

Low Flow Residential Control Zone Kits

TECHNICAL SPECIFICATIONS

XCZ-075-PRF
ICZ-075-9V
XCZLF-100-PRF

The Low Flow Control Zone Kit is made specifically for drip irrigation systems; the unique patented design of the LFV allows it to effectively handle particles at low flow rates. When combined with the RBY pressure regulating filter, it is a great choice for residential zones.

FEATURES:

- **Optimized for Low Flow:** Includes the field-proven Low Flow Valve, the only valve on the market that can handle low flows (below 3 gpm) without weeping
- **Compact Solution:** Shorter kits with only two components (valve plus pressure-regulating filter) mean that you can fit more Control Zone Kits in a valve box, saving time and money.
- **Long-term Reliability:** These preassembled kits with PR Filters provide on/off control, filtration, and pressure regulation with only two parts; so there is less chance of leakage at the connections, both at installation and over the life of the system

MODELS:



XCZ-075-PRF
3/4" Low Flow Control Zone Kit

OTHER MODELS:

ICZ-075-9V
3/4" Low Flow Control Zone Kit with TBOS solenoid (BSP)

XCZ-LF-100-PRF
1" Low Flow Control Zone Kit

OPERATING RANGES:

Operating Flow Range

XCZ-075-PRF: 0.2 to 5.0 gpm; (0.8 to 18.91 l/m)
ICZ-075-9V: 0.2 to 5.0 gpm; (0.8 to 18.91 l/m)
XCZ-LF-100-PRF: 0.2 to 10.0 gpm; (0.8 to 37.85 l/m)

Min Diagnostic Flow

N/A

Inlet Pressure

20 to 150 psi; (1.4 to 10.3 bar)

Regulated Pressure:

XCZ-075-PRF - 30psi (2.1 bar)
ICZ-075-9V - 30psi (2.1 bar)
XCZ-LF-100-PRF - 40 psi (2.8 bar)

ADDITIONAL SPECIFICATION NOTES:

*0.9 gph dripline with 12" emitter spacing

OTHER SPECIFICATIONS:

Valve

XCZ-075-PRF: Lfv075
ICZ-075-9V: Lfv075TBOS
XCZ-LF-100-PRF: Lfv100

Filter Type

Stainless steel screen filter; 200 mesh (75 micron)

Flow Rate Capability*

13 to 300 ft (4 to 91m) of dripline

Valve Box

Mini-Standard or 10" Round

Warranty

3 years

Controller Compatibility

- Compatible with traditionally-wired controllers.
- Compatible with TBOS / DC controller when used with DC Latching solenoid.
- Compatible with IVM controllers (ESP-LXIVM/LXIVMP) when used with IVM SOL.
- Not compatible with 2-wire decoder systems like the ESP-LXD controller.

Dimensions

Length = 10"

Replacement Filter

RBY-200SSMX

Inlet Size

XCZ-075-PRF: 3/4" x 3/4" NPT
ICZ-075-9V: 3/4" x 3/4" NPT/BSP
XCZ-LF-100-PRF: 1" x 1" NPT



SPECIFICATIONS:

The control zone kit shall contain 2 pieces, which are pre-assembled: an integrated Pressure-Regulating Filter (PR Filter) and a valve.

The PR Filter shall contain both a 200 mesh filter and a pressure regulator. The pressure regulating filter body shall be constructed of heavy-duty, glass-filled, UV resistant plastic material providing a pressure rating of not less than 150 psi.

The filter element shall be constructed of a durable polyester fabric attached to a propylene frame. The standard 200-mesh (75 micron) screen shall be serviceable for cleaning purposes by unscrewing the cap from the body and removing the filter element. Replaceable filter elements (white) 200-mesh (75 micron) shall be available from the same manufacturer of the inline filter. The 3/4" pressure regulating filter body shall have a 3/4" male threaded inlet and outlet. The 1" PR Filter shall have a 1" male threaded inlet and outlet. The design shall be of a compact "Y" body and cap configuration. The dimension for the filter shall not exceed the following: Height: 4 1/2" (11,4 cm), Length: 5 1/2" (14 cm), Width: 2" (5,1 cm).

The pressure regulating element of the pressure regulating filter is a normally open device that allows full flow with a little pressure loss unless the inlet pressure is greater than preset level. As the inlet pressure increases above the preset level it compresses a spring and begins to reduce the flow and downstream pressure. The 3/4" pressure regulator shall have a preset outlet pressure of approximately 30 psi (2,0 bars) at a flow rate of ____ GPM or (l/s: m3 /h). The 1" pressure regulator shall have a preset outlet pressure of approximately 40 psi (2,6 bars) at a flow rate of ____ GPM or (l/s: m3 /h).

The pressure regulator shall be able to accommodate an inlet pressure rating of not less than 120 psi (8,3 bars). The control zone kits shall have the ability to be installed either above or below ground.

The control zone kits shall have an automatic irrigation control valve. 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) (NPT) inlet and outlet 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.

XCZ-075-PRF			
Minimum Inlet Pressure for 30 psi (2.1 bar) Outlet Pressure			
FLOW		INLET PRESSURE	
gpm	l/m	psi	bar
0.2	0.8	34.4	2.4
1.0	3.8	36.1	2.5
3.0	11.4	38.1	2.6
5.0	18.9	43.4	3.0

ICZ-075-9V			
Minimum Inlet Pressure for 30 psi (2.1 bar) Outlet Pressure			
FLOW		INLET PRESSURE	
gpm	l/m	psi	bar
0.2	0.8	34.4	2.4
1.0	3.8	36.1	2.5
3.0	11.4	38.1	2.6
5.0	18.9	43.4	3.0

XCZ-LF-100-PRF			
Minimum Inlet Pressure for 40 psi (2.8 bar) Outlet Pressure			
FLOW		INLET PRESSURE	
gpm	l/m	psi	bar
0.2	0.8	44.4	3.1
1.0	3.8	44.4	3.1
3.0	11.4	45.0	3.1
5.0	18.9	46.2	3.2
10.0	37.9	52.2	3.6

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