"Apollo"® Valves

water pressure reducing valves

section H

WHY THE NEED FOR WATER PRESSURE REDUCING VALVES?

Municipal water is distributed at elevated pressures for efficiency, and supply pressures can exceed 150 psi. The greater the elevation changes in a region, the higher the supply pressures. Booster pump systems in high-rise buildings can even exceed 250 psi. Water pressure reducing valves are designed to automatically reduce such elevated supply pressures to a lower, safer and more manageable downstream pressure. In most plumbing code jurisdictions, pressure reducing valves are required to be installed whenever the water pressure supply exceeds 80 psi. Excessive pressures can waste tens of thousands of gallons of water in an average home every year.

THE VALUE OF ECONOMIZING

Installing a water pressure reducing valve offers many benefits:

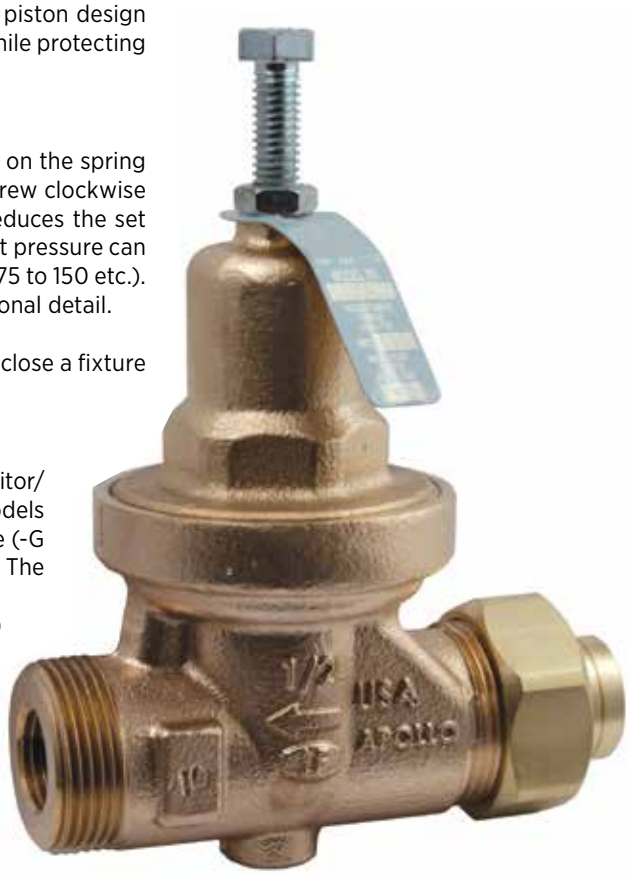
- Reduces water consumption.
- Reduces associated energy and utility costs.
- Protects piping systems and fixtures from excessive pressures that can reduce service life, cause water hammer, and other undesirable piping noises.
- Used to ensure compliance with local plumbing codes.

The use of a water pressure reducing valve also helps to protect the environment and conserves our precious natural resources.

OPERATION

Apollo cast bronze water pressure reducing valves are “direct acting” devices, meaning no external pilots or sensing lines are required. Direct acting valves are “normally open”, meaning the internal seat is held open by the force of a compression spring. As water flows through the valve and the downstream pressure begins to build, this pressure acts on the relatively larger surface area of the diaphragm. As the downstream pressure continues to increase, eventually the force acting on the diaphragm overcomes the force of the spring and the valve seat is hydraulically closed. This is the static (non-flowing) set pressure and is factory preset at 50 to 60 psi, depending upon the model.

When downstream demand begins (such as a faucet being opened), the line pressure will drop and the force of the spring begins opening the valve seat. This allows higher pressure water to flow into the system until the static set pressure is once again reached and the valve seat closes. Apollo’s balanced piston design enables the valve to react smoothly and quickly to changing flow demands, while protecting against incoming supply pressure changes.



ADJUSTMENT

The static set pressure of the valve can be adjusted by changing the preload on the spring by means of the adjusting screw. After loosening the lock nut, turning the screw clockwise (down) will increase the set point, while turning it counter-clockwise (up) reduces the set point. Tighten the locknut after adjustment to secure the setting. The static set pressure can be adjusted through the published range of the installed spring (eg. 25 to 75, 75 to 150 etc.). Refer to the Installation, Operation & Installation Instructions (IOM) for additional detail.

