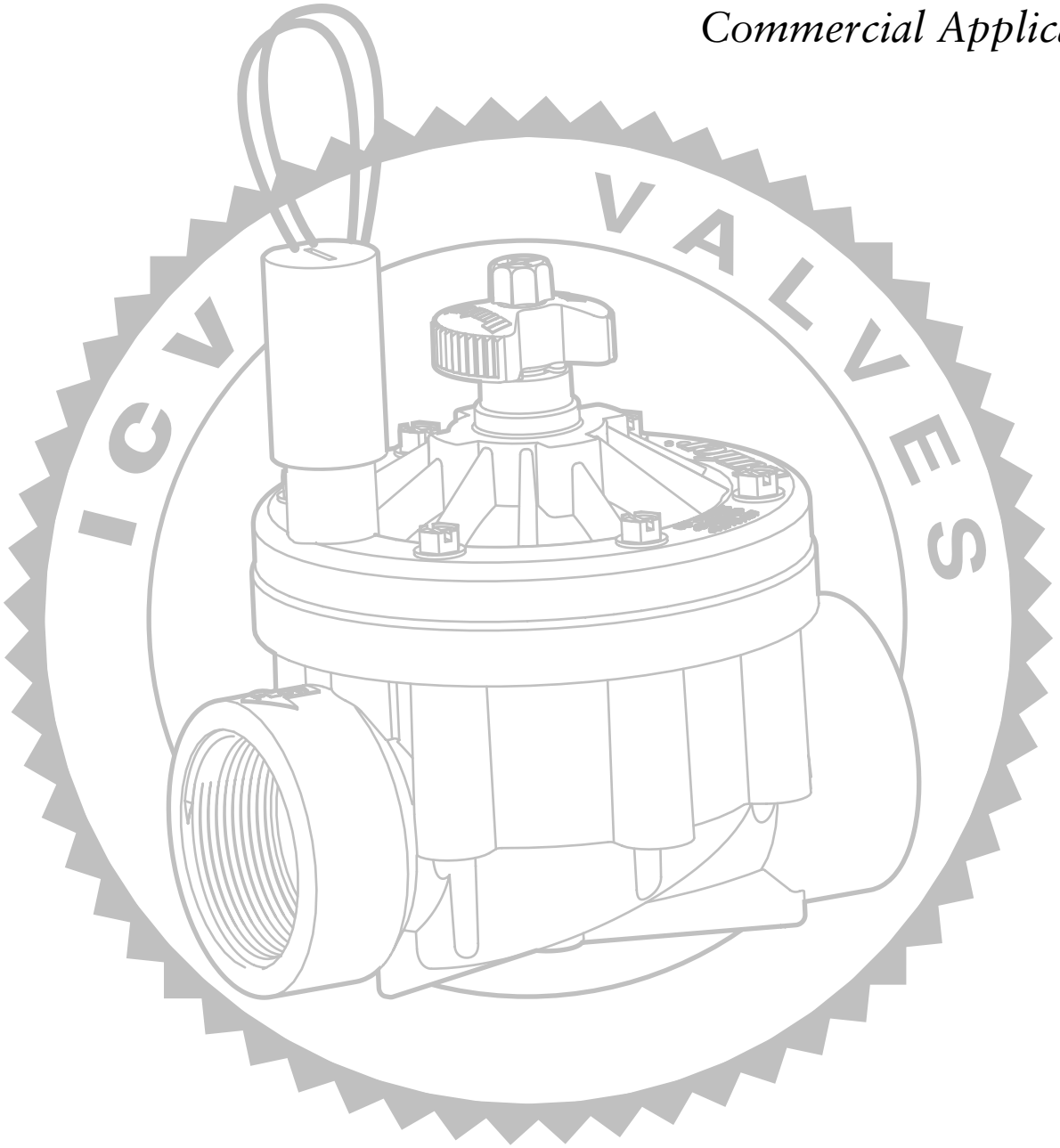
Hunter®

PRODUCT INFORMATION

ICV Valves

Institutional Series Valves for Heavy Duty Residential and Commercial Applications



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PRODUCT OVERVIEW

The ICV is a prime example of today's technological capabilities. The valve is as rugged, durable and reliable as any commercial valve on the market, even those made of solid brass. And that is something that will astound those who thought that a plastic valve could never make that claim.

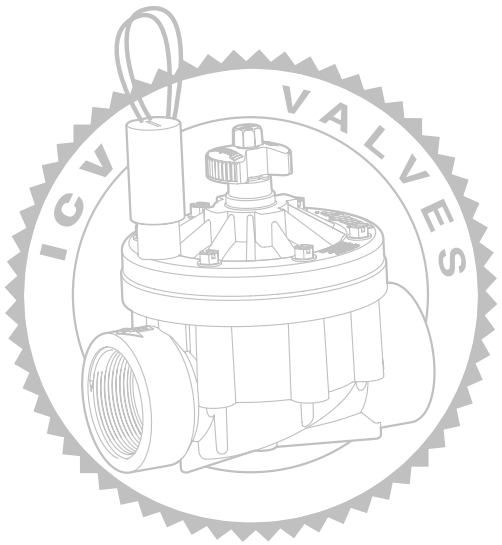
This heavy-duty workhorse can consistently withstand a pressure rating of up to 220 PSI and can handle the continual hammering that such forces will produce. On the outside of the valve, the glass reinforced material provides exceptional body and bonnet strength. Add the fabric reinforced diaphragm and knife-edge body seat to the inside and you get an exceptionally durable Hunter valve, capable of years of reliable operation.

Contractors and irrigation designers alike will appreciate the ICV's power-efficient solenoid, with its reverse flow design and available DC latching solenoid. The smooth flow, low profile design contributes to the low pressure loss and ability to achieve high flow rates – up to an unbelievable 300 GPM for large turf applications!

A maintenance-friendly valve, the ICV boasts captive parts (designed as such to eliminate their chance of being lost) including the diaphragm, solenoid plunger and bonnet bolts. Through-hole brass inserts in the body of the valves provide greater strength and serviceability. And, the screw hole allows dirt to fall through instead of packing to the bottom, where it would become impossible to tighten the bonnet bolts.

