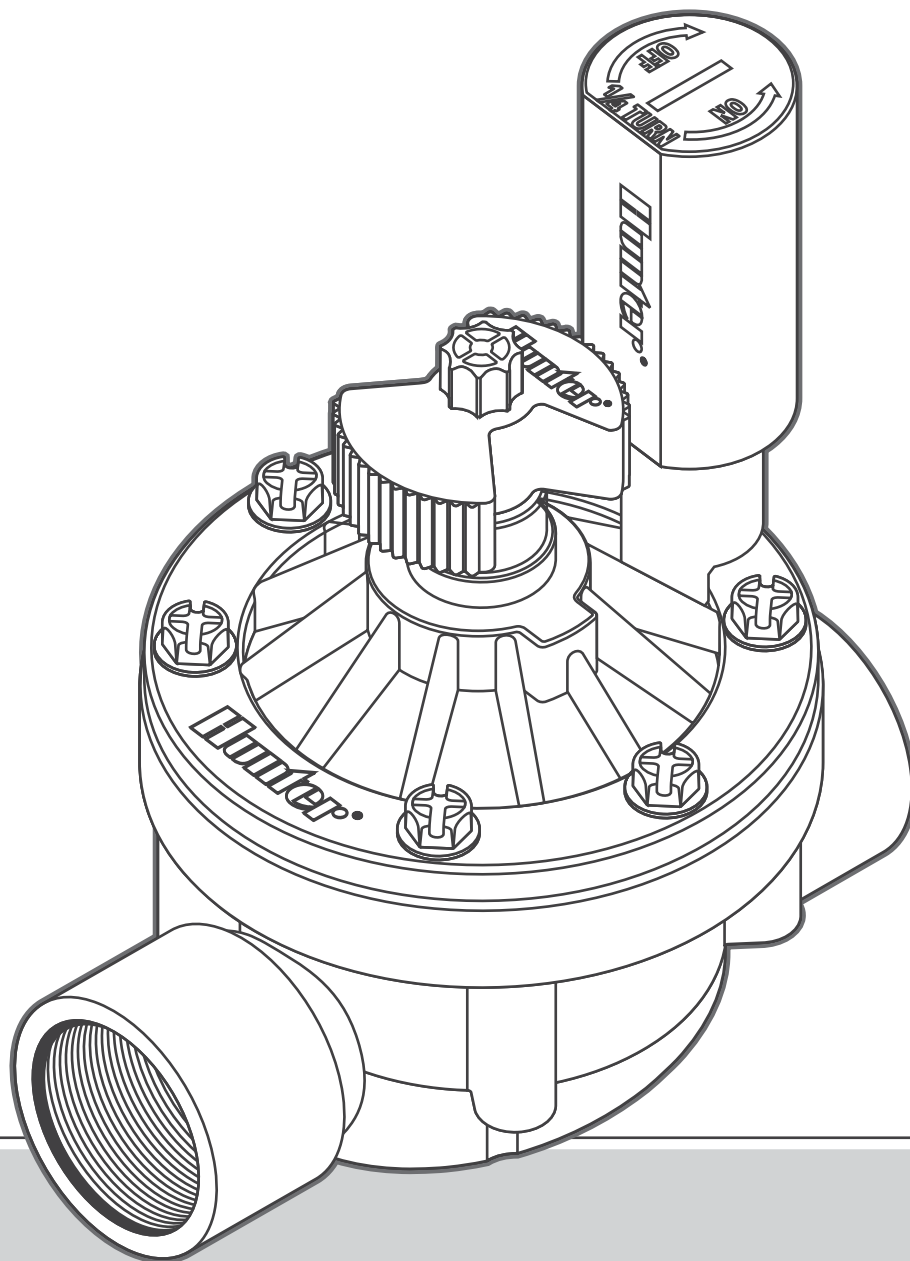


# ICV VALVES

PRODUCT INFORMATION AND USER GUIDE



ICV Valves  
Robust valves for highly demanding irrigation systems

**Hunter**<sup>®</sup>

## Overview

Durable, glass-filled Hunter ICV series valves are the leading solution for irrigation systems worldwide. Industrial strength, unmatched reliability, and advanced technologies make the ICV an ideal choice for commercial and high-end residential projects. Every ICV valve is loaded with professional features for maximum reliability.

The maintenance-friendly ICV is designed with captive parts, common components such as a single solenoid for all valves, and a convenient triple-tool design for easy accessibility. Since all Hunter valves are 100% water-tested prior to shipping, you can be sure they are working properly before ever coming into your hands.



This guide explains the key benefits of ICV valves, as well as our best-in-class Accu Sync® pressure regulators. You will also find helpful installation details, a parts list, and a troubleshooting section.

Please read the guide carefully to fully understand the top-quality products you have invested in. Thank you for choosing Hunter Industries as your partner for irrigation needs.

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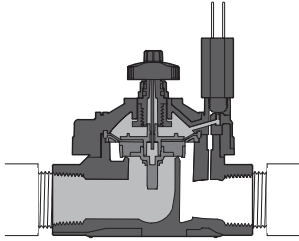
- 3** Valve Operation
- 4** Product Details
- 6** Accu Sync Pressure Regulators
- 7** Valve Comparison
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**Principles of Valve Operation**

Valve mechanics are based on the formula  $F = P \times A$  where:

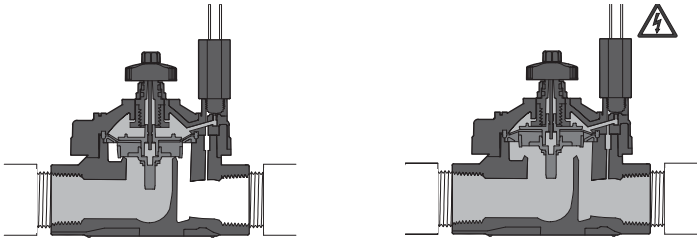
- P = Water pressure within the valve
- A = Surface area of the diaphragm (top or bottom)
- F = Amount of force exerted on either side of diaphragm

Since the top of the diaphragm is larger than the bottom, the force is higher on the diaphragm top when pressure equalizes, keeping the valve closed.