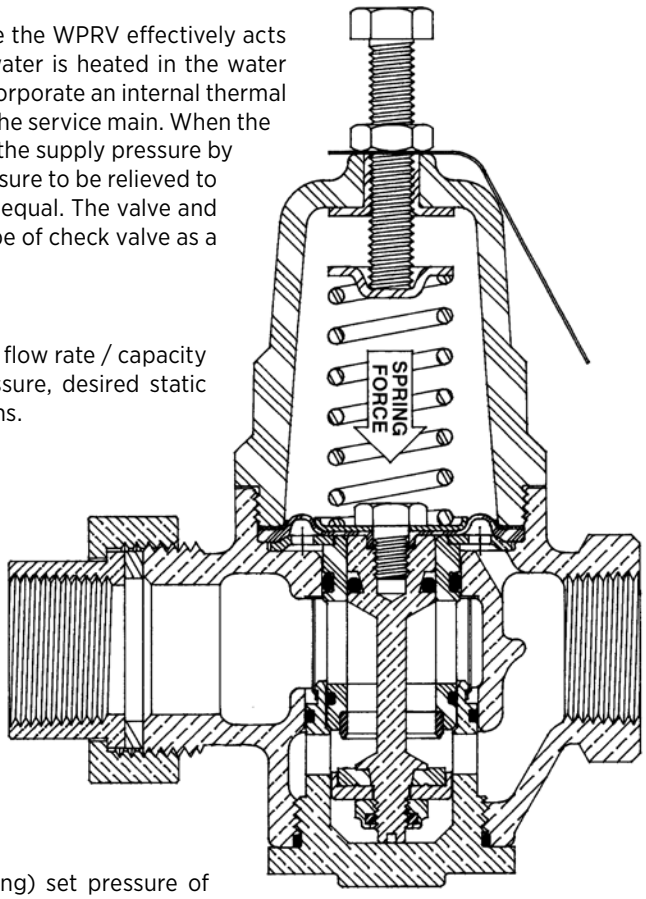
Note when reducing the set pressure it may be necessary to briefly open and close a fixture to let the downstream pressure adjust to the new setting.

GAUGES

Dial pressure gauges may be used to measure the supply pressure and monitor/adjust the reduced pressure downstream of the valve. Some regulator models can be ordered with a 2” dial pressure gauge to display the reduced pressure (-G option); or select the “P” option which allows the installation of a gauge later. The “P” option adds a tapped and plugged, 1/4” NPT connection to the valve. Alternatively, a dial pressure gauge, with 3/4” hose thread (part no. W807800) can be connected to a hose bib or utility sink, to monitor pressure. This model features a 2-1/4” dial and maximum pressure indicator. Both types of gauges are available from your Apollo distributor.

THERMAL EXPANSION CONSIDERATIONS

Installing a pressure reducing valve creates a closed water system, since the WPRV effectively acts as a check when the seat is closed. Thermal expansion occurs when water is heated in the water heater and pressure builds up. Apollo water pressure reducing valves incorporate an internal thermal expansion bypass feature that will bleed the increased pressure back to the service main. When the system pressure in a closed system increases to a pressure greater than the supply pressure by just one pound, the o-ring on the stem will flex and allow the excess pressure to be relieved to the supply side until pressures on both the system and supply sides are equal. The valve and the system then return to normal. The 36HLF features a ball and seat type of check valve as a thermal bypass but the principle is similar.



SIZING & SELECTION

The size and model of pressure reducing valve you need depends on the flow rate / capacity required. It is therefore important to know the maximum supply pressure, desired static downstream pressure and required flow under normal demand conditions.
**Recommended bypass WPRV for lines 1-1/4" and larger.*

FLOW / PERFORMANCE CURVES

Apollo publishes performance curves for all models of direct acting regulators. Flow curves plot the rate of flow against the reduced pressure fall-off based upon a specific differential pressure (see definitions below).

DIFFERENTIAL PRESSURE (DP)

Differential pressure is the difference in PSI between the supply pressure and the adjusted static (non-flowing) set pressure of the valve. Example 100 psi supply pressure – 50 psi static set pressure = 50 psi differential pressure.

REDUCED PRESSURE FALLOFF

"Falloff" is simply the difference in PSI between the static (non-flowing) set pressure of the valve and the reduced downstream pressure at a given flow rate. Falloff is inversely proportional to the flow: as flow increases and the seat opens wider the downstream pressure reduces (falls off). Fall-off is a normal operating characteristic for all direct acting regulators.

It is important to allow for adequate fall-off from the set pressure downstream during flow conditions. 10 to 20 psi falloff is considered ideal for most applications. Less falloff means the valve is only partially open, and extreme throttling can cause noise, vibration and premature wear. Sizing at 10-20 psi falloff will allow the valve to operate nearer the middle of its operating range for optimal performance and durability.

In the chart, zero (0) falloff indicates a no-flow condition. Figures below zero show the flow curves for each size of valve as the fall-off pressures increase.