Two added options give the ICV even more appeal. The Accu-Set™ pressure regulator helps provide uniform pressure on a specific zone regardless of inlet pressure variation. The pressure you dial in is the downstream dynamic pressure you will receive. The other optional item is the Filter Sentry™ system, which automatically cleans the large diaphragm filter each time the valve opens and closes. This cleansing action eliminates the build up of algae, minerals, sludge and other contaminants, making the ICV excellent for dirty water applications.

Looking for an industrial strength valve that can face challenging conditions? The Hunter ICV is the one that can handle the pressure.



PRODUCT FEATURES AND BENEFITS

Heavy-duty Construction…
Stands up under 220 PSI water pressure

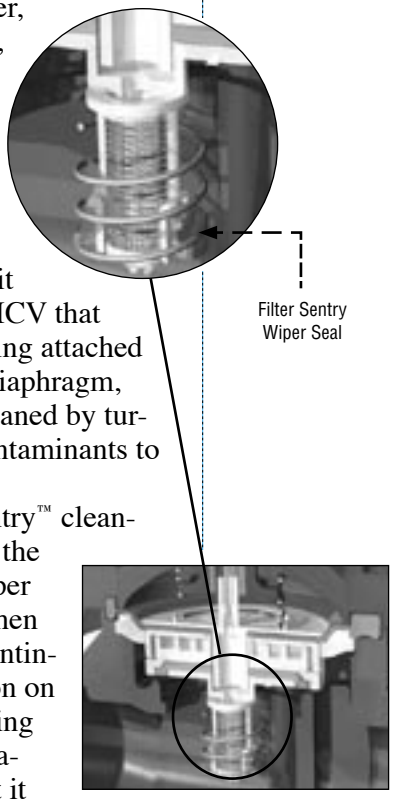
In order to build a plastic valve designed to operate at 220 PSI (15 bars, 1518 kPa) pressures, Hunter relies upon only materials that are both time- and contractor-proven. To mold the bonnet and body, a substantial amount of a glass-filled nylon material is used, providing exceptional strength and durability. The diaphragm is manufactured from a fabric reinforced EPDM rubber, which is highly resistant to chlorine degradation and abrasion. The diaphragm seat is constructed from a revolutionary new polymer material proficient at high wear resistance and grit tolerance. In addition, the solenoid used on the ICV is very efficient in operation and energy consumption. To prove the valves reliability, Hunter subjected the ICV valve to a barrage of grueling tests (including high-pressure surge, sand and grit, and continuous operational tests) until we were satisfied that the ICV would stand up to many, many years of 220 PSI (15 bars; 1518 kPa) operation.

Flow Range…
An incredibly versatile valve

The enormously wide flow range obtainable from the ICV valve allows it to be used for any application including micro irrigation using flows as little as .10 GPM up to large turf irrigation systems with flows as high as 300 GPM (0.06 to 68.10 m^3/hr; 0.9 to 1,135.5 l/min). A smooth flow design minimizes pressure loss through the valve. The low profile design contributes to the low pressure loss, and the ability to achieve high flow rates. And because the valve is low profile there is more room in the valve box for performing maintenance.

Self Cleaning Filtering System…
Excellent for dirty water applications

The Hunter ICV standard filter has four times the surface area of some manufacturers' valves. That's a great start for keeping clean the water that travels up into the valve bonnet. However, even with a large surface area, filters can become clogged by large amounts of debris like sand or algae, which are commonly found in reclaimed water, wells, or in lakes and ponds. So, in addition to its ample size, what is it about the filter on the Hunter ICV that keeps particle debris out? Being attached directly to the bottom of the diaphragm, the ICV filter is constantly cleaned by turbulent water flow, keeping contaminants to an absolute minimum.



With the optional Filter Sentry™ cleaning system setup in the valve, the filter is scoured clean by a wiper seal as it slides up the filter when the valve opens. The wiper continues to provide scrubbing action on the upper part of the filter during valve operation. A superior feature of the Filter Sentry is that it

always strokes the full length of the filter, independent of flow control adjustments. Other self-cleaning filter systems are restricted in their cleaning ability when the diaphragm travel height above the body seat is restricted due to any flow control adjustments.

The feature most appreciated by installers and maintenance personnel is that the Filter Sentry can be added without difficulty after the valve is already installed.

An excellent system in dirty water situations, the ICV filtering system also provides extra insurance in so called "clean water" applications.

Brass Inserts…
For added strength

Through-hole brass inserts in the body of the valves provide greater strength and contribute to the serviceability of the ICV. Instead of the dirt packing to the bottom of the screw hole making it impossible to tighten the bonnet, dirt falls through the brass insert screw holes.

Heavy-duty Solenoid…
Provides dependable operation and long life

The entire line of Hunter valves has something in common: the same heavy-duty five-year warranty solenoid. Installers will find that not having to stock two or three different solenoids for valves of the same manufacturer are a real plus.

Another tremendous benefit to installers or maintenance people who work with valves is the fact that 1½ turns are all that's required when removing the solenoid from the bonnet. This makes the aggravating mess of twisted solenoid wires a non-issue. The ICV solenoid is unique in the industry because it operates on a reverse flow principle. The center hole in the solenoid bowl is an inlet port, instead of an exhaust port as found in other manufacturers valves. This solenoid is especially efficient when installed on long wire runs (voltage drop issues), and under high system pressures because water pressure actually helps open the solenoid, not impede it.

A big advantage to this reverse flow action is that it reduces potential large pressure spikes against the valve. Such spikes could cause damage not only to the valve, but to other components of the irrigation system as well. With the ICV, when a surge pressure spike hits the closed valve, the solenoid plunger will open slightly to allow the spike to travel downstream and dissipate through the zone piping, minimizing any damage that could occur. The solenoid plunger then closes immediately, preventing unscheduled system operation.

In addition, within the ICV class of valves, the Hunter solenoid is one of the most efficient solenoids on the market. The solenoid has a very high efficiency rating at only 370mA (8.9VA) inrush current and 190mA (4.5VA) holding current at 60 cycles. Low current utilization means low power consumption, allowing long wire runs between the valve and controller. Low current utilization also means the solenoid will operate with very little sound or buzzing noise, almost non-existent.