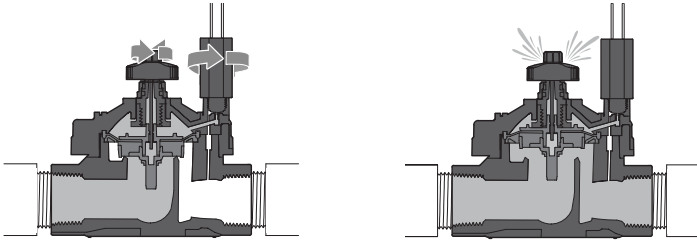
**Opening a Valve Electrically**

When operating a valve electrically, 24 VAC flows to the solenoid and lifts the solenoid plunger. The pressurized water then vacates downstream through an exhaust port. With pressure released on the top of the diaphragm, the force below pushes the diaphragm up, opening the valve.



**Opening a Valve Manually**

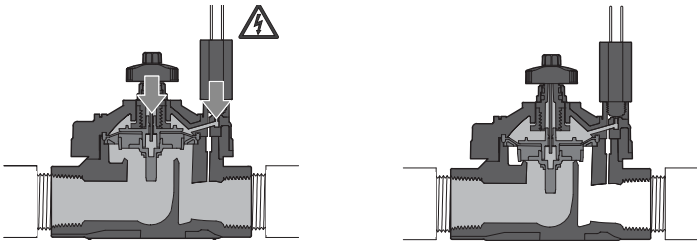
Turn the bleed screw (above the flow control knob) counterclockwise to externally bleed water from the upper chamber to open the valve or rotate the solenoid a ¼-turn to internally bleed the water from the top of the diaphragm downstream to open the valve.



**Note:** Example of opening valve using external bleed.

**Closing a Valve**

- When the controller shuts off the electricity from the solenoid, the solenoid plunger is released and forced downward to cover the exhaust port.
- Covering the port stops the discharge of water from the upper chamber and allows the chamber to pressurize to mainline pressure once again.
- As the pressure above the diaphragm increases, the diaphragm slowly closes.
- The valve will fully close when the diaphragm sits completely on the body of the valve.



## Product Details

### Heavy-Duty Construction

Designed to operate within highly demanding systems up to 220 PSI (15 bar; 1518 kPa) for many years of operation:

- Body and bonnet made with glass-filled nylon to provide extra strength and durability
- Diaphragm manufactured from fabric-reinforced EPDM rubber highly resistant to abrasion
- Through-hole brass inserts in the body provide greater strength between body and bonnet

Reliability and durability proven through grueling tests:

- High-pressure surge
- Sand and grit
- Cyclical burst
- Life cycle
- Heat/freeze

### Flow Range

Incredibly versatile with wide flow range:

- Flows starting at 0.1 GPM and reaching up to 300 GPM (0.03 to 68 m<sup>3</sup>/hr; 0.4 to 1,135 l/min)
- Designed for minimal friction loss
- Use for micro irrigation systems as well as large turf projects



### Robust Solenoid

Provides dependable operation and long life:

- Common AC solenoid for all Hunter valves
- Common DC-latching solenoid for all Hunter valves having one black (common) wire and one red (station) wire
- Contractors/distributors only need to stock one solenoid for Hunter valves
- Eliminate damage from pressure surges with Hunter's innovative reverse-flow solenoid design
- The most dependable and efficient solenoids on the market:
  - Only 370 mA (8.9 VA) inrush current, 190 mA (4.5 VA) holding current at 60 Hz
  - Allows for longer wire runs between the valve and controller



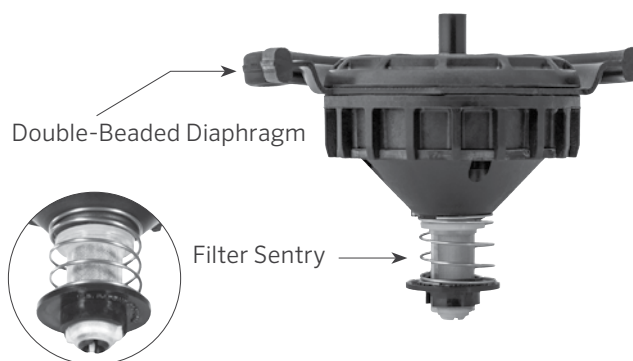
### Large Filtering Area

Excellent choice for dirty water applications:

- Large filtering surface area assists in ensuring consistent opening/closing of valve

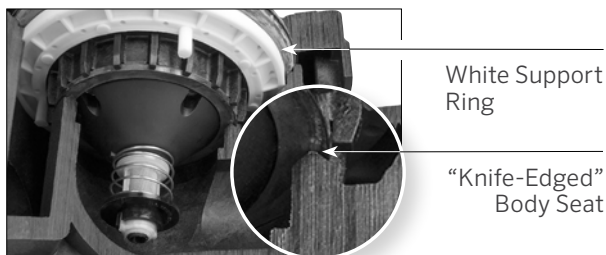
### Optional Filter Sentry®

- Scrapes filter fully and continuously while valve is open
- Cleans full screen regardless of flow control adjustments
- Filter Sentry cleaning system is uniquely attached to the diaphragm, not the valve; the valve body does not need to be removed to replace the diaphragm



**Debris Tolerant**

- “Knife-edged” body seat helps eliminate weeping due to debris caught under the diaphragm
- EPDM diaphragm seat assembly provides substantial grit tolerance and wear resistance



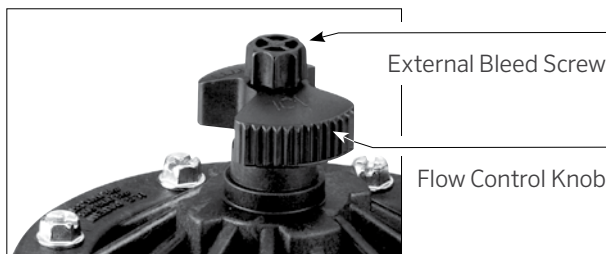
**Fully Supported, Slow-Closing Diaphragm**

Minimizes water hammer:

- Slow closing speed helps prevent water hammer
- Support ring protects the fabric-reinforced diaphragm from additional stresses
- Small holes in the support ring flush around the diaphragm and prevent sticking
- Double-beaded diaphragm seal design ensures leak-free performance
- Offered in purple reclaimed version designed to withstand high levels of chlorine and chloramines in the water

**Adjustable Flow Control with Non-Rising Handle**

- Flow adjustment and servicing made easy
- All sizes equipped with non-rising flow control