Example: A ¾" PRC with an inlet pressure of 100 psi is set to an outlet pressure of 50 psi in the static, no-flow condition (50 psi differential pressure). At 10 psi falloff the flow is 8 gpm, and at 20 psi falloff the flow is 21 gpm. This valve would be ideal for flows ranging from 8 to 21 gpm. Although this chart shows curves at a 50 psi Pressure Differential, curves for other DP's are similar. The curve shifts slightly to the left for a smaller differential and to the right for a greater differential.

Do not select based solely on the maximum flow requirement!

Do not select a regulator based on pipe-size alone!

The two most common problems affecting water pressure reducing valves are: 1.) installing a larger valve than is needed for the volume of flow required. This is particularly true for valves larger than 1", and 2.) Excessive one-step pressure reduction / Turndown Ratio . In either case the water pressure reducing valve will operate in a nearly closed position potentially causing premature wear and undesirable noise.

TURNDOWN RATIO

Optimal performance is achieved at a 2:1 Differential Pressure ratio. Example: 100 psi supply pressure, 50 psi static downstream pressure = 2:1 reduction. 50 psi is the default factory setting. Turndown ratios of 3:1 are usually ok and even 4:1 can work but factors such pressure, size, flow, velocity and falloff can result in noise or premature wear as the ratio increases.

TWO-STAGE REDUCTION

Two valves installed in series should be used for large pressure drop requirements. Example: valve #1 200 psi to 100 psi reduction, valve #2 100 psi to 50 psi reduction.

LOW FLOW BYPASS

When a large valve is called upon to provide small amounts of flow during off-peak hours, the valve seat is operating in a nearly closed position and undesirable noise and vibration may result. In this case a parallel low flow bypass line should installed with a smaller regulator. The smaller regulator is set 5 – 7 psi higher than the main regulator and will help prevent premature wear and noise.
**Recommended for lines 1-1/4" and larger.*

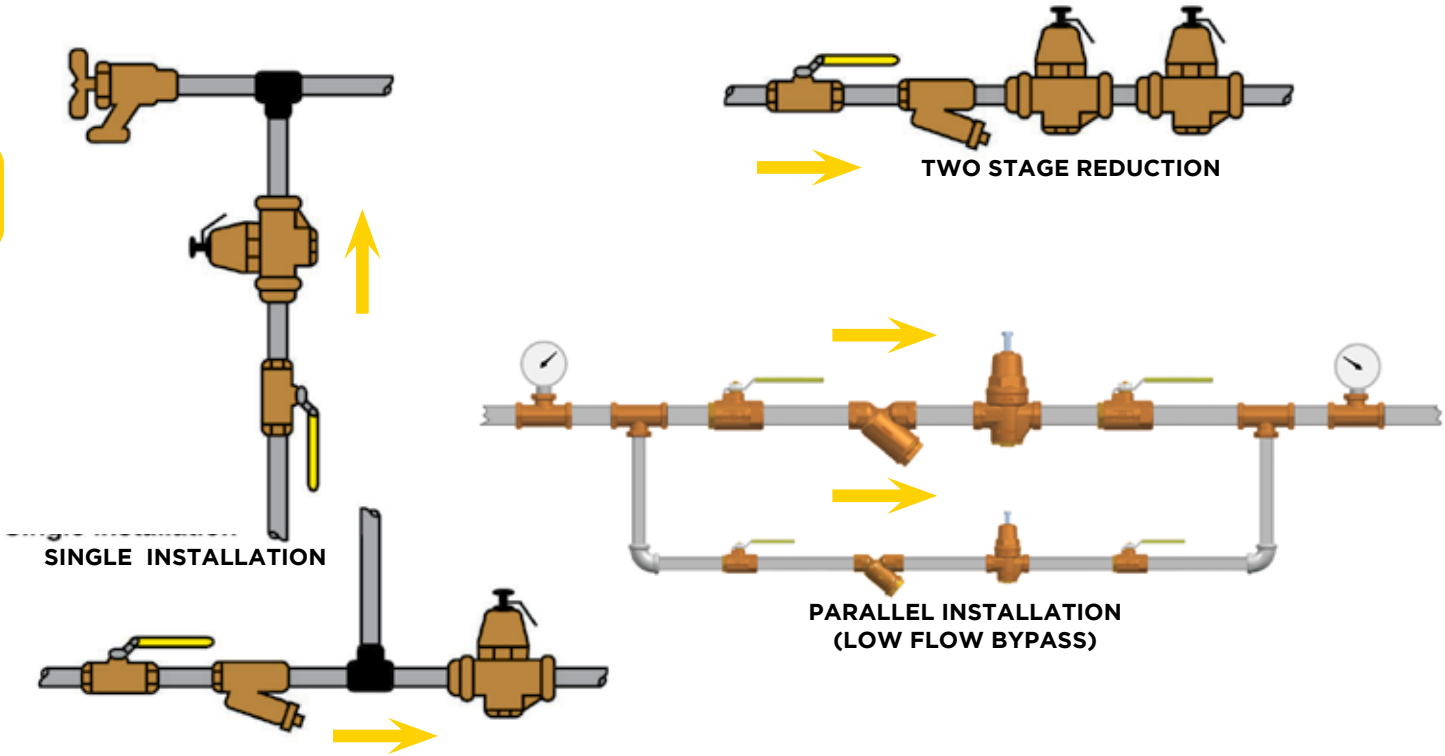
SPECIALLY DESIGNED LOW AND HIGH PRESSURE MODELS