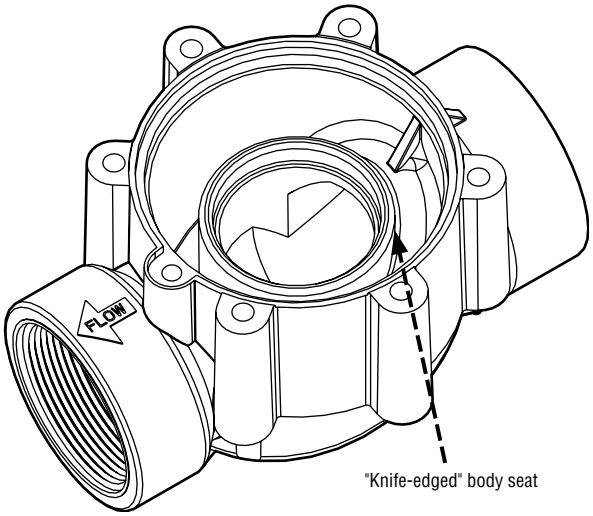
PRODUCT FEATURES AND BENEFITS *(continued)*

Captive Parts…
No more lost screws or solenoid plungers

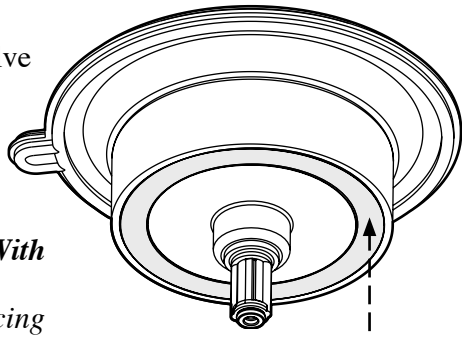
Captive diaphragm, bonnet bolts and solenoid plunger eliminate the chance of losing parts during solenoid or diaphragm servicing. The head of the beefy captive bolts are a combination slot/Phillips/hex for easy servicing with a variety of tools. And, with no studs protruding up out of the body, this is the easiest valve in the industry to maintain.

Debris Tolerant…
Designed to eliminate weeping failure caused by debris

The ICV is highly debris tolerant because it has a "knife-edged" body seat and a revolutionary new Estane polymer utilized in the diaphragm seat assembly. By virtue of the fact that the body seat is knife-edged, it will not allow anything to be caught across it during valve closing, making it very difficult for debris to be trapped by the diaphragm. In the unlikely occurrence of debris becoming imbedded in the diaphragm seat, the Estane polymer material will retain its original shape after the imbedded debris is flushed through the valve. With the ICV valve installed in the irrigation system, callbacks for weeping valves are a thing of the past.



"Knife-edged" body seat



Specially formulated polymer material resists pitting

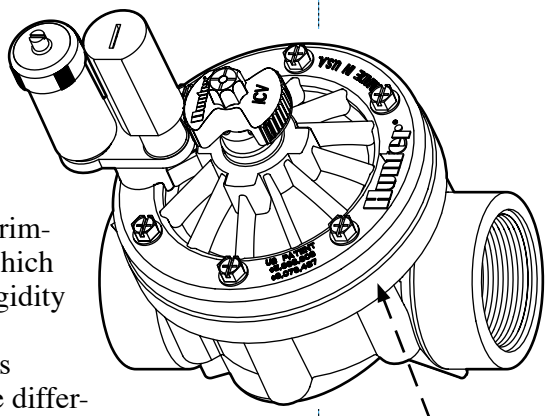
Adjustable Flow Control With Non-Rising Handle…
Flow adjustment and servicing made easy

Flow management is a simple process when using the Hunter ICV with its non-rising flow control handle in all sizes. A non-rising handle means the valve can be placed closer to the valve box lid for easier servicing. When fine tuning the system, adjust to the desired zone flow either by hand or using a valve key. If necessary, the easy-to-turn flow control handle completely shuts the valve off without the possibility of damage to the diaphragm, even under maximum pressure and flow conditions.

Heavy-duty Bonnet…
Designed to provide maximum durability

Through repeated testing of different valve designs, the ICV is incorporated with a robust bonnet that goes beyond the typical plastic valve bonnet. The ICV design features a skirt around the perimeter of the bonnet, which gives it incredible rigidity or "hoop strength."

An example of this rigidity would be the difference between a Styrofoam cup with a lid attached and one without. Without a lid, the cup is very malleable, easily bent out of shape. But with the lid attached, the cup walls are tremendously strengthened, allowing the cup can be held without fear of collapsing.



Bonnet skirt for increased strength

ICV Valves

Bonnet Air Relief…
Air release to minimize system stresses

The ICV is designed with a special air relief feature that facilitates the removal of any air bubble from the top underside of the bonnet. The removal of air promotes the elimination of water hammer. When the flow control stem is pushed downward, any air trapped in the valve is released. The water pressure will then force the stem back up into place without leaking.

Two Methods to Manually Bleed…
Internal bleed for completely dry manual operation

For fast manual operation, a quick ¼ turn of the solenoid allows water to bleed off of the top of the diaphragm and, as a result, opens the valve. All the exhaust water stays in the valve.

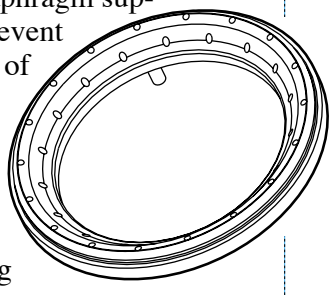
Easy Access Bleed Screw for Manual Operation...
Turn the bleed screw on top of the flow control stem to allow water to bleed off opening the valve. Water will vent out through a groove in the bleed srew.

Slow Closing Diaphragm…
To minimize water hammer

The ICV has been designed to begin closing immediately after the controller sends the signal to do so, and closes at a speed which will help to prevent water hammer and the resulting possible system damage.

Fully Supported Diaphragm…
Prevent stress failure in tough conditions

The ICV fabric reinforced diaphragm is fully supported by a diaphragm support ring designed to prevent premature stress failure of the diaphragm material. The ring is also designed with small holes in it, allowing water to keep the diaphragm from sticking to the support ring. Diaphragm sticking typically is noticed after long periods of non-use, such as before landscaping installation or during winter shutdown.

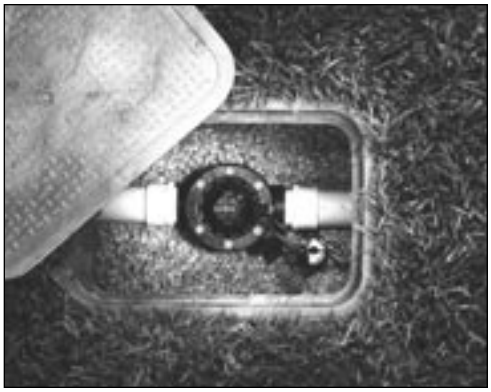


5-Year Warranty…
Hunter Industries backs up the products

A full five-year warranty by Hunter communicates to our customers that the ICV is a valve that stands up to the environment. The end-user can be assured of a quality product with a guarantee of dependable operation.