**Two Methods to Manually Bleed Valve**

Internal bleed for completely dry operation:

- Quick ¼-turn of solenoid allows water to bleed downstream and open valve
- All the exhaust water stays in the valve

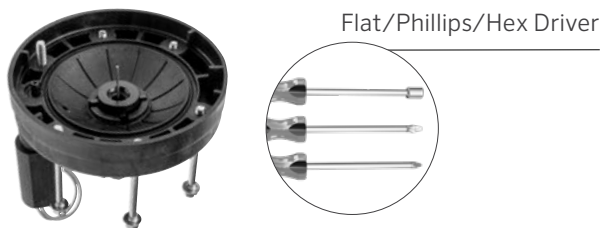
External bleed using easy access bleed screw:

- Turn the bleed screw on top of the flow control stem
- Water will vent outside the valve

**Captive Parts**

No more lost bolts, nuts, or solenoid plungers:

- Captive diaphragm remains on bonnet until you remove it
- Captive solenoid plunger remains intact
- Captive bonnet bolts stay in the bonnet even when tipped upside down
- With the bolts having a combination of slot/Phillips/hex for easy servicing, this is the easiest valve in the industry to maintain without losing the parts in a muddy valve box



Captive Bonnet Bolts

**Brass Inserts**

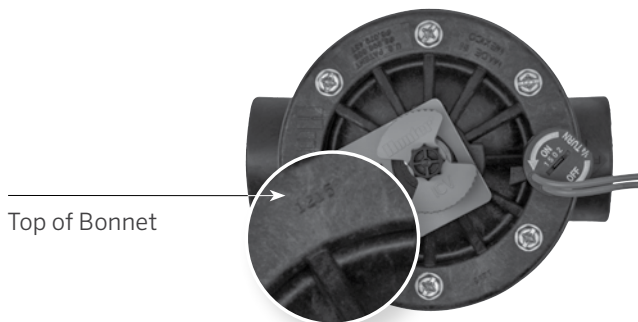
Adding strength where it matters:

- Contribute to serviceability by preventing dirt from packing into the hole as in other valves
- Dirt falls through the inserts, allowing the bonnet to fully tighten on the body

**Warranty Information**

The date code is located on top of the bonnet (mo/yr)

Warranty period: 5 years



# Accu Sync Pressure Regulators

## Pressure Regulation for Any Hunter Valve

- Accu Sync can be used to regulate pressure for any type of applications to meet optimum pressure level
- Offered in fixed outlet pressure options of either 30 or 40 PSI (2 or 2.75 bar; 200 or 275 kPa)
- Offered in adjustable outlet pressure setting from 20 to 100 PSI (1.4 to 7.0 bar; 140 to 700 kPa)
- Required dynamic pressure differential: 15 PSI (1.0 bar; 100 kPa) above outlet selection
- Works with all Hunter valves and both AC solenoids and DC-latching solenoids
- Consistent outlet pressure regardless of incoming pressure fluctuations
- Ideal for any Hunter valve as long as appropriate pressure and flow is met
- No need for cumbersome gauge to double-check pressure. Every Accu Sync is calibrated and tested for appropriate pressures.

### RECOMMENDED FLOW RANGES FOR ICV VALVES WITH ACCU SYNC

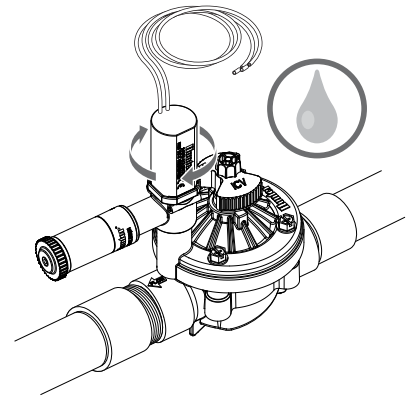
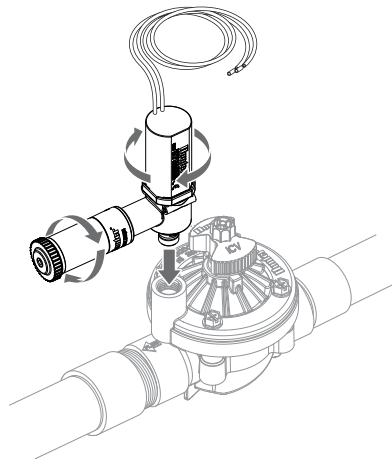
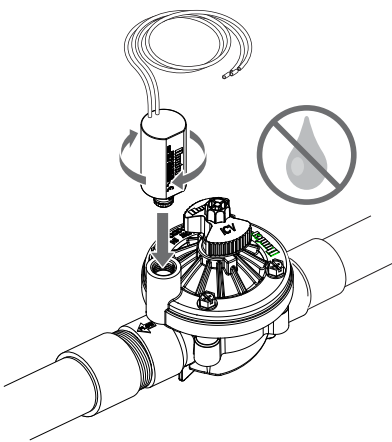
Valve	Flow		
	GPM	m <sup>3</sup> /hr	l/min
ICV-101G	5-40	1.2-9.0	19-150
ICV-151G	20-150	4.5-31	75-510
ICV-201G	40-200	9.0-34	150-560
ICV-301G	150-300	34-68	565-1135



**Note:** When activating the valve by twisting the solenoid counterclockwise, the valve will continue to regulate pressure. If using the bleed screw to activate, the valve will not regulate pressure.

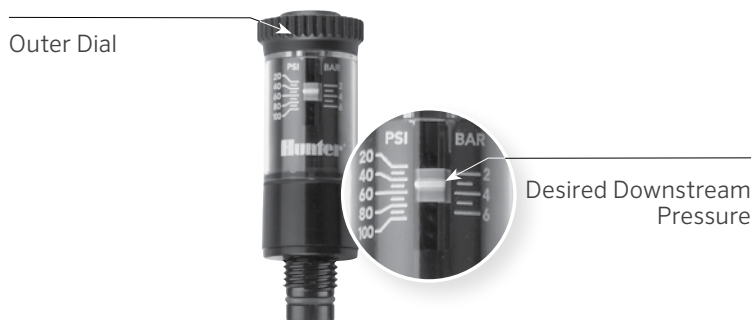
## Installation Instructions

1. After shutting off the water supply, remove the solenoid from the Hunter valve.
2. Thread the Accu Sync into the side inlet of the adapter.
3. Thread the solenoid into the top port of the adapter.
4. Thread the solenoid adapter into place by inserting it and holding it steady while rotating the solenoid in its socket.






