Tech Spec

LFV Series

Low Flow Valve

Low Flow DV Valve
The only valves in the industry made specifically for drip irrigation systems, the unique patented design of the LFV allows it to effectively handle particles at low flow rates. These valves contain all of the features of reliable Rain Bird DV valves, coupled with a unique diaphragm design that allows particles to pass through at extremely low flow rates, preventing weeping of the valve.

Features

- 1⁄2" diameter seat allows diaphragm to lifthigher and pass larger particles at low flows
- Patent-pending double knife diaphragm design eliminates need for filtration at low flow rates
- Low flow valve allows the filter to be safely placed downstream of the valve
- 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
- 11⁄4" (3,2 cm) stainless steel phillips head screws
- Accepts latching solenoid for use with Rain Bird battery-operated controllers
- Available as: 3⁄4" (20/27) and 1" (26/34) FPT 1" (26/34) BSP inline configuration
- Standard in XCZLF-100-PRF and XCZ-075-PRF

Operating Range

- Pressure: 15 to 150 psi (1,0 to 10,4 bar)
- LFV075 Flow: 0.2 to 8 gpm (0,05 to 1,82 m3/h; 0,01 to 0,50 l/s)
- LFV100 and ILFV100 Flow: 0.2 to 10 gpm (0,05 to 1,82 m3/h; 0,01 to 0,50 l/s)
- Water Temperature: Up to 110° F (43° C)
- Ambient air temperature up to 125° F (52° C)

Electrical Specifications

- 24 VAC 50/60 Hz (cycles per second) solenoid power requirement
- 0.30 A (7.2 VA) inrush current
- 0.19 A (4.56 VA) holding current
- Solenoid coil resistance: 38 Ohms

Dimensions

- Height: 41⁄2" (11,4 cm)
- Length: 43⁄8" (11,1 cm)
- Width: 31⁄3" (8,4 cm)

Models

- LFV075: 3⁄4" Low Flow Valve
- LFV100: 1" Low Flow Valve
- ILFV100: 1" Low Flow Valve with 1" BSP threads

How To Specify

LFV - 100

Size
075: 3/4" (20/27)
100: 1" (26/34)

Model
Low Flow Remote Control Diaphragm Valve

Note: *For non-U.S. applications it is necessary to specify ILFV-100 BSP thread type (1" only)*

Specifications

LFV075 and LFV100
Electric Remote Control Valves

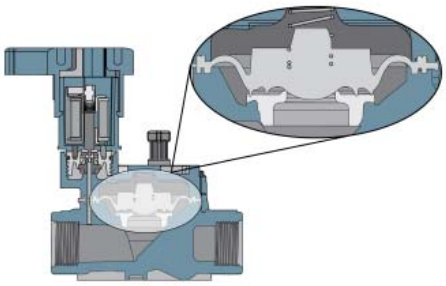
The valve shall be normally closed 24 VAC 50/60 Hz (cycles per second) solenoid actuated, balanced pressure type capable of a flow rate of _____gpm (l/s; m3/h) with a pressure loss not to exceed _____ psi (bar). The valve pressure rating shall not be less than 150 psi (10,4 bar). The valve body and bonnet 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, and a double knife seal. The valve shall have a 1⁄2" diameter seat. 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) 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.

The valve shall be actuated by a low power 0.30 A (7.2 VA) in-rush current and 0.19 A (4.56 VA) 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 is manufactured by Rain Bird Corporation.



Low Flow Valve

Pressure Loss Characteristics

Flow GPM	Flow GPH	LFV-075 (psi)	LFV-100 (psi)
0.2	12	3.0	3.0
1.0	60	3.2	3.4
2.0	120	3.3	3.8
4.0	240	3.6	5.0
6.0	360	4.2	6.4
8.0	480	6.8	7.5

METRIC

Flow l/hr	Flow l/s	LFV-075 (bars)	LFV-100 (bars)
45,42	0,01	0,21	0,21
227	0,06	0,22	0,23
454	0,13	0,23	0,26
908	0,25	0,25	0,34
1362	0,38	0,28	0,44
1817	0,50	0,47	0,52

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

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

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

Rain Bird Technical Services
(800) RAINBIRD (1-800-724-6247)
(U.S. and Canada)

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

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www.rainbird.com