Date Coding…
Identify exactly when your valve was manufactured

All Hunter valves including the ICV have the manufactured date code stamped on the top of the bonnet. The date is stamped with a 4-digit code – the first two digits representing the month, the last two digits indicating the year (e.g., 05 03 stands for May 2003).



ACCU-SET™ DIAL CONTROL PRESSURE REGULATION

For Use on 1", 1½", 2"and 3" ICV Valves

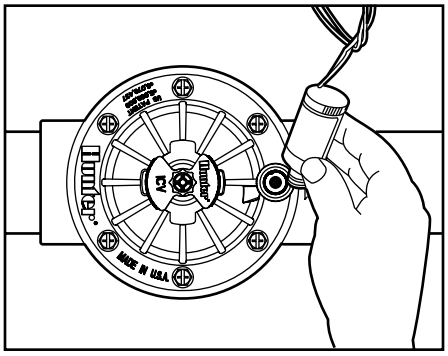
Exact pressure settings every time with Hunter's Accu-Set™ pressure regulating module with its easy-to-read dial settings. This dial assures exact downstream pressure between 20 and 100 PSI (1.4 to 7.0 bars, 138 to 689 kPa). There are no extra gauges to carry for pressure adjustments or inspection. (A schraeder valve is included on the unit for job specifications requiring checking and setting using a gauge only.)

The Accu-Set dial-in module provides an accurate working (or dynamic) pressure to the zone. The module constantly adjusts as needed to provide a consistent outlet pressure regardless of inlet pressure variations.

The Accu-Set pressure regulator is an important tool a professional installer will use when the irrigation main lines need to be at maximum pressures due to long pipe runs or when static supply pressures are too high for sprinkler operation. Also, the Accu-Set is the product of choice when different zones require different outlet pressures due to product specifications, such as large rotor sprinklers zoned off the same main line as sprayheads.

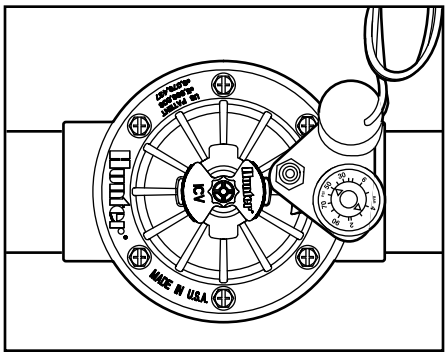
The benefit of the Accu-Set is that the irrigation system does not need to be pressurized to adjust it, resulting in a very fast installation. With this unique pressure regulating module, just set the easy-to-read dial to the desired pressure, with or without the system operating. The pressure dialed in is the pressure delivered to the zone.

The optional Accu-Set pressure regulating module is easy to retrofit on all ICV valves. On systems determined to have high-pressure problems after installation, the amount of time saved in labor, along with reduced costs, is considerable. That's because the Accu-Set is installed without a hassle, without cutting pipe and without replacing valves.



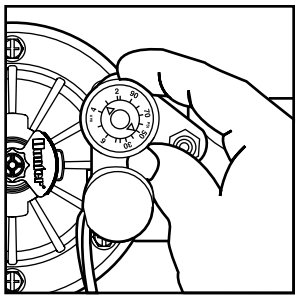
Accu-Set Installation Instructions

1. Remove the solenoid from the Hunter ICV irrigation valve.
2. Thread the Accu-Set into the solenoid area of the ICV.
3. Thread the solenoid into the Accu-Set.



Accu-Set Pressure Regulator Adjustment

1. Turn the clear dial on the top of the Accu-Set until the arrow underneath the clear dial is pointing to the desired downstream pressure.
2. The white colored scale is for PSI, the yellow colored scale is for BAR.



PRODUCT COMPARISONS

Features	Hunter® ICV	Hunter® ICV-FS	Rain Bird® PEB	Rain Bird® PESB	Irritrol® Century Plus
220 PSI Rated Operating Pressure	✓	✓			
Dial Set Pressure Regulator Option without extraneous tubing	✓	✓	✓	✓	✓
Pressure Regulator Mounting	top	top	top	top	top
Continuous Mechanically Assisted Self-Cleaning Diaphragm Filter		✓		✓	
Easy Field Installed Filter Cleaning Option	✓			factory	
Internal Manual Bleed	✓	✓	✓	✓	✓
Bonnet Air Relief	✓	✓	✓	✓	✓
Captive Diaphragm	✓	✓			
Debris Tolerant “Knife-edged” Body Seat	✓	✓			
Captive Bonnet Bolts	✓	✓	studs	studs	studs
Three Tool (Std. or Philips Screwdriver, Nut Driver) Stainless Steel Bonnet Bolts	✓	✓			
Brass Inserts for Bonnet Bolts	✓	✓	studs	studs	studs
Flow Control with Non-Rising Handle	✓	✓			
Low Power Requirement Solenoid - Minimal Inrush Current	8.9 VA	8.9 VA	9.9 VA	9.9 VA	11.5 VA
Manual Bleed with Screwdriver	✓	✓			
Reverse-Flow Solenoid Design to Reduce Line Surges	✓	✓			
Interchangeable Solenoid with All Plastic Valves in Catalog	✓	✓			✓
Manufacturer’s 12V DC Latching Solenoid Available	✓	✓	✓	✓	✓
Female Inlet/Outlet NPT / BSP Option	✓	✓	✓	✓	✓
Vent Holes in Diaphragm Support	✓	✓			

Rain Bird® is a registered trademark of Rain Bird Sprinkler Manufacturing Corp.
Irritrol® is a registered trademark of Irritrol Systems