## ACCU-SYNC-ADJ Adjustment

1. Turn the outer black dial until the white line is next to the desired downstream pressure.
2. Accu Sync shows PSI on one side and bar on the other. For kPa, multiply bar by 100.



**VALVE COMPARISON CHART**

FEATURES	HUNTER ICV 	HUNTER ICV FILTER SENTRY 	COMPETITOR 1 	COMPETITOR 2 
220 PSI (15.0 bar; 1500 kPa) rated operating pressures	●	●		●
Pressure regulation	●	●	●	●
Common AC solenoids and DC-latching solenoids	●	●		
Low power requirement solenoids; minimal inrush current	8.9 VA	8.9 VA	9.9 VA	11.5 VA
Reverse-flow solenoid design to reduce line surges	●	●		
Internal manual bleed	●	●	●	●
Three-tool (standard or Phillips screwdriver, nut driver) stainless steel bonnet bolts	●	●		
Captive bonnet bolts with brass inserts in the body	●	●		
Continuous self-cleaning diaphragm filter		●		●
Easy field-installed filter cleaning options	●			
Debris-tolerant, “knife-edged” body seat	●	●		
Flow control with non-rising handle	●	●		

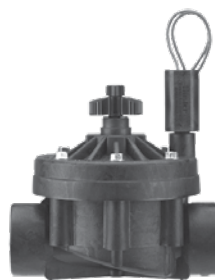
## Technical Information

### Operating Specifications

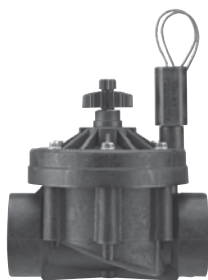
- Flow:
  - ICV-101G / ICV-101G-FS: 0.1 to 40 GPM; (0.03 to 9 m<sup>3</sup>/hr; 0.4 to 150 l/min)
  - ICV-151G / ICV-151G-FS: 0.1 to 150 GPM; (0.03 to 34 m<sup>3</sup>/hr; 0.4 to 568 l/min)
  - ICV-201G / ICV-201G-FS: 0.1 to 200 GPM (0.03 to 45 m<sup>3</sup>/hr; 0.4 to 757 l/min)
  - ICV-301 / ICV-301W-FS: 0.1 to 300 GPM; (0.03 to 68 m<sup>3</sup>/hr; 0.4 to 1,135 l/min)
- Recommended pressure range: 20 to 220 PSI (1.5 to 15.0 bar; 150 to 1500 kPa)
- Temperature rating: 150°F (66°C)
- Warranty period: 5 years



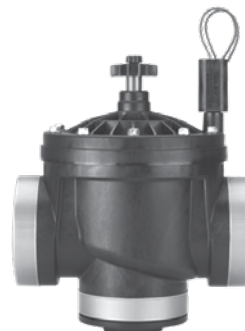
**ICV-101G-FS**  
 Inlet diameter: 1" (25 mm)  
 Height: 5½" (14 cm)  
 Length: 4¾" (12 cm)  
 Width: 4" (10 cm)



**ICV-151G-FS**  
 Inlet diameter: 1½" (40 mm)  
 Height: 7⅞" (18 cm)  
 Length: 6⅞" (17 cm)  
 Width: 5½" (14 cm)



**ICV-201G-FS**  
 Inlet diameter: 2" (50 mm)  
 Height: 7⅞" (18 cm)  
 Length: 6⅞" (17 cm)  
 Width: 5½" (14 cm)



**ICV-301-FS**  
 Inlet diameter: 3" (80 mm)  
 Height: 10¾" (27 cm)  
 Length: 9" (22 cm)  
 Width: 7⅞" (19 cm)

### ICV SPECIFICATION BUILDER

Model	Threading	Options
ICV-101G	1" (25 mm) globe valve	<b>Blank</b> NFPT
ICV-151G	1½" (40 mm) globe valve	<b>B</b> BSP
ICV-201G	2" (50 mm) globe valve	<b>FS</b> Filter Sentry
ICV-301G	3" (80 mm) globe/angle valve	<b>FS-R</b> Filter Sentry, Reclaimed

Examples: ICV-201G-FS-R = 2" (50 mm) ICV globe valve with Filter Sentry and reclaimed components  
 ICV-101G-DC = 1" (25 mm) ICV globe valve with installed DC-latching solenoid



**User-Installed Option Only**

- Accu Sync pressure regulation at the valve

**User-Installed or Factory-Installed Options**

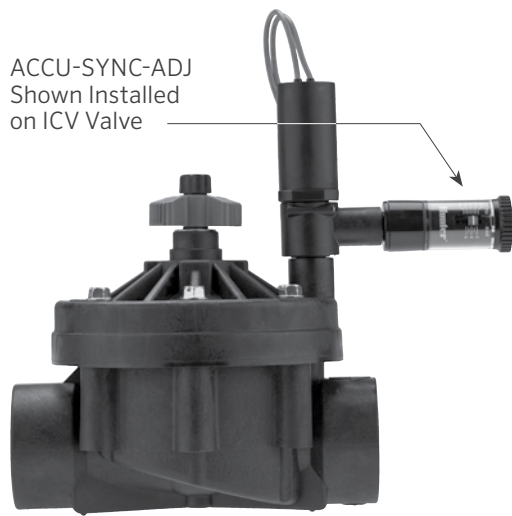
- LS: Valve without solenoid
- DC: DC-latching solenoid for battery-powered controllers (P/N 458200)
- FS: Filter Sentry mechanism easily added to an installed valve
- FS-R: Reclaimed option with Filter Sentry, purple control knob, and purple chlorine-resistant diaphragm



**AS-30 (Red)**  
Height with solenoid:  
3¼" (8 cm)



**AS-40 (Gray)**  
Height with solenoid:  
3¼" (8 cm)



**AS-ADJ**  
Height with solenoid:  
3¼" (8 cm)

**ACCU SYNC MODELS**

<b>ACCU-SYNC-30</b>	30 PSI valve regulator (2.1 bar; 210 kPa)
<b>ACCU-SYNC-40</b>	40 PSI valve regulator (2.8 bar; 280 kPa)
<b>ACCU-SYNC-ADJ</b>	20-100 adjustable regulator (1.4-6.9 bar; 140-690 kPa)

