

## DV Series Valves

### The Irrigation Management Solution for Smaller Sites

#### Features

##### DV SERIES

- Double-filtered pilot-flow design for maximum reliability
- Balanced-pressure diaphragm for long life
- External bleed to manually flush system of dirt and debris during installation and system start up
- Internal bleed for spray-free manual operation
- Energy efficient, low-power encapsulated solenoid with captured plunger and 90-mesh (200 micron) solenoid filter
- Buna-N diaphragm with self-cleaning 90-mesh (200 micron) pilot water filter and captive spring
- Operates in low-flow and Xerigation® applications when the RBY filter is installed upstream
- 1¼" (3.2 cm) stainless steel phillips head screws
- Accepts latching solenoid for use with Rain Bird battery-operated controllers
- Available as:
  - ¾" (20/27) and 1" (26/34) standard in-line configuration
  - 1" (26/34) Slip-by-Slip (SS) configuration for low cost, solvent-weld installations
  - 1" (26/34) Angle (A) configuration for flexible installations especially when submains are deep
  - 1" (26/34) Male-by-Barb (MB) configuration for installation with poly pipe

##### DVF SERIES

- Incorporates all features of DV Series valves
- Unique, easy-to-turn pressure-assisted flow control mechanism

##### ASVF SERIES

- Combination reliable DVF valve and atmospheric backflow preventer in one unit
- Incorporates all features of DVF Series valves, plus meets I.A.P.M.O. and A.S.S.E. listing specifications and City of Los Angeles listing approved
- Must be installed at least 6" (15.2 cm) above the highest point of water in the sprinkler pipe it serves
- No valve can be located downstream of the anti-siphon valve
- Consult local codes

#### Operating Range

- Pressure: 15 to 150 psi (1.0 to 10.4 bar)
- 075-DV/ASVF Flow: 0.2 to 22 gpm (0.05 to 5.0 m³/h; 0.01 to 1.39 l/s); for flows below 3 gpm (0.75 m³/h; 0.21 l/s) or any Xerigation application, use RBY-075-200MX filter installed upstream
- 100-DV/DVF/ASVF Flow: 0.2 to 40 gpm (0.05 to 9.08 m³/h; 0.01 to 2.52 l/s); for flows below 3 gpm (0.75 m³/h; 0.21 l/s) or any Xerigation application, use RBY-100-200MX filter installed upstream
- Temperature: Up to 110° F (43° C)
- Ambient air temperature up to 125° F (52° C)

#### Electrical Specifications

- 24 VAC 50/60 Hz (cycles/sec.) solenoid
- Inrush current: 0.30 A (7.2 VA) at 60 Hz
- Holding current: 0.19 A (4.6 VA) at 60 Hz
- Coil resistance: 42-55 Ohms
- Not compatible with ESP-LXD decoders. Use Rain Bird commercial valves (PGA, PEB, GB, EFB-CP and BPE series)

#### Dimensions

##### DV SERIES

- Height: 4½" (11.4 cm); (Angle) 5½" (14 cm)
- Length: 4¾" (11.1 cm); (Angle) 3¾" (9.5 cm)
- (MB) 5¾" (14.6 cm)
- Width: 3½" (8.4 cm)

##### DVF SERIES

- Height: 5¾" (14.2 cm); (Angle) 5½" (14 cm)
- Length: 4¾" (11.1 cm); (Angle) 3¾" (9.5 cm)
- (MB) 5¾" (14.6 cm)
- Width: 3½" (8.4 cm)

##### ASVF SERIES

- Height: 6¼" (15.8 cm)
- Length: 6½" (15.5 cm)
- Width: 3½" (8.1 cm)