PRODUCT COMPARISONS *(Continued)*

Features	Hunter® ICV	Hunter® ICV-FS	Toro® P-220	Nelson® 7900	Weathermatic® 11000
220 PSI Rated Operating Pressure	✓	✓	✓		
Dial Set Pressure Regulator Option without extraneous tubing	✓	✓			
Pressure Regulator Mounting	top	top	side	side	side
Continuous Mechanically Assisted Self-Cleaning Diaphragm Filter	✓	✓			
Easy Field Installed Filter Option	✓	✓			
Internal Manual Bleed	✓	✓	✓	✓	✓
Bonnet Air Relief	✓	✓	✓	✓	
Captive Diaphragm	✓	✓		1" model	
Debris Tolerant “Knife-edge” Body Seat	✓	✓			
Captive Bonnet Bolts	✓	✓	studs	1" model	
Three Tool (Std. or Philips Screwdriver, Nut Driver) Stainless Steel Bonnet Bolts	✓	✓		1" model	
Brass Inserts for Bonnet Bolts	✓	✓	studs	studs	✓
Flow Control with Non-Rising Handle	✓	✓	✓		
Low Power Requirement Solenoid - Minimal Inrush Current	8.9 VA	8.9 VA	11.5 VA	11.9 VA	9.9 VA
Less Than 1½ Turns to Remove Solenoid	✓	✓			
Reverse-Flow Solenoid Design to Reduce Line Surges	✓	✓			
Interchangeable Solenoid with All Plastic Valves in Catalog	✓	✓		✓	
Manufacturer’s 12V DC Latching Solenoid Available	✓	✓	✓	✓	
Female Inlet/Outlet NPT / BSP Option	✓	✓	✓	✓	✓
Vent Holes in Diaphragm Support	✓	✓			

Nelson® is a registered trademark of L. R. Nelson Corporation
Weathermatic® is a registered trademark of Weathermatic Corp.
Toro® is a registered trademark of the Toro Company

PRODUCT PERFORMANCE

ICV Pressure Loss in PSI

GPM	1"	1½"	2"	3" Globe	3" Angle
0.1	2.0				
0.5	2.0				
1.0	2.0				
5.0	4.0				
10.0	3.0				
15.0	3.0				
20.0	3.0	1.5			
30.0	4.0	1.5			
40.0	7.0	1.7	0.8		
50.0		2.2	1.2		
60.0		3.0	1.7		
75.0		3.9	2.4		
90.0		5.5	3.2		
100.0		7.0	4.2		
120.0		10.9	6.5		
135.0		12.7	7.9		
150.0		16.2	9.8	2.5	1.9
175.0			13.3	3.0	2.4
200.0			17.7	4.1	3.3
225.0				5.3	4.3
250.0				6.7	5.5
275.0				8.3	6.9
300.0				10.1	8.5

ICV Pressure Loss in Bars

m^3/hr	1"	1½"	2"	3" Globe	3" Angle
0.06	0.14				
0.11	0.14				
0.23	0.14				
1.14	0.28				
2.27	0.21				
3.41	0.21				
4.54	0.21	0.10			
6.81	0.28	0.10			
9.08	0.48	0.12	0.05		
11.36		0.15	0.08		
13.63		0.21	0.12		
17.03		0.27	0.16		
20.44		0.38	0.22		
22.71		0.48	0.29		
27.25		0.75	0.45		
30.66		0.87	0.54		
34.10		1.12	0.67	.17	.13
39.70			0.92	.20	.16
45.42			1.22	.28	.23
51.10				.36	.30
56.80				.46	.38
62.50				.57	.48
68.10				.70	.59

ICV Pressure Loss in kPa

l/min	1"	1½"	2"	3" Globe	3" Angle
0.9	13.7				
1.9	13.7				
3.8	13.7				
18.9	27.5				
37.9	20.6				
56.8	20.6				
75.7	20.6	10.3			
113.5	27.5	10.3			
151.4	48.2	11.7	5.5		
189.2		15.1	8.2		
227.1		20.6	11.7		
283.8		26.8	16.5		
340.6		37.9	22.0		
378.5		48.2	28.9		
454.2		75.1	44.8		
510.9		87.5	54.4		
567.8		111.6	67.5	17.2	13.1
662.4			91.7	20.7	16.5
757.0			122.0	28.3	22.8
851.6				36.5	29.6
946.3				46.2	37.9
1040.9				57.2	47.6
1135.5				69.6	58.6

TECHNICAL INFORMATION

MODELS

ICV-101G – 1" plastic globe valve
ICV-151G – 1½" plastic globe valve
ICV-201G – 2" plastic globe valve
ICV-301G – 3" plastic globe/angle valve
Accu-Set™ Pressure Regulator

DIMENSIONS

- ICV-101G
  5½" H x 4¾" L x 4" W
  (14 cm H x 12 cm L x 10.2 cm W)
- ICV-151G
  7⅛" H x 6⅞" L x 5½" W
  (18 cm h x 17.5 cm L x 14 cm W)
- ICV-201G
  7⅛" H x 6⅞" L x 5½" W
  (18 cm H x 17.5 cm L x 14 cm W)
- ICV-301G
  10¾" H x 9¼" L x 7⅜" W
  (27.3 cm H x 23.5 cm L x 18.7 cm W)
- Female inlet/outlet: 1", 1½", 2" & 3" NPT or BSP

OPERATING SPECIFICATIONS

- Flow: 0.10 to 300 GPM (0.06 to 68.10 m^3/hr; 0.9 to 1,135.5 l/min)
- Pressure: 20 to 220 PSI (1.4 to 15.0 bars; 138 to 1500 kPa)
- Temperature: up to 150˚F (66˚C)
- Heavy-duty solenoid: 24VAC, 370mA inrush current, 190mA holding current, 60 cycles; 475mA inrush current, 230mA holding current, 50 cycles
- Accu-Set: 20 PSI (1.4 bars, 138 kPa) minimum operating pressure. Regulates from 20 to 100 PSI (1.4 to 7.0 bars; 138 to 689 kPa)