## Product Performance

### ICV PRESSURE LOSS (AT OPTIMAL FLOWS) IN PSI

Flow (GPM)	1" Globe	1½" Globe	2" Globe	3" Globe	3" Angle
0.1	2.0				
0.5	2.0				
1	2.0				
5	2.5				
10	3.0				
15	3.0				
20	3.0	1.5			
30	9.0	1.5			
40	20.0	1.7	0.8		
50		2.2	1.2		
60		3.0	1.7		
75		3.9	2.4		
90		5.5	3.2		
100		7.0	4.2		
120		10.9	6.5		
135		12.7	7.9		
150		16.2	9.8	2.5	1.9
175			13.3	3.0	2.4
200			17.7	4.1	3.3
225				5.3	4.3
250				6.7	5.5
275				8.3	6.9
300				10.1	8.5



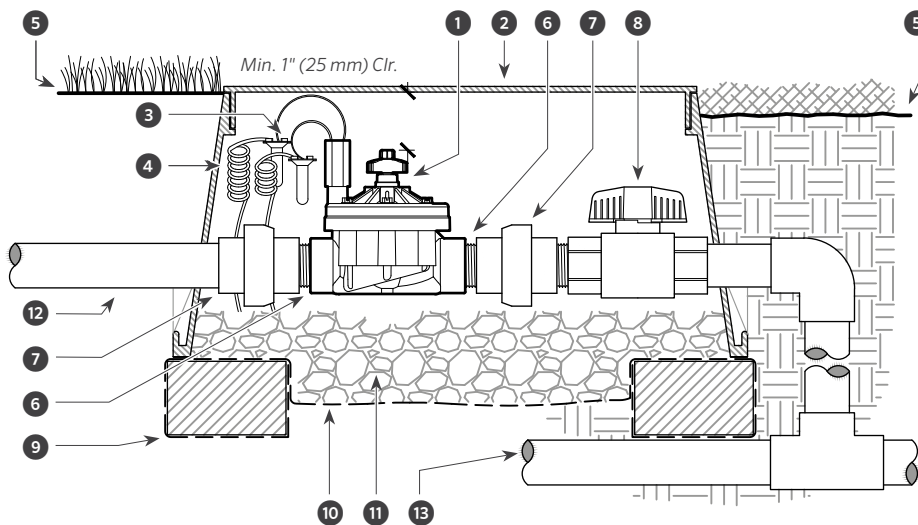
### ICV PRESSURE LOSS (AT OPTIMAL FLOWS) IN BAR

Flow m³/hr	1" (25 mm) Globe	1½" (40 mm) Globe	2" (50 mm) Globe	3" (80 mm) Globe	3" (80 mm) Angle
0.05	0.1				
0.1	0.1				
0.3	0.1				
1.0	0.2				
2.5	0.2				
3.5	0.2				
4.5	0.2	0.1			
7.0	0.4	0.1			
9.0	1.0	0.1	0.1		
11.0		0.2	0.1		
13.5		0.2	0.1		
17.0		0.3	0.1		
20.5		0.4	0.2		
23.0		0.5	0.3		
27.0		0.7	0.4		
30.5		0.9	0.5		
34.0		1.2	0.6	0.2	0.1
40.0			0.9	0.2	0.2
45.5			1.2	0.3	0.2
51.0				0.3	0.3
57.0				0.4	0.4
62.5				0.5	0.5
68.0				0.6	0.6

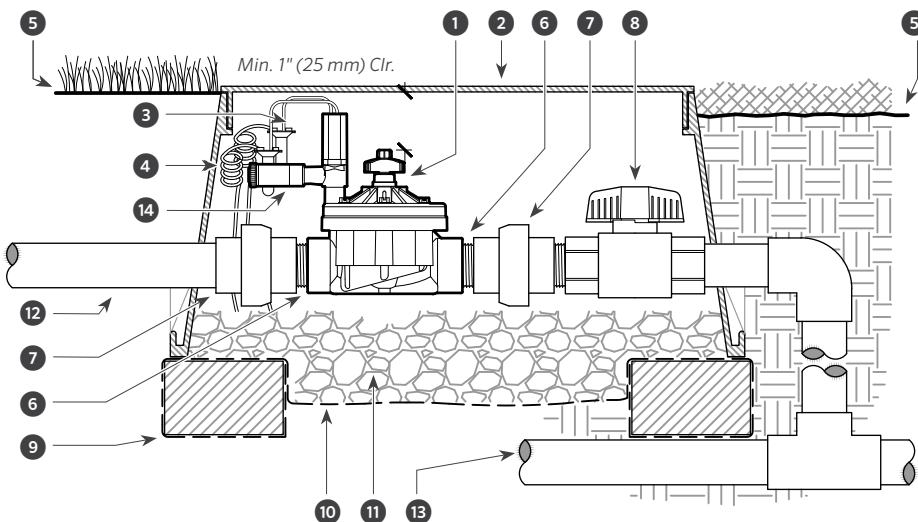
### ICV PRESSURE LOSS (AT OPTIMAL FLOWS) IN kPa

Flow l/min	1" (25 mm) Globe	1½" (40 mm) Globe	2" (50 mm) Globe	3" (80 mm) Globe	3" (80 mm) Angle
1	14				
2	14				
4	14				
20	17				
40	20				
60	20				
75	20	9.6			
115	62	10			
150	139	12	5.0		
190		15	7.0		
225		18	9.3		
280		26	14		
340		37	20		
380		46	26		
450		65	36		
510		84	47		
565		104	57	16	12
660			79	22	17
750			103	29	23
850				38	30
950				47	38
1,050				58	47
1,135				69	56