Apollo LP and HP models feature specially designed springs optimized for superior performance and flow. Beware competitors' that publish extreme pressure ranges such as 10 – 125 psi, as these valves lack sensitivity and tend to perform poorly, especially at the low and high ends of the pressure range.

REPAIR KITS AVAILABLE

Apollo pressure reducing valves are engineered to provide years of reliable service. Over time, internals may be subject to wear or even damage caused by sand or debris. Convenient pre-packaged "major goods" repair kits are available for all Apollo pressure reducing valves. A "soft-goods" only kit is also available for the 36CLF and 36HLF models.

INSTALLATION CONFIGURATIONS



36LF SERIES

Apollo 36LF Series pressure reducing valves provide automatic control of excessive water pressure and problem supply fluctuations. These models are designed to reduce pressures of up to 300 PSI to a more manageable range.

Factory set at 50 PSI, they adjust with a turn of a screw. They feature a built-in bypass and strainer, and comply with ASSE 1003 and CSA B356 standards. They are listed with IAPMO and the City of Los Angeles.

The 36LF Series valves are built for long, reliable service with an all-bronze body and cover and high-capacity stainless steel strainer. Available with or without optional pressure gauge on tapping.

FEATURES

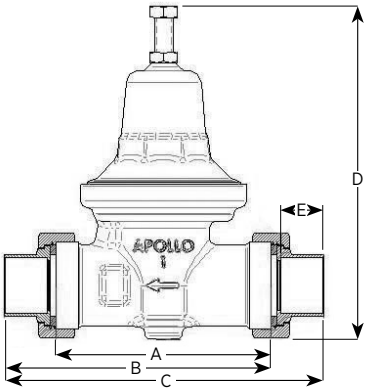
- All Bronze Body and Cover
- Suitable for Supply Pressures to 300 psi
- Every Valve is 100% Factory Set and Tested
- Standard Factory Setting: 50 psi
- High & Low Pressure Options
- Diaphragm Suitable for 33° - 180°F
- Solder, Threaded, PEX, CPVC, Press Connection Options
- Integral Thermal Expansion Bypass
- Integral Stainless Steel Strainer
- Single and Double Union Options
- In-Line Repairable
- **Proudly Made in USA**

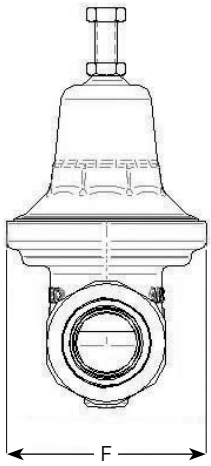
OPTIONS

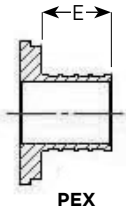
- (-P) Tapped & Plugged
- (-G) With Pressure Gauge
- (-S) Sealed Cage with SS Adjusting Screw for Vault Installation
- 36 Non-LF Materials for Non-Potable Service, Such as Irrigation

APPROVALS

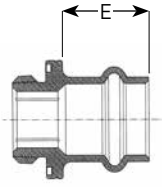
- ASSE 1003
- CSA B356
- NSF/ANSI/CAN 372 - Lead Free
- IAPMO