OPTIONS AVAILABLE

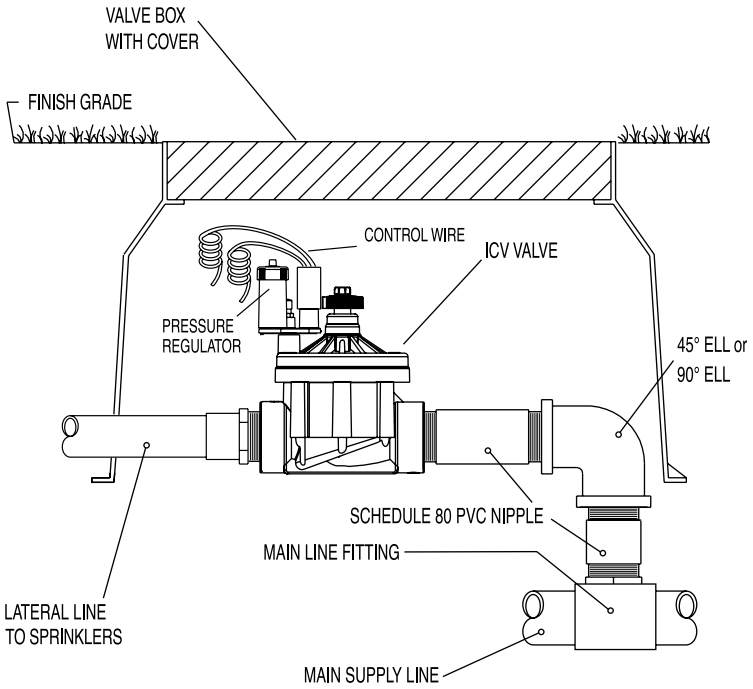
- Accu-Set pressure regulator
- Reclaimed water ID handle
  (part number 561205 - 1", 1½" & 2")
  (part number 515005 - 3")
- DC latching solenoid (part number 458200)
- Solenoid conduit cover (part number 464322)

SPECIFICATION GUIDE

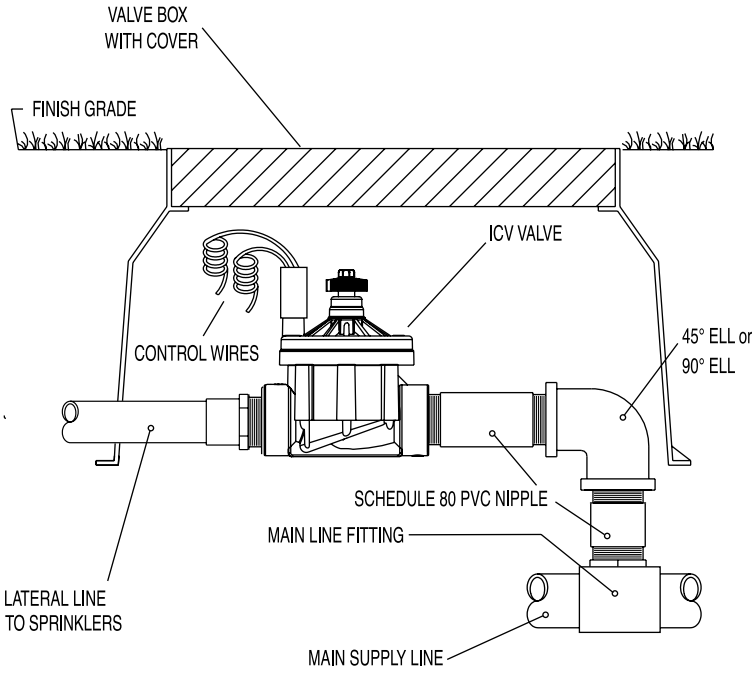
EXAMPLE: **ICV - 201G - DC - AS**

MODEL	FEATURES	OPTIONS FACTORY INSTALLED	OPTIONS USER INSTALLED
ICV	**101G** = 1" Globe Valve **151G** = 1½" Globe Valve **201G** = 2" Globe Valve **301G** = 3" Globe/Angle Valve	**B** = BSP Threads **DC** = DC Latching Solenoid	**AS** = Accu-Set Pressure Regulator **R** = Reclaimed Water Identification Handle **CC** = Conduit Cover