In-line valve (ICV-151G) with unions and shutoff valve



In-line valve (ICV-151G) with unions, shutoff valve, and ACCU SYNC



**ICV INSTALLATION DETAILS**

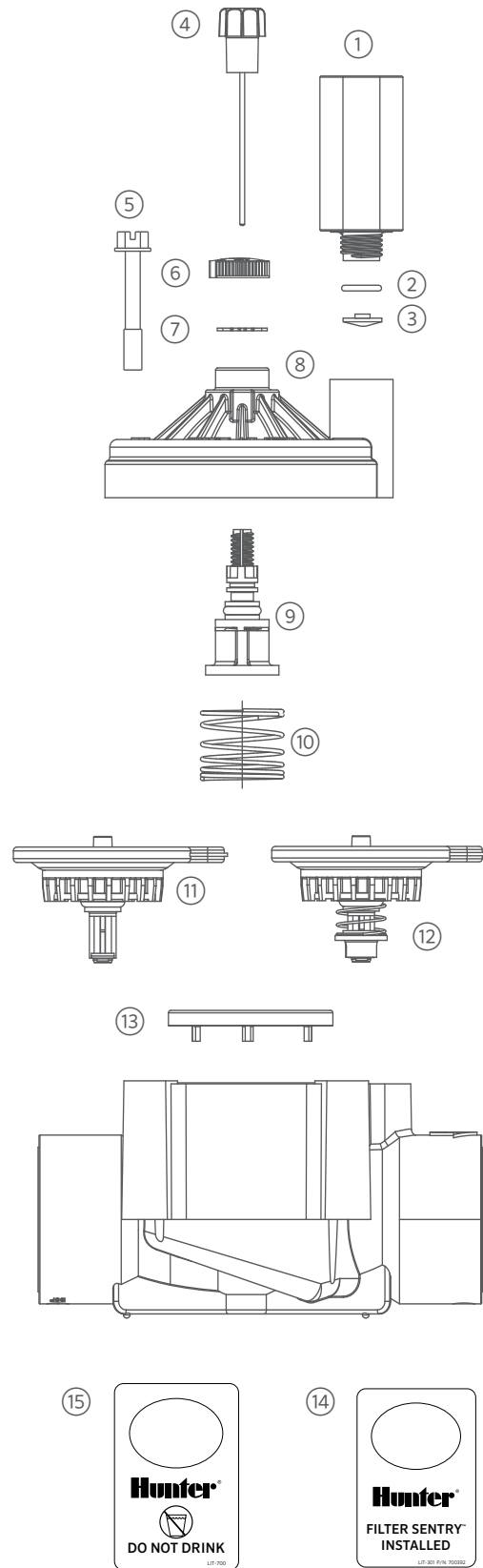
- 1 Hunter remote control valve (ICV) with flow
- 2 Irrigation valve box: Heat stamp lid with 'RCV' in 2" (51 mm) letters
- 3 Waterproof connectors (2)
- 4 18"-24" (46-61 cm) coiled wire to controller
- 5 Finish grade at adjacent surface (turf or mulch)
- 6 Schedule 80 close nipple, size per RCV
- 7 PVC slip (or FPT) x FPT union
- 8 Isolation valve, size and type per plan
- 9 Brick supporters (4)
- 10 Filter fabric; wrap twice around brick supports
- 11 ¾" (20 mm) washed gravel; 4" (10 cm) min. depth
- 12 Irrigation lateral
- 13 Mainline and fittings
- 14 Accu Sync pressure regulator

For a complete list of ICV details, visit [hunter.direct/icvresources](http://hunter.direct/icvresources)

# Replacement Parts

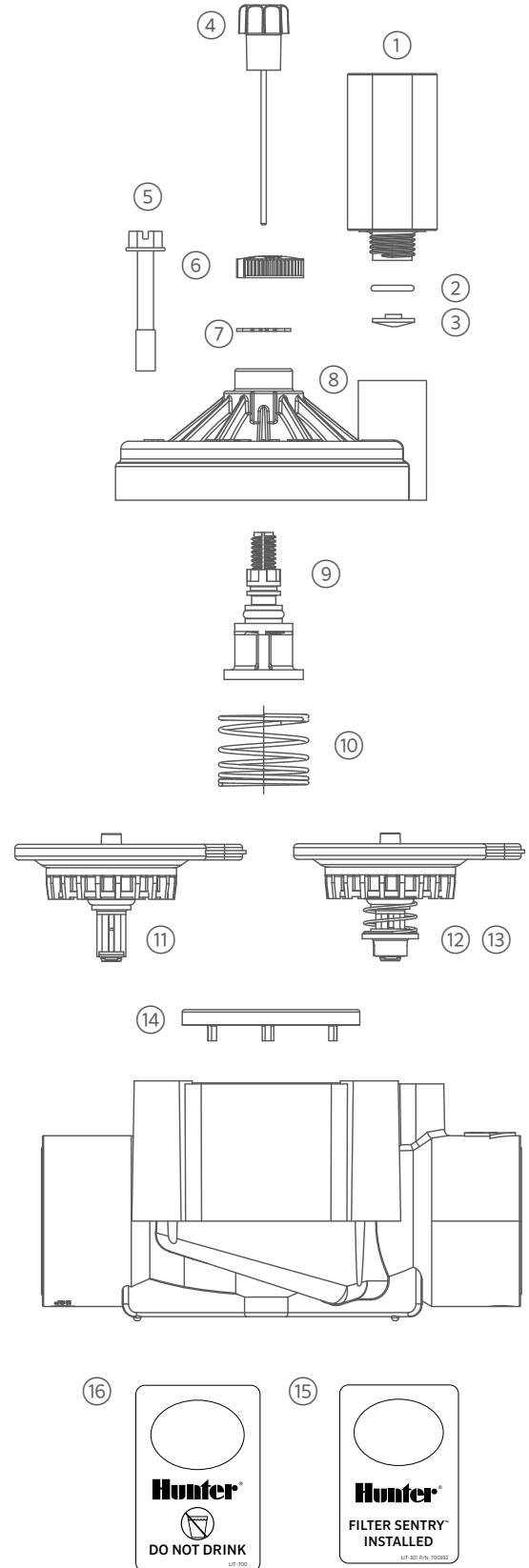
## ICV-101G: PLASTIC VALVE

ITEM	DESCRIPTION	CATALOG NO.	
1	Solenoid Assembly (Includes 2 & 3)	AC Solenoid	606800
		DC Solenoid	458200
2	O-Ring	262600	
3	Solenoid Seal	364400	
4	Bleed Assembly	561400	
5	Bonnet Bolt	386900	
6	Flow Control Knob	561200SP	
7	E-Clip Retainer	561205SP	
8	Bonnet	387700	
9	Flow Control Stem Assembly (Includes Stem, Stem Nut, O-Ring)	Flow Control Stem	560900
		Flow Control Stem Nut	386000
		Flow Control Stem O-Ring	387100
		Spring	386700
10	Spring	386700	
11	Diaphragm Assembly, Standard	387800SP	
12	Diaphragm Assembly with Filter Sentry Mechanism	461503SP	
13	Diaphragm Support Ring	711900	
14	Filter Sentry Tag, Yellow (10-Pack)	700392SP	
15	Purple Reclaimed ID Tag (10-Pack)	LIT-700	