PEX



PRESS

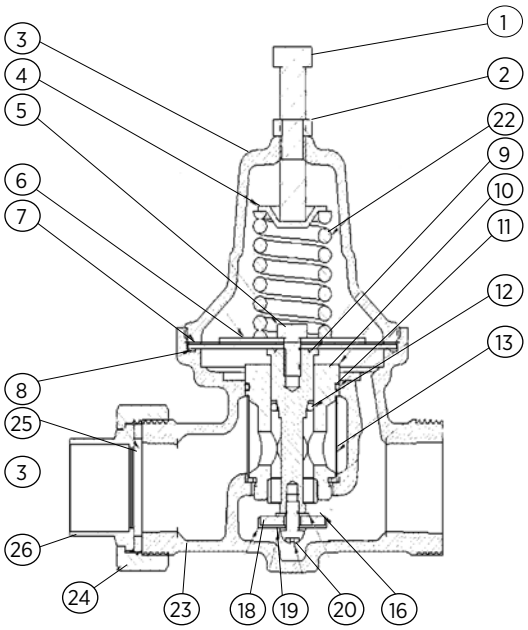
DIMENSIONS

PIPE THREAD UNION X FNPT	SOLDER JOINT UNION X FNPT	CPVC UNION X FNPT	SIZE (IN.)	DIMENSIONS (IN.)			WT./100 (LB.)
				A	B	C	
36LF-103-01	36LF-303-01	-	1/2	5.88	4.88	1.00	350
36LF-104-01	36LF-304-01	36LF-3C4-01	3/4	5.88	4.88	1.00	340
36LF-105-01	36LF-305-01	36LF-3C5-01	1	6.88	5.50	1.12	450
36LF-106-01	36LF-306-01	-	1-1/4	8.88	6.50/6.63	1.37	1020
36LF-107-01	36LF-307-01	-	1-1/2	8.88	6.63/6.75	1.37	1045
36LF-108-01	36LF-308-01	-	2	11.50	8.50/8.88	1.81	2250
FNPT X FNPT (NO UNION)							
36LF-203-01	-	-	1/2	5.88	4.00	1.00	311
36LF-204-01	-	-	3/4	5.88	3.88	1.00	305
36LF-205-01	-	-	1	6.88	4.38	1.12	415
36LF-206-01	-	-	1-1/4	8.88	5.38	1.37	910
36LF-207-01	-	-	1-1/2	8.88	5.38	1.37	909
36LF-208-01	-	-	2	11.50	7.12	1.81	1880

DOUBLE UNION FNPT XFNPT	DOUBLE UNION SOLDER X SOLDER	DOUBLE UNION CPVC X CPVC	SIZE (IN.)	DIMENSIONS (IN.)			WT./100 (LB.)
				A	B	C	
36LF-403 -01	36LF-503-01	-	1/2	5.88	5.63	1.00	389
36LF-404-01	36LF-504-01	36LF-5C4-01	3/4	5.88	5.63	1.00	372
36LF-405-01	36LF-505-01	-	1	6.88	6.38	1.12	495
36LF-406-01	36LF-506-01	-	1-1/4	8.88	7.50/7.75	1.37	1090
36LF-407-01	36LF-507-01	-	1-1/2	8.88	7.88/8.00	1.37	1183
36LF-408-01	36LF-508-01	-	2	11.50	9.88/10.50	1.81	2472
36LF-904-01	PEX x PEX	-	3/4	6.12	5.81	1.00	372
36LF-9C4-01	Union CPVC	PEX Union	3/4	6.12	5.81	1.00	372

**36 Series for non-potable water available.*
Example: 36-103-01

36LF SERIES



STANDARD MATERIALS LIST

1	Adj. Screw (Zinc Plated Steel)
2	Hex Nut (Zinc Plated Steel)
3	Cap (Cast Bronze)
4	Spring Disc (Zinc Plated Steel)
5	Cartridge Bolt
6	Pressure Plate (Zinc Plated Steel)
7	Friction Ring (Zinc Plated Steel)
8	Diaphragm (FDA Nitrile)
9	Stem (Brass)
10	Cartridge Housing (LF Brass)
11	O-Ring (FDA Nitrile)
12	O-Ring (FDA Nitrile)
13	Screen (300 Series SS)

14	Seal, Cartridge (Polypropylene)
15	Seat Ring (300 Series SS)
16	Washer (LF Brass)
17	Seat Disc (FDA EPDM)
18	Seat Holder (LF Brass)
19	Washer (Polypropylene)
20	Seat Screw (300 Series SS)
21	Nameplate (Aluminum)
22	Spring (ASTM 228 Music Wire)
23	Body, Machined (Cast LF Bronze)
24	Union Nut (Cast Bronze)
25	Union Washer (FDA Nitrile)
26	Union Tail Piece (LF Brass)

