



The Model 115-26 has an extremely wide range of applications: anywhere it is necessary to open and close a valve electrically and reverse flow must be prevented.

Model 115-26

Typical examples include:

- Process control
- Irrigation systems
- Petroleum loading terminals
- Storage tank level control
- Automated wash systems
- Automated fountains
- Dust control

**SCHEMATIC** 

### **SERIES FEATURES**

- Electrically operated solenoid allows valve to open or close
- Can be maintained without removal from the line

FLOW

**RECOMMENDED INSTALLATION** 

• Install the valve with adequate space above and around the

valve to facilitate servicing. Refer to the Dimension table.

8" and larger valves, and any valve with a limit switch.

· Valve should be installed with the bonnet (cover) at the top, particularily

· Shut-off valves should be installed upstream and downstream of the

control valve. These are used to isolate the valve during startup and

- Adjustable response speed
- Factory tested and can be pre-set to your requirements

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Check feature closes valve on pressure reversal

**OPERATION** 

A two-way solenoid, when closed, causes the main valve to close. Opening the solenoid opens the valve. The pilot system is equipped with a needle valve that allows the opening and closing speed of the valve to be adjusted.

The solenoid can be supplied normally closed (energize to open) or normally open (energize to close).

If downstream pressure becomes greater than upstream pressure, the valve will fully close to prevent reverse flow.

## **COMPONENTS**

The Model 115-26 consists of the following components, arranged as shown on the schematic diagram:

- 1.) Model 65 Basic Control Valve
- 2.) Model 451 Two-way Solenoid Pilot
- 3.) Model 126 Ejector
- Fixed orifice pilot system supply restrictor 4.) Model 141-2 Needle Valve
- (adjustable response speed) 5.) Model 141-1 Check Valve
- 6.) Model 159 Y-strainer
- Protects pilot system from dirt/debris
- 7.) Model 141-4 Isolation Ball Valves
- 8.) 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.



The pressures listed here are maximum pressures at 100°F. Also, working pressures of solenoids vary greatly, consult factory on application of OCV Model 115-26 valves when pressures exceed those stated in chart.

• Wire the valve solenoid via conduit appropriate to the application.

END CONNECTIONS	DUCTILE IRON	STEEL/STN STL	LOW-LEAD BRONZE
Threaded	300 psi	300 psi	300 psi
Grooved	300 psi	300 psi	300 psi
150# Flanged	250 psi	285 psi	225 psi
300# Flanged	300 psi	300 psi	300 psi

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# Model 115-26



SIZES GLOBE/ANGLE Screwed Ends - 1 1/4" - 3" Grooved Ends - 1 1/2" - 6" (globe); 1-1/2"-4" (angle) Flanged Ends - 1 1/4" - 24" (globe); 1 1/4" - 16" (angle) FLUID OPERATING TEMPERATURE RANGE (Valve Elastomers) ÈPDM 32° F - 230°F\* MATERIALS Consult factory for others. Body/Bonnet: Ductile Iron (epoxy coated), Carbon Steel (epoxy coated), Stainless Steel, Iow-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 / Explosion Proof NEMA 4X, 6P, 7, 9

Body: Brass, Stainless Steel

Voltages: 24, 120, 240, 480 VAC / 12, 24 VDC Note: Working pressures of solenoids vary greatly, consult factory on application of OCV Model 115-26 valves.

\*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 Commercial Plumbing Application)

The solenoid shut-off and check valve shall open and close via discrete electrical signals. The valve shall be equipped with a two-way solenoid valve that will allow the valve to open when <energized, deenergized>. If downstream pressure becomes greater than upstream pressure, the valve will close fully to prevent reverse flow. ĎESIGN

The solenoid shut-off and check 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 pistons be used as an operating means. The pilot system shall be furnished complete and installed on the main valve. It shall include a needle valve, Y-strainer, solenoid valve, pilot check valves, and isolation ball valves. The solenoid shut-off and check valve shall be oper-ationally 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 and isolation ball valves 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 and check valve shall be suitable for pressures of <X to X> psi at flow rates up to <X> gpm. ACCEPTABLE PRODUCTS

The solenoid shut-off and check valve shall be a <size> Model 115-26, <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.		2	2 1/2	3	4	6	8	10	12	14	16	24
	SCREWED	8 3/4	9 7/8	10 1/2	13								
A	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
	SCREWED	1 7/16	1 11/16	1 7/8	2 1/4	3 5/16			-				
в	GROOVED	1*	1 3/16	1 7/16	1 3/4	2 1/4	3 5/16						
	150# FLGD	2 5/16-2 1/2	3	3 1/2	3 3/4	4 1/2	5 1/2	6 3/4	8	9 1/2	10 5/8	11 3/4	16
	300# FLGD	2 5/8-3 1/16	3 1/4	3 3/4	4 1/8	5	6 1/4	7 1/2	8 3/4	10 1/4	11 1/2	12 3/4	18
	SCREWED	4 3/8	4 3/4	6	6 1/2								
С	GROOVED	4 3/8*	4 3/4	6	6 1/2	7 5/8							
ANGLE	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	
	SCREWED	3 1/8	3 7/8	4	4 1/2								
D	GROOVED	3 1/8*	3 7/8	4	4 1/2	5 5/8							
ANGLE	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
Н	ALL	10	11	11	11	12	13	14	17	18	20	20	28 1/2
*GROOVED	GROOVED END NOT AVAILABLE IN 1 1/4"												

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

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.

limit switch, in positions other than described.

#### How to order your Model 115-26 valve

When Ordering please provide: Fluid to be controlled -Model Number -Size Globe or Angle -End Connection \_Body Material Trim Material -Solenoid Voltage -Energize to Open or Close Valve -Solenoid enclosure Weatherproof or Explosion Proof -Special Requirements / Installation requirements

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