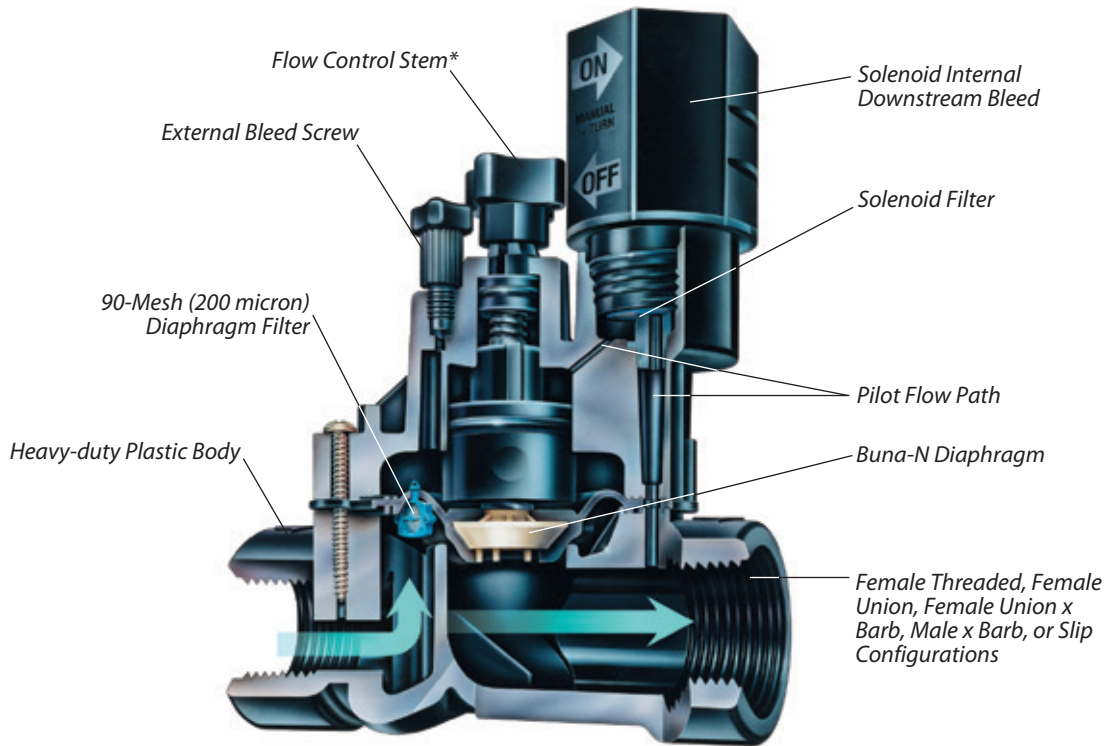
#### Models

- 075-DV: ¾" (20/27)
- 100-DV-A: 1" (26/34)\*
- 100-DV: 1" (26/34)\*
- 100-DV-MB: 1" (26/34)
- 100-DV-SS: 1" (26/34)
- 100-DVF: 1" (26/34)\*
- 100-DVF-MB: 1" (26/34)
- 100-DVF-SS: 1" (26/34)
- 100-DVF-A: 1" (26/34)
- 075-ASVF: ¾" (20/27)
- 100-ASVF: 1" (26/34)

\* Available with BSP threads



100-DVF



\*Available only on DVF models

DV and DVF

Valve Pressure Loss (psi)			
Flow (gpm)	075-DV 3/4" (psi)	100-DV/100-DVF 1" (psi)	
1	2.5	2.2	
3	2.5	2.2	
5	2.9	2.4	
10	3.8	2.7	
20	5.1	4.2	
30	-	6.1	
40	-	9.3	

Valve Pressure Loss (bar)				METRIC
Flow (m <sup>3</sup> /h)	(l/s)	075-DV 3/4" (bar)	100-DV/100-DVF 1" (bar)	
0.25	0.06	0.18	0.15	
0.75	0.21	0.18	0.15	
1.0	0.28	0.20	0.17	
2.0	0.56	0.24	0.19	
5.0	1.39	0.37	0.31	
7.5	2.08	-	0.48	
9.1	2.52	-	0.60	