PART NUMBER MATRIX

36LF 36	**X**	**X**	**X**	**X**	**X**	**X**
SERIES	CONNECTION	OPTION	SIZE	GAUGE	PRESSURE RANGE	OPTION
36LF (LEAD FREE)	1 - SINGLE UNION NPT	0 - NO OPTION	3 - 1/2"	0 - NO GAUGE	1 - 25-75 PSIG	PR - PRESS
36 - BRONZE	2 - NO UNION NPT	C - CPVC TAILPIECE	4 - 3/4"	P - W/ GAUGE PORT	2 - 10-35 PSIG	(APPLIES TO MODELS 36-20X
	3 - SINGLE UNION SOLDER X NPT	S - SEALED CAGE*	5 - 1"	G - W/ GAUGE	3 - 75-125 PSIG	AND 36LF20X ONLY)
	4 - DOUBLE UNION NPT	X - PEX F1807 TAILPIECE	6 - 1-1/4"			
	5 - DOUBLE UNION SOLDER		7 - 1-1/2"			
	6 - SINGLE UNION METER X NPT		8 - 2"			
	8 - DOUBLE UNION CPVC					
	9 - DOUBLE UNION PEX F1807					

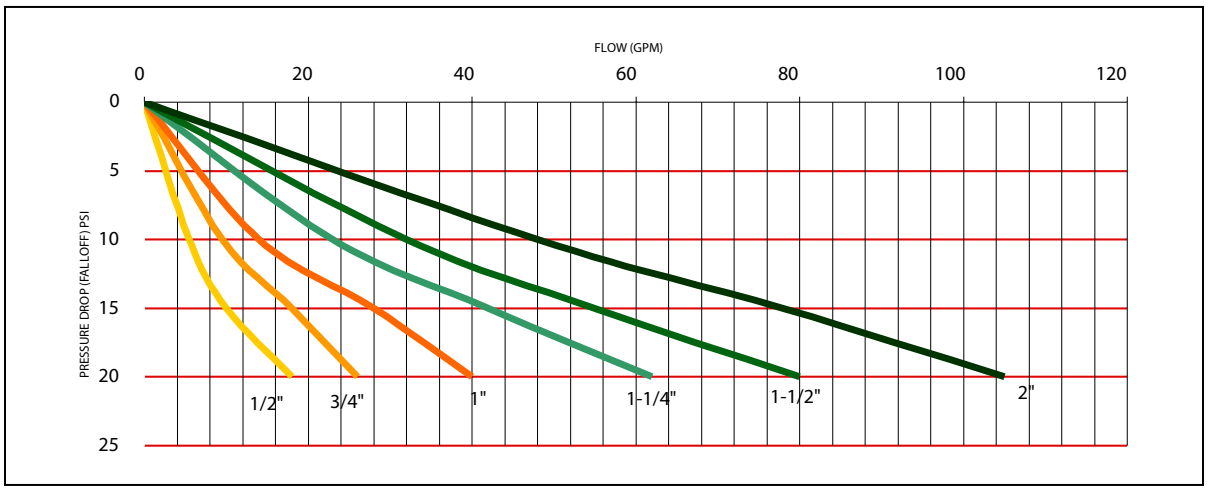
** S option = Sealed cage with stainless steel adjusting screw for vault installation.*

36LF SERIES

		PRESSURE DIFFERENTIAL (PSI)		
		25	50	75
PIPE SIZE	*FALLOFF (PSI)	WATER CAPACITY (GPM)		
1/2"	5	1.7	2.0	2.3
	10	4.3	5.0	5.8
	15	8.5	10.0	11.5
	20	15.3	18.0	20.7
3/4"	5	3.4	4.0	4.6
	10	7.7	9.0	10.4
	15	14.5	17.0	19.6
	20	22.1	26.0	29.9
1"	5	5.1	6.0	6.9
	10	11.9	14.0	16.1
	15	22.1	26.0	29.9
	20	34.0	40.0	46.0
1 1/4"	5	8.5	10.0	11.5
	10	19.6	23.0	26.5
	15	35.7	42.0	48.3
	20	52.7	62.0	71.3
1 1/2"	5	11.9	14.0	16.1
	10	27.2	32.0	36.8
	15	47.6	56.0	64.4
	20	68.0	80.0	92.0
2"	5	15.3	18.0	20.7
	10	39.1	46.0	52.9
	15	66.3	78.0	89.7
	20	93.5	110.0	126.5

**Falloff is the difference between the PRV's set pressure and the flowing pressure at any given demand*

FLOW CURVE



Pressure Differential *is the difference between the inlet supply pressure and the adjusted outlet pressure.*
Pressure Falloff *is the reduction in downstream pressure from the static (set) pressure as the flow increases through the valve.*

36CLF SERIES

Versatile, all-purpose Apollo 36CLF Series pressure reducing valves handle pressures up to 400 PSI. Compact and with a built-in thermal expansion bypass, they're designed to protect residential and commercial water distribution systems from excessive pressures. The valves' integral thermoplastic cage helps protect the inner adjusting spring from galvanic corrosion. Built for reliable, long-term service, these valves offer an all-bronze body, stainless steel strainer and seat. They comply with ASSE 1003 and CSA B356 standards. They are listed with IAPMO and City of Los Angeles. Designed for easy in-line servicing, 36CLF models come standard with a clean-out plug on the housing's bottom. Both seat disc and strainer can be maintained via the clean-out plug using a 1-1/2" hex socket. Available with or without gauge tapping and gauge.

