 180°F

Viton 32° F - 400°F

EPDM 32° F - 300°F

MATERIALS Consult factory for others.

Body/Bonnet:

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

Seat Ring:

Bronze, Stainless Steel

Stem: Stainless Steel, Monel

Spring: Stainless Steel

Diaphragm: Nylon Reinforced, Buna-N, Viton, EPDM

Seat Disc: Buna-N, Viton, EPDM

Tubing & Fittings: Copper/Brass, Stainless Steel

Solenoid:

Enclosure: Weatherproof NEMA 4X

Body: Brass

Voltages: 120 VAC

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>.

DESIGN

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 bronze. Elastomers (diaphragms, resilient seats and O-rings) shall be Buna-N. 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 <X to X> 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 |
|------------|-----------|--------|-------|--------|--------|
| A | 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 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 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 |
| E | ALL | 6 | 6 | 7 | 6 1/2 |
| H | ALL | 10 | 11 | 11 | 11 |

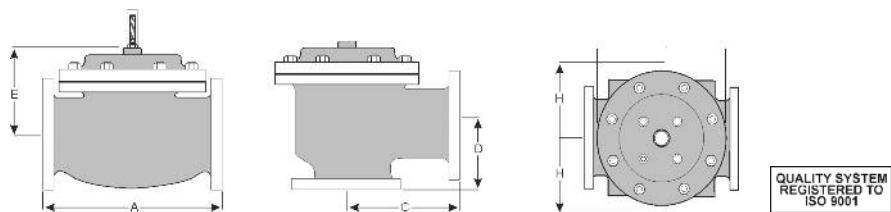
*GROOVED END NOT AVAILABLE IN 1 1/4"

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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