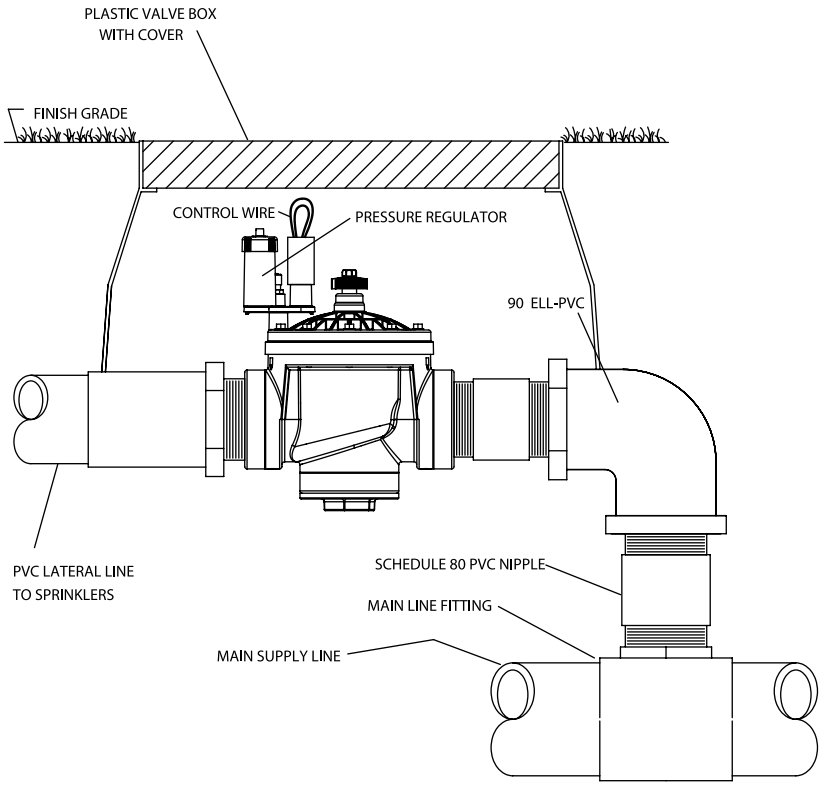
INSTALLATION DETAILS



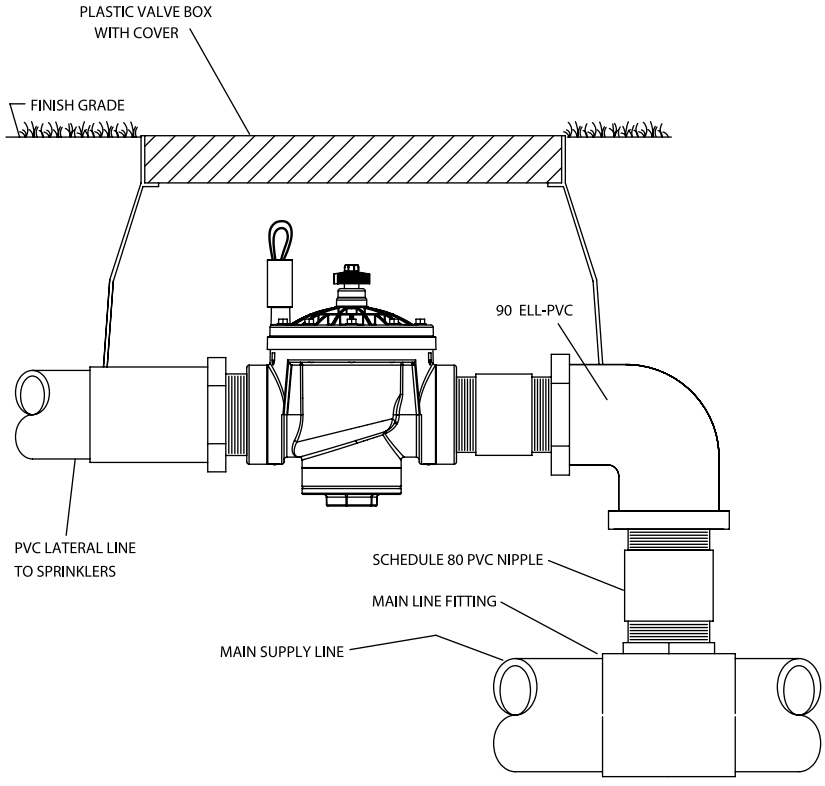
1", 1½", 2" ICV w/Pressure Regulation



1", 1½", 2" ICV

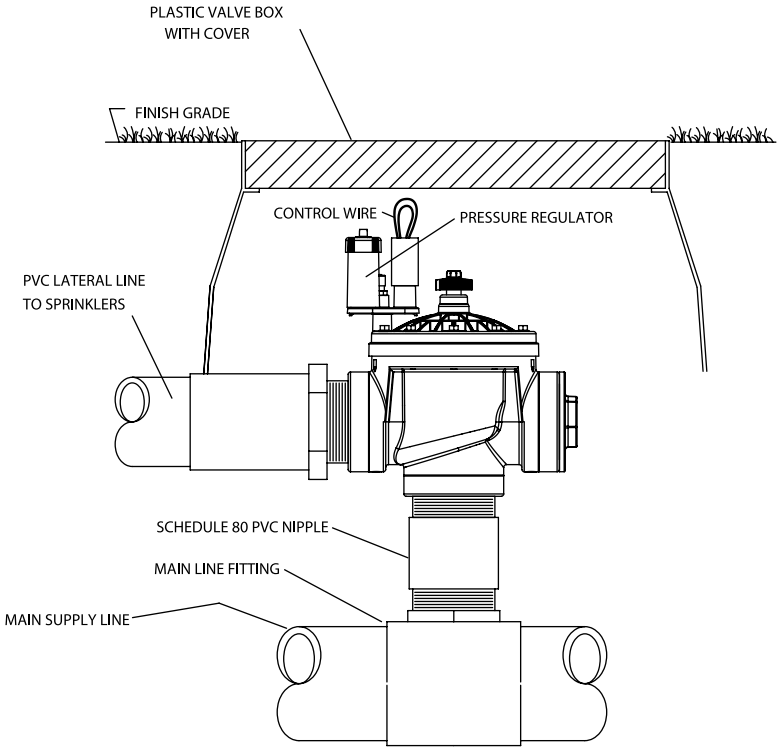


Hunter® **ICV 3" w/Pressure Regulation**

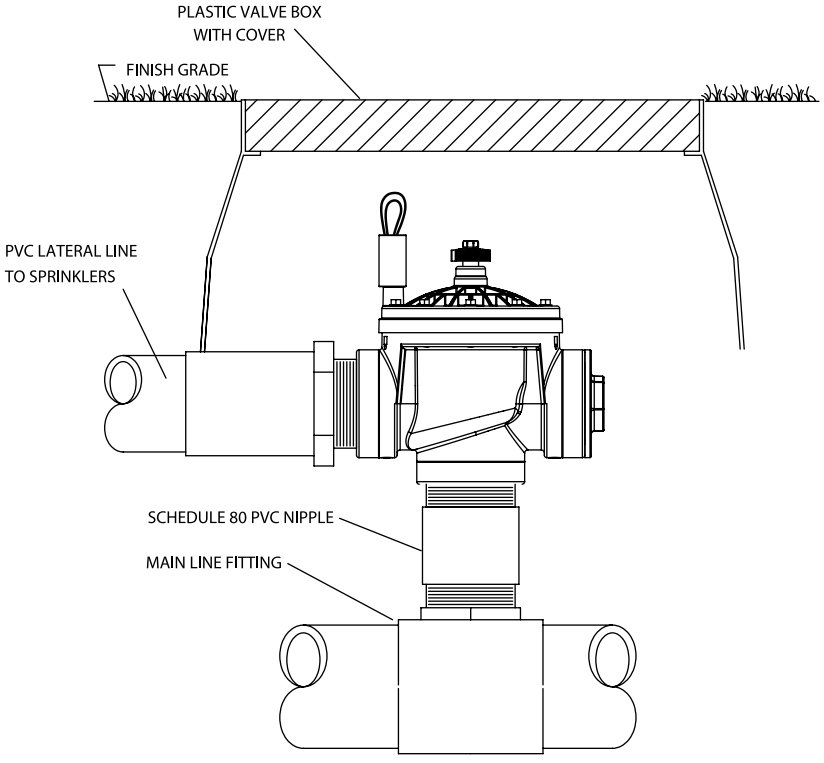


Hunter® **ICV 3"**

INSTALLATION DETAILS



ICV 3" w/Pressure Regulator



ICV 3"

PRINCIPLES OF VALVE OPERATION

Pressurized water enters the valve from the system mainline. A small filtered orifice in the diaphragm allows this water to flow into the bonnet chamber or toPSIde of the diaphragm, filling it completely when the valve is closed. The valve stays closed as long as the solenoid piston or plunger is not lifted off of the solenoid bowl "inlet" port, which is in the center of the solenoid bowl.