100-DV/DVF Angle, Male x Barb, Male x Male, Union x Union and Union x Barb

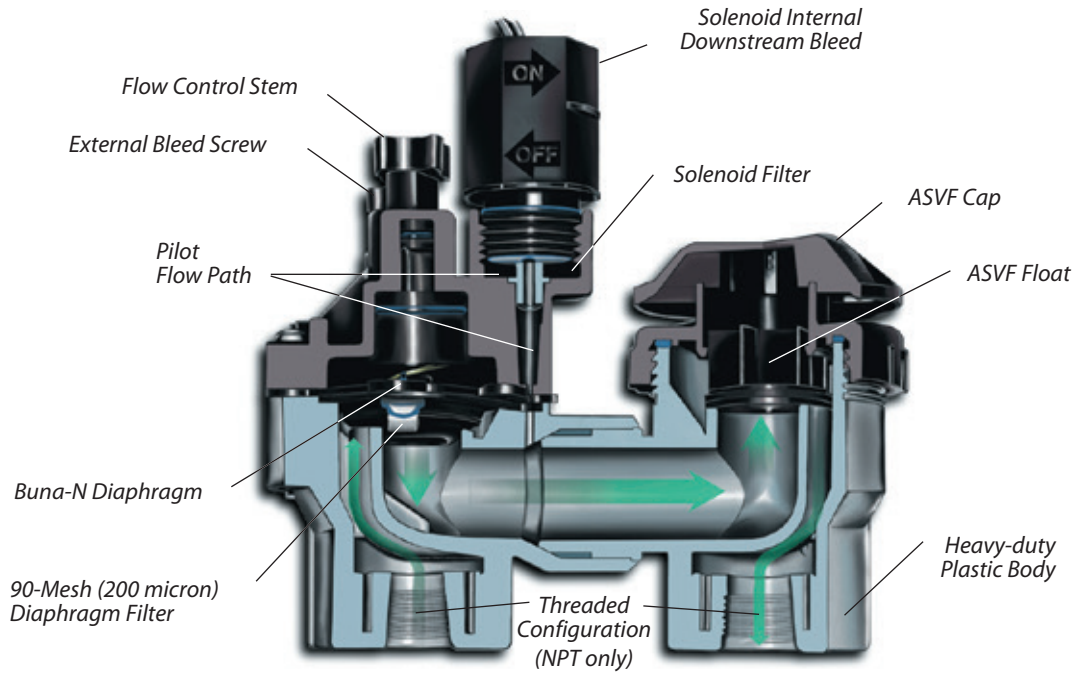
Valve Pressure Loss (psi)		
Flow (gpm)	Angle 1" (psi)	Male x Barb 1" (psi)
1	1.6	2.2
3	1.6	2.2
5	1.8	2.4
10	2.3	2.7
20	3.6	5.2
30	5.5	10.5
40	9.1	18.5

Valve Pressure Loss (bar)				METRIC
Flow (m <sup>3</sup> /h)	l/s	Angle 1" (bar)	Male x Barb 1" (bar)	
0.25	0.06	0.12	0.15	
0.75	0.21	0.12	0.15	
1.0	0.28	0.13	0.17	
2.0	0.56	0.16	0.19	
5.0	1.39	0.27	0.36	
7.5	2.08	0.45	0.72	
9.1	2.52	0.60	1.27	

Note: See Xerigation® Section for RBY filter flow loss data.

- 1) Rain Bird® recommends flow rates in supply line not to exceed 7.5 ft/sec (2.3 m/s) in order to reduce the effects of water hammer.
- 2) DV Series valves cannot be used with PRS pressure regulating modules.
- 3) DV/DVF Male x Barb not recommended for flows exceeding 30 gpm (6.8 m<sup>3</sup>/h; 1.9 l/s).

**Anti-siphon Valve  
100-ASVF**



**ASVF**

Valve Pressure Loss (psi)

Flow (gpm)	075-ASVF 3/4" (psi)	100-ASVF 1" (psi)
1	3.6	3.1
3	3.6	3.1
5	4.2	4.0
10	5.7	5.4
20	8.6	7.3
30	-	10.3
40	-	15.9

Valve Pressure Loss (bar)

Flow		METRIC	
(m <sup>3</sup> /h)	(l/s)	075-ASVF 3/4" (bar)	100-ASVF 1" (bar)
0.25	0.06	0.25	0.22
0.75	0.21	0.25	0.22
1.0	0.28	0.28	0.25
2.0	0.56	0.35	0.34
5.0	1.39	0.60	0.50
7.5	2.08	-	0.72
9.1	2.52	-	1.10

NOTE: See Xerigation® Section for RBY filter flow loss data.

1) Rain Bird® recommends flow rates in supply line not to exceed 7.5 ft/sec (2.3 m/s) in order to reduce the effects of water hammer.

## Specifications

### 075-DV, 100-DV, 100-DV-SS, 100-DV-A, 100-DV-MB Electric Remote Control Valves

The valve shall be normally closed 24 VAC 50/60 Hz (cycles per second) solenoid actuated, balanced pressure type capable of a flow rate of \_\_\_\_\_gpm (l/s; m<sup>3</sup>/h) with a pressure loss not to exceed \_\_\_\_\_psi (bar). The valve pressure rating shall not be less than 150 psi (10.4 bar). The valve body and bonnet shall be constructed of high impact weather resistant plastic, stainless steel and other chemical/UV resistant materials. The valve shall have a one unit diaphragm constructed of durable Buna-N rubber material with a clog resistant metering orifice. The valve shall have one 90-mesh (200 micron) pilot filter attached to the diaphragm. The valve shall have one fully encapsulated solenoid with captured plunger. The valve shall have one 90-mesh (200 micron) filter attached to the solenoid base.