## ICV-151G AND 201G: PLASTIC VALVE

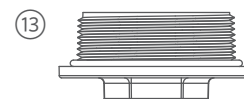
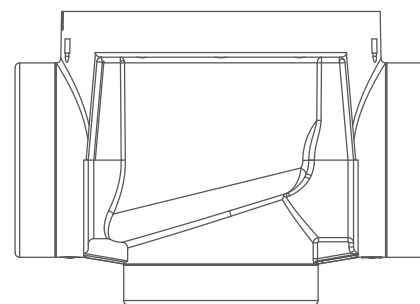
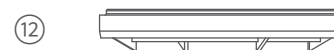
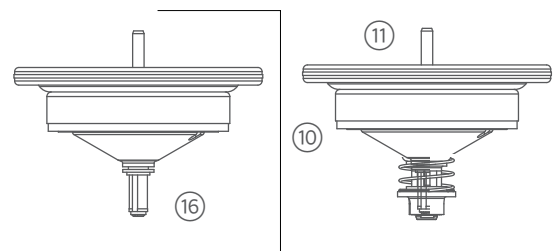
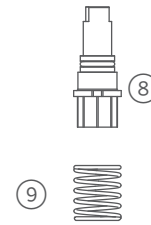
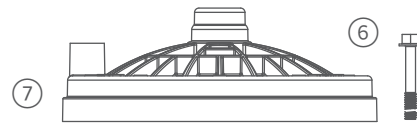
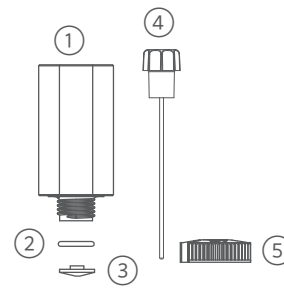
ITEM	DESCRIPTION	CATALOG NO.	
1	Solenoid Assembly (Includes 2 & 3)	AC Solenoid	606800
		DC Solenoid	458200
2	O-Ring	262600	
3	Solenoid Seal	364400	
4	Bleed Assembly	561500SP	
5	Bonnet Bolt	366700	
6	Flow Control Knob	561200SP	
		561205SP	
7	E-Clip Retainer	387200	
8	Bonnet	380600SP	
9	Flow Control Stem Assembly (Includes Stem, Stem Nut, O-Ring)	374600SP	
10	Spring	365400SP	
11	Diaphragm Assembly, Standard	460026SP	
12	Diaphragm Assembly with Filter Sentry Mechanism	460027SP	
13	Diaphragm Assembly, Reclaimed	676902SP	
14	Diaphragm Support Ring	365900SP	
15	Filter Sentry Tag, Yellow (10-Pack)	700392SP	
16	Purple Reclaimed ID Tag (10-Pack)	LIT-700	



# Replacement Parts

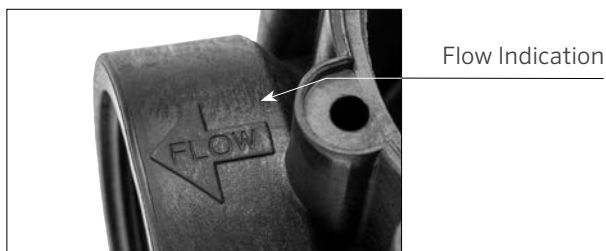
## ICV-301G: PLASTIC VALVE

ITEM	DESCRIPTION		CATALOG NO.
1	Solenoid Assembly (Includes 2 & 3)	AC Solenoid	606800
		DC Solenoid	458200
2	O-Ring		262600
3	Solenoid Seal		364400
4	Bleed Assembly (2015 and Older)		836200
	Bleed Assembly, for Old-Style Female Threaded Flow Control Stem		518800
5	Flow Control Knob, (2015 and Older)	Black	515000
		Purple	515005
	Flow Control Knob, for Use with Current Production Flow Control Stem with Male Threads	Purple	836500
6	Bonnet Bolt		386900
7	Bonnet Assembly (incl. 4, 5, 8)		856300SP
8	Flow Control Stem Assembly (2015 and Older)		836200
	Flow Control Stem Assembly, Old-Style with Female Threads		516100
9	Diaphragm Spring		518000
10	Diaphragm Assembly		518900SP
11	Filter Sentry Diaphragm Assembly		518905SP
12	Diaphragm Support		514600
13	Port Plug Assembly including O-Ring	NPT	514900
		BSP	514905
14	Filter Sentry Tag, Yellow (10-Pack)		700392SP
15	Purple Reclaimed ID Tag (10-Pack)		LIT-700
16	Diaphragm Filter Sentry		365200



## Installing the Valve

An arrow molded on the valve indicates the direction of flow. The solenoid is positioned downstream or the outlet side of the valve. Always verify the direction of water flow while installing.



## Threaded Valves

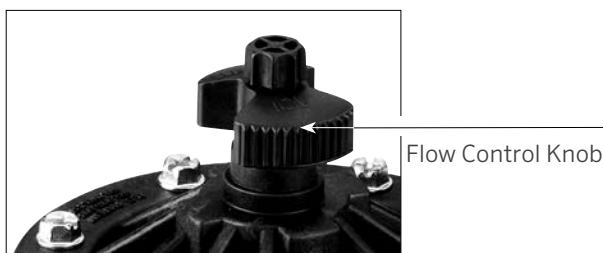
- Wrap the threads of the male adapter or fitting clockwise with three to four full wraps of Teflon® tape.
- Thread together without bottoming out the connection (hand tightening is fine).
- Too much Teflon tape may cause unnecessary stress on the valve inlet and outlet.

## “Tuning the Valve” Using Flow Control

The flow control system opens or restricts water passing through the valve by limiting the stroke of the diaphragm. The flow control fine-tunes the performance of the irrigation zone.