FEATURES

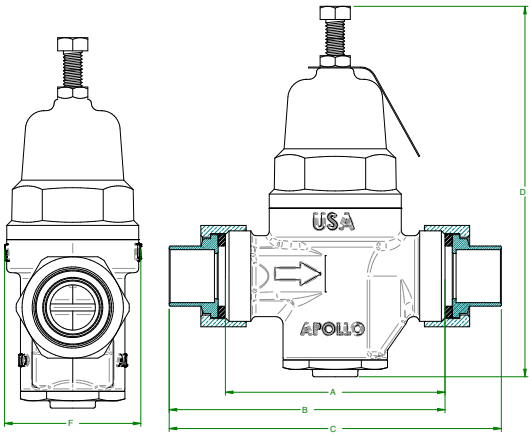
- Dependable Cast Bronze Body
- Suitable for Supply Pressures to 400 psi
- Every Valve is 100% Factory Set and Tested
- Standard Factory Setting is 50 psi
- High and Low Pressure Options
- Diaphragm Suitable for 33° - 180°F Solder, Threaded, PEX B/C F1807, CPVC, and Press Connection Options
- Sealed Cage with SS Adjusting Screw for Vault Installation
- Integral Thermal Expansion Bypass
- Integral Stainless Steel Strainer
- Single and Double Union Options
- In-Line Repairable, Bottom Access
- **Proudly Made in USA**

OPTIONS

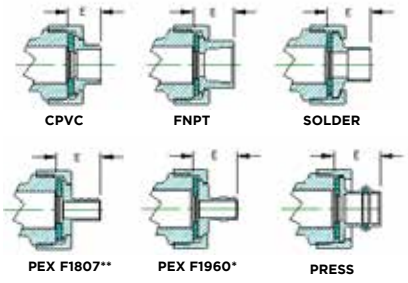
- (-P) Tapped 1/4" & Plugged
- (-G) With Pressure Gauge
- (-02) 10-35 psig
- (-03) 75-125 psig
- 36C Non-LF Materials for Non-Potable Service, such as Irrigation

APPROVALS

- ASSE 1003
- CSA B356
- NSF/ANSI/CAN 372 - Lead Free
- City of Los Angeles
- IAPMO