The mechanics behind the valve staying closed has to do with the formula: P x A = F (where P is water pressure, A is the diaphragm surface area and F is an amount of force exerted on the diaphragm). All irrigation valves are designed so that their diaphragms have approximately twice the area exposed to pressurized water on the top of the diaphragm than on the bottom. When water pressure (main line) is exerting itself on the top and bottom of the diaphragm equally there will be approximately twice the force exerted downward than upward. This difference of force keeps the valve in the closed position.

Opening a Valve Electrically

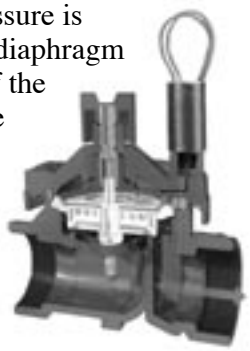
When a valve is operated electrically via a controller, 24VAC is allowed to flow through the valve solenoid energizing it and allowing it to "suck up" the plunger (lifting it off of the inlet port). With the plunger in an elevated position, the pressurized water in the bonnet chamber is allowed to vacate through a second "exhaust" port, discharging downstream through the lateral piping. With this pressure relieved from the top of the diaphragm, the pressure is now greater on the bottom than the top of the diaphragm. A greater force contributed by the pressure on the bottom of the diaphragm pushes up on the diaphragm causing the valve to open.

Opening a Valve Manually

The same principle is at work when a valve is manually opened using the manual bleed. The pressure on top of the diaphragm is released when the manual bleed is opened. The manual bleed in a Hunter valve is done "internally" through the exhaust port in the solenoid bowl. When the solenoid is turned a ¼ turn, the plunger is lifted off of the inlet port allowing pressurized water to be released downstream through the lateral piping. With an internal bleed system, the area surrounding the valves is kept dry because no water is bled to atmosphere.

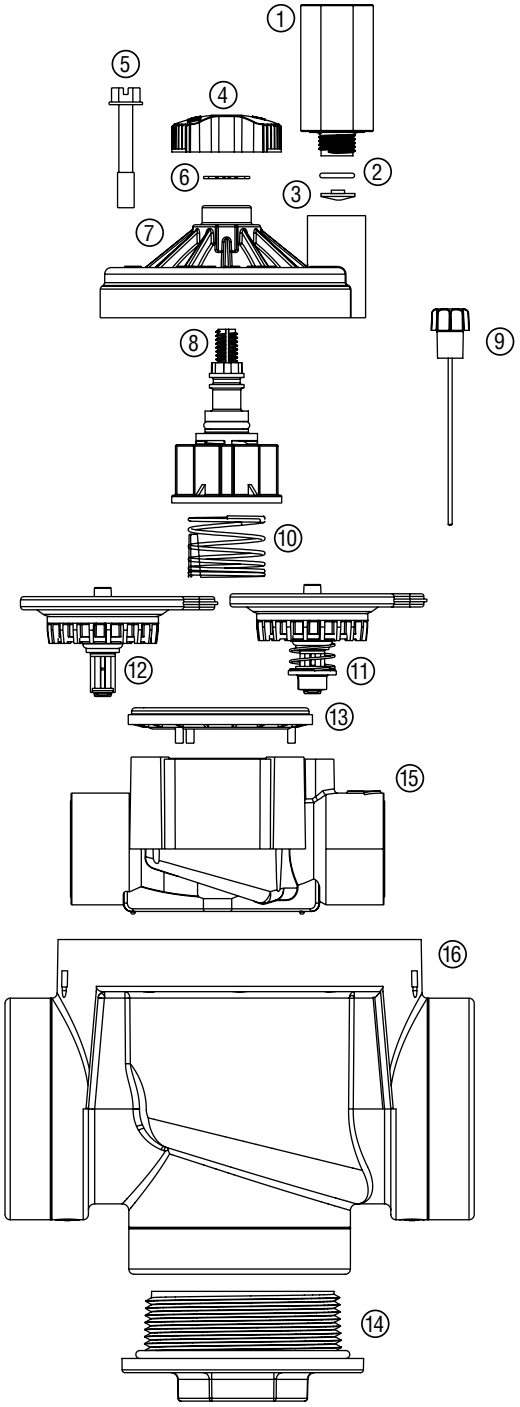
Closing a Valve

When the controller stops the flow of 24VAC through the solenoid, the solenoid plunger is released and forced downward by a plunger spring and covers the inlet port. This covering stops the discharge of water through the exhaust port and allows the bonnet chamber to pressurize up to mainline pressure. As the pressure increases, the diaphragm begins to close as a result of an increasing force exerted on it. Remember, as pressure increases, the force increases because the area exposed to water pressure is greater on top of the diaphragm than on the bottom of the diaphragm. The valve will be completely closed when the diaphragm seat meets the body seat.



ICV REPLACEMENT PARTS

Item	Description		Catalog No.
①	Solenoid Assembly *(Includes Parts 2 & 3)*	AC Solenoid	434100
		DC Solenoid	458200
②	O-Ring		262600
③	Solenoid Seal		364400
④	Flow Control Knob (1", 1½", 2" Models)	Black	561200
		Purple	561205
	Flow Control Knob (3" Model)	Black	515000
		Purple	515005
⑤	Bonnet Bolt	1" & 3"	386900
	Bonnet Bolt	1½" & 2"	366700
⑥	E-Clip Retainer	1"	387200
		1½" & 2"	371600
⑦	Bonnet Assembly	1"	388000
		1½" & 2"	380600
		3"	519100
⑧	Flow Control Assembly	1"	560900
		1½" & 2"	560800
		3"	516100
⑨	Bleed Screw Assembly	1"	561400
		1½" & 2"	561500
		3"	518800
⑩	Spring	1"	386700
		1½" & 2"	365400
		3'	518000
⑪	Diaphragm Assembly – Standard	1"	387800
		1½" & 2"	374500
		3"	518900
⑫	Diaphragm Assembly with Filter Sentry Mechanism		
		1"	461503
		1½" & 2"	461818
		3"	518905
⑬	Diaphragm Support	1"	385700
		1½" & 2"	365900
		3"	514600
⑭	Port Plug (includes O-ring)	3" NPT	514900
		3" BSP	514905
⑮	Body	1" NPT	385300
		1" BSP	387605
		1½" NPT	370100
		1½" BSP	374805
		2" NPT	365500
		2" BSP	365505
⑯	Body	3" NPT	514400
		3" BSP	514405



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