Tuning a valve should be a regular part of valve installation. The flow control system:

- Lowers the effects of water hammer
- Increases the life of system and components
- Calibrates the flows and pressures to system needs
- Assists in closing the valve, especially when oversized for the zone



## Tuning Methods

### Drip:

With the system running, start with the flow control fully open. As you slowly adjust the flow control down, you will hear and feel turbulence in the valve as the flow gets too low. Adjust back up a half-turn.

### Sprays and Rotors:

1. Turn flow control knob clockwise until you feel it bottom out (do not crank tight).
2. Turn flow control knob counter-clockwise **one** full turn.
3. ¼ turn solenoid counter-clockwise (as indicated on solenoid) to manually bleed the valve (will come on). Only turn ¼ turn. **The solenoid is not meant to be unscrewed completely for manual operation**
4. Slowly turn flow control counter-clockwise using ½ turns (180°) increments.
5. Listen and observe! Watch the sprays increase to their maximum operation. A slight sound of restriction of flow from the valve should be heard.
6. Once set, turn solenoid back ¼ turn to allow valve to turn off.
7. Once off, make a final ½-turn (180°) counter-clockwise with the flow control knob. **It is now set!**
8. Confirm that the valve closes smoothly in about 6-8 seconds by turning on the valve manually again from the solenoid.



**Note:** If valve closes too quickly – Flow control needs to be adjusted counter clockwise. If valve closes to slowly – Flow control needs to be adjusted clockwise. **Always make your adjustments by 180° turns at a time.**

## Troubleshooting

### Valve Not Closing

There are several reasons why a valve would continue running or why you might see irrigation continuing to flow. Please review the following checklist before trying more advanced troubleshooting.

- Is the power from the controller off or unplugged?
- Is the valve installed correctly with arrow pointing downstream?
- Is the external bleed screw emitting water externally? If so, hand tighten.
- Are the valves opened manually (solenoid not closed to off position)?
- Is this low-head drainage (water leaking out of the lowest head in the zone)?
- Is the valve slow to close?

If the valve continues to weep after reviewing the list above, proceed with common troubleshooting techniques.

### Debris Under Diaphragm

The most common reason for a valve to remain on, or weep, is debris. New installations without proper flushing, recent mainline repair, or well water can cause debris to flow into the valve and get caught between the diaphragm and the seat. Check for debris using the following steps:

1. Remove the bonnet of the valve by loosening all bonnet bolts and lifting the bonnet up. The screws will remain captive in the bonnet.
2. Remove the diaphragm.
3. Run your finger around the white diaphragm support ring inside the valve body to check for any damage that may prevent the diaphragm from seating correctly. Replace if issue is found.
4. Examine the bottom of the diaphragm for debris. If debris is lodged in the diaphragm seal or deep indentations are found, replace the diaphragm.
5. Rinse the diaphragm and the diaphragm seat and reassemble, orienting the diaphragm on the valve body so that the solenoid port lines up correctly.

### Damage to the Diaphragm

The valve can remain in the “open” position if the diaphragm becomes punctured. Follow the steps at left and inspect the diaphragm (Step 3) looking for obvious tears or punctures.

For more information, visit [hunter.direct/valvesupport](https://hunter.direct/valvesupport).

Search for tears or punctures



Diaphragm Top View

Check for damage or gouges



Diaphragm Support Ring

Check for lodged debris or dents



Diaphragm Bottom View



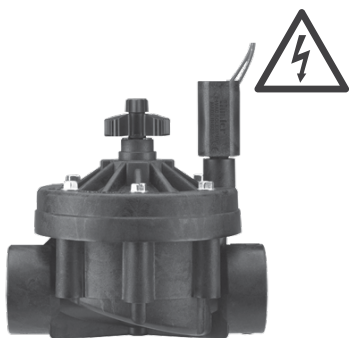
### Valve Not Opening

There are several reasons why a valve might not open.

#### Insufficient Voltage

If the valve does not receive an appropriate level of voltage or the wire distance is too long, you may experience issues opening the valve.

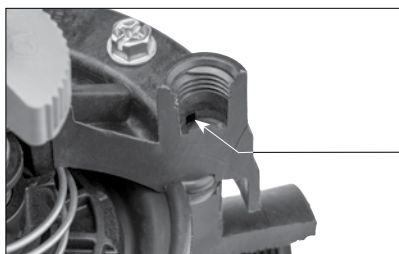
1. Check the voltage at the controller screw terminals for proper voltage of 24–28 VAC.
2. Using the installed wire gauge size connected to the valve, review the maximum run in the chart compared to the actual install  
*For additional guidance, reference the wire sizing section in the Hunter catalog near the end of the book.*
3. If there are other valves within the box, swap the valve wires to a known operating valve to verify proper voltage.



#### Clogged Solenoid Exhaust Ports

There is an entry port from the valve upper chamber to the solenoid and an exhaust port from the solenoid to downstream in the valve. If either port gets clogged with debris, the valve may not open or open fully.

1. Attempt to turn on the valve using the external bleed screw. If it turns on, there may be a port issue.
2. Remove the solenoid (or Accu Sync assembly if installed).
3. Insert a thin piece of metal or 18 AWG (0.8 mm<sup>2</sup>) station wire (small paperclip size) down the center port in the solenoid chamber.
4. Insert the same piece down the side outlet port of the solenoid chamber.
5. Re-thread the solenoid or Accu Sync assembly onto the valve bonnet.



Solenoid Port

#### Check Flow Control

1. Flow control should be adjusted for every system to maximize efficiency. (Please read section “Tuning the Valve” Using Flow Control on page 15.) Sometimes it can be inadvertently closed. Check by rotating the handle clockwise. If it will not turn, the flow control is completely down and the diaphragm is unable to fully open.
2. Turn the handle counterclockwise to make adjustments.



Flow Control Knob

For more information, visit [hunter.direct/valvesupport](https://hunter.direct/valvesupport).

#### Winterization

All irrigation systems in regions where the frost level extends below the depth of installed piping should receive a system blowout annually before the first freeze.

*Always call a professional to prepare your irrigation system for winterization. For more information, visit [hunterindustries.com/winterizing-your-irrigation-system](https://hunterindustries.com/winterizing-your-irrigation-system)*

## Troubleshooting

Find other helpful information about your product, including installation tips and more.



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 [hunter.direct/valvesupport](https://hunter.direct/valvesupport)

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[hunter.direct/valvevideos](https://hunter.direct/valvevideos)

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hunterindustries.com

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