

**OPERATION** 

A programmable self powered solenoid, when closed, causes the main valve to close. When given the command to open 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.

### **COMPONENTS**

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

- 1.) Model 65 Basic Control Valve
- 2.) Battery Operated Two-way Programmable Solenoid
- 3.) Model 126 Ejector Fixed orifice pilot system supply restrictor
- 4.) Model 141-2 Needle Valve Adjustable response speed
- 5.) Model 159 Y-strainer Protects pilot system from dirt/debris
- 6.) Model 141-4 Isolation Ball Valves
- 7.) 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 model 115AV has an extremely wide range of applications anywhere it is necessary to open and close a valve automatically at predetermined time intervals without the use of external electric power. Typical examples include:

- Irrigation systems
- Automated tower cycling control (refreshing, recycle)
- Automated line flushing

Model 115AV

Automated Fountains

#### **SERIES FEATURES**

- Programmable
- -Valve operating time from 1 min to 12 hours per day -6 different operational programs per day up to 7 days a week
- -Programmable rain delay for 1 to 99 days (shut down for winter, December... etc)
- Manual on/off
- Excellent for remote systems where power is unavailable
- Powered by lithium ion technology good for 10 years
- LCD display with clock and low battery indicator and rain delay as programmed
- External rain sensor option available



## **RECOMMENDED INSTALLATION**



## MAX. PRESSURE

The working pressure range of the 115AV is 7 to 150 psi (at 100°F.)

TOLL FREE 1.888.628.8258 • phone: (918)627.1942 • fax: (918)622.8916 • 7400 East 42nd Place, Tulsa, 0k 74145 email: sales@controlvalves.com • website: www.controlvalves.com

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## Model 115AV



QUALITY SYSTEM REGISTERED TO

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" - 6" (globe); 1 1/4" - 6" (angle) FLUID OPERATING TEMPERATURE RANGE Solenoid limited to 32°F - 140°F

EPDM 32°F - 230°F\* MATERIALS Consult factory for others. Body/Bonnet:

Ductile Iron (epoxy coated)

Seat Ring:

low-lead Bronze, Stainless Steel

Stem: Stainless Steel

Spring: Stainless Steel Diaphragm: EPDM\*

Seat Disc: EPDM\*

Pilot: low-lead Bronze, Stainless Steel

Other pilot system components: low-lead Bronze/Brass, All Stainless Steel

Tubing & Fittings: Copper/Brass, Stainless Steel Solenoid:

Enclosure: Weatherproof / Submersible to 6 ft Body: ABS / Nylon Voltages: NA

\*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 programmable time. The valve shall be equipped with a programmable two-way solenoid valve that will allow the valve to open and close when programmed. DESIGN

The solenoid valve shall be a single-seated, line pressure operated, diaphragm actu-ated, 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 and isolation ball valves. 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 and isolation ball valves shall be brass, and control line tubing shall be copper. The solenoid shall have an ABS / Nylon body and weatherproof enclosure.

#### **OPERATING CONDITIONS**

The solenoid shut-off valve shall be suitable for pressures of 7 to 150 psi at flow rates up to <X> gpm.

#### ACCEPTABLE PRODUCTS

The solenoid shut-off valve shall be a <size> Model 115AV, <globe pattern, angle pattern>, with <150# 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
	SCREWED	8 3/4	9 7/8	10 1/2	13		
А	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
С	SCREWED	4 3/8	4 3/4	6	6 1/2		
ANGLE	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
D	SCREWED	3 1/8	3 7/8	4	4 1/2		
ANGLE	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
E	ALL	6	6	7	6 1/2	8	10
Н	ALL	10	11	11	11	12	13

#### '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.

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How to order your Model 115AV valve Represented by:

When Ordering please provide: -Fluid to be controlled -Model Number -Size Globe or Angle -End Connection -Body Material -Trim Material Special Requirements/Installation requirements

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