The valve body shall have one of the following: a 3/4" globe configuration (20/27) or 1" (26/34) (FNPT) inlet and outlet; a 1" slip x slip inlet and outlet for solvent pipe connection; a 1" angle configuration with 1" (26/34) (FNPT); a 1" (26/34) (MNPT) inlet and 1" barb outlet configuration (NPT only); a 1" (26/34) (MNPT) inlet and a 1 1/4" barb outlet configuration; a 1" (26/34) (FNPT) union inlet and outlet; or a 1" (26/34) (FNPT) union inlet with 1" barb outlet configuration (NPT only).

The valve shall be actuated by a low power 0.30 A (7.2 VA) in-rush current and 0.23 A (5.5VA) holding current. The valve shall be capable of on/off control by turning the solenoid 1/4 turn. The valve shall provide a flush mode that is manually activated by 1/2 turn of the bleed screw where external porting is permissible.

The valve shall be as such to provide for all internal parts to be removable from the top of the valve without disturbing the valve installation.

The remote control valve shall be manufactured by Rain Bird Corporation, Azusa, California.

### 100-DVF, 100-DVF-SS, 100-DVF-A, 100-DVF-MB Electric Remote Control Valves with Flow Control

#### Optional Feature Specifications

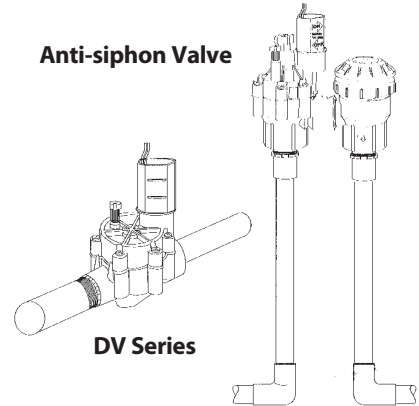
When so indicated on the design, the DVF valve shall have all the specifications of the DV Series remote control valve plus a unique, easy-to-turn pressure-assisted flow control mechanism.

The remote control valve with flow control shall be as manufactured by Rain Bird Corporation, Azusa, California.

### 075-ASVF, 100-ASVF Electric Remote Control Valves with Flow Control and Atmospheric Backflow Preventer

When so indicated on the design, the ASVF valve shall have all the specifications as the DVF Series remote control valve plus an atmospheric backflow preventer. The remote control valve shall include as one unit an electric remote control valve and atmospheric backflow preventer. The valve shall have a patented, easy-to-turn, pressure-assisted flow control mechanism. The valve shall meet I.A.P.M.O. and A.S.S.E. listing specifications and be City of Los Angeles listings approved.

The combination remote control valve and atmospheric backflow preventer shall be as manufactured by Rain Bird Corporation, Azusa, California.



## How To Specify

### 100 - DVF - MB

Size	Model	Optional Configuration
075: 3/4" (20/27) 100: 1" (26/34)	DV: Remote Control Valve ASV: Anti-siphon Valve	MB: Male x barb A: Angle SS: Slip x Slip
	Optional Feature	
	F: Flow Control	

**Note:** This specifies a 100-DV valve; 1" (26/34) male x barb with flow control. For non-U.S. applications it is necessary to specify NPT or BSP thread type (1" only).

#### Rain Bird Corporation

6991 E. Southpoint Road  
Tucson, AZ 85756  
Phone: (520) 741-6100  
Fax: (520) 741-6522

#### Rain Bird Technical Services

(800) RAINBIRD (1-800-724-6247)  
(U.S. and Canada)

#### Rain Bird Corporation

970 West Sierra Madre Avenue  
Azusa, CA 91702  
Phone: (626) 812-3400  
Fax: (626) 812-3411

#### Specification Hotline

800-458-3005 (U.S. and Canada)

#### Rain Bird International, Inc.

1000 West Sierra Madre Ave.  
Azusa, CA 91702  
Phone: (626) 963-9311  
Fax: (626) 852-7343

The Intelligent Use of Water™  
[www.rainbird.com](http://www.rainbird.com)