TAILPIECES

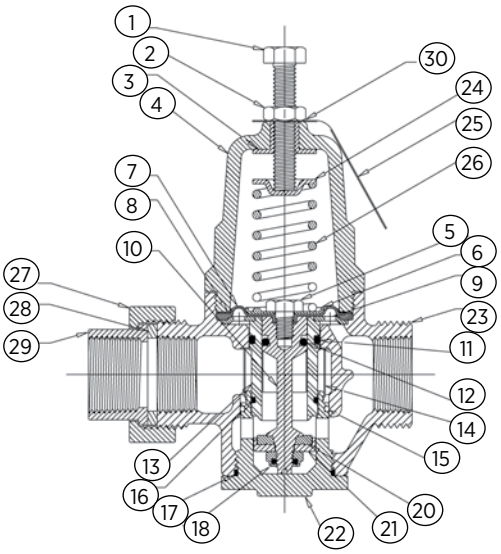


DIMENSIONS

LEAD FREE PART NUMBER	STANDARD BRONZE PART NUMBER	SIZE (IN.)	DIMENSIONS (IN.)		WT./100 (LB.)
			A	OVERALL LENGTH	
NO UNION - FNPT INLET X OUTLET					
36CLF20301	36C20301	1/2"	3.63	3.63	2.00
36CLF20401	36C20401	3/4"	3.63	3.63	2.00
36CLF20501	36C20501	1"	3.89	3.89	2.50
SINGLE UNION - FNPT UNION INLET X FNPT OUTLET					
36CLF10301	36C10301	1/2"	3.63	4.58	2.37
36CLF10401	36C10401	3/4"	3.63	4.56	2.37
36CLF10501	36C10501	1"	3.89	4.95	2.99
SINGLE UNION - SOLDER UNION INLET X FNPT OUTLET					
36CLF30301	36C30301	1/2"	3.63	4.56	2.35
36CLF30401	36C30401	3/4"	3.63	4.56	2.29
36CLF30501	36C30501	1"	3.89	4.95	2.91
SINGLE UNION - CPVC UNION INLET X FNPT OUTLET					
36CLF30401C	36C30401C	3/4"	3.63	4.55	2.21
36CLF30501C	36C30501C	1"	3.89	5.05	2.99
DOUBLE UNION - THREADED INLET X THREADED OUTLET					
36CLF40301	36C40301	1/2"	3.63	5.53	2.74
36CLF40401	36C40401	3/4"	3.63	5.49	2.74
36CLF40501	36C40501	1"	3.89	6.01	3.48
DOUBLE UNION - SOLDER INLET X SOLDER OUTLET					
36CLF50301	36C50301	1/2"	3.63	5.49	2.70
36CLF50401	36C50401	3/4"	3.63	5.49	2.58
36CLF50501	36C50501	1"	3.89	6.01	3.32
DOUBLE UNION - CPVC INLET X CPVC OUTLET					
36CLF50401C	36C50401C	3/4"	3.63	5.47	2.42
36CLF50501C	36C50501C	1"	3.89	6.21	3.48
DOUBLE UNION - PEX F1807 INLET X PEX F1807**OUTLET**					
36CLF90301	36C90301	1/2"	3.63	5.67	2.58
36CLF90401	36C90401	3/4"	3.63	6.13	2.58
36CLF90501	36C90501	1"	3.89	6.99	3.36
DOUBLE UNION - PEX F1960 INLET X PEX F1960 OUTLET					
36CLF90301X2	36C90301X2	1/2"	3.63	6.03	2.58
36CLF90401X2	36C90401X2	3/4"	3.63	6.03	2.58
36CLF90501X2	36C90501X2	1"	3.89	6.23	3.36

** PEX A (ASTM F1960) Cold Expansion PEX*
*** PEX B/C (ASTM F1807) Crimp PEX*

36CLF SERIES



STANDARD MATERIALS LIST

1	Adjusting Bolt (Stainless Steel)
2	Nut (Stainless Steel)
3	Tee Nut (Zinc Plated Steel)
4	Cap (Noryl™)
5	Hex Bolt (300 Series SS)
6	Pressure Plate (Brass)
7	Diaphragm (FDA EPDM w/Polyester)
8	Friction Ring (Brass)
9	Cartridge Ret. Washer (Brass)
10	Stem (LF Brass)
11	O-Ring (FDA Nitrile)
12	O-Ring (FDA Nitrile)
13	Cartridge Housing (G.F. Noryl)
14	Screen (300 Series SS)
15	O-Ring (FDA Nitrile)

16	O-Ring (FDA Nitrile)
17	O-Ring (FDA Nitrile)
18	Lock Nut (300 Series SS)
19	Seat Ring (300 Series SS)
20	Seat Disc (FDA EPDM)
21	Disc Holder (LF Brass)
22	Clean-Out Plug (LF Brass)
23	Body, Machined (LF Cast Bronze)
24	Spring Washer (Zinc Plated Steel)
25	Nameplate (Aluminum)
26	Spring (Zinc Plated Music Wire)
27	Union Nut (Brass)
28	Union Washer (FDA Nitrile)
29	Union Tail Piece (LF Brass)
30	Cage Seal (Stainless Steel)

PART NUMBER MATRIX

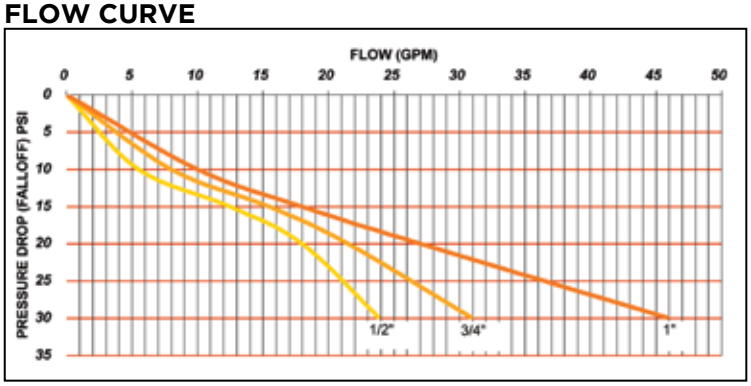
36CLF 36C	X	XX	X	X	X
SERIES	CONNECTION	SIZE	GAUGE	PRESSURE RANGE	OPTION
36CLF (LEAD FREE)	1 - SINGLE UNION NPT	03 - 1/2"	0 - WITHOUT GAUGE	1 - 25 - 75 PSIG RANGE	C - CPVC TAILPIECE
36C - BRONZE	2 - NO UNION NPT	04 - 3/4"	P - W/ GAUGE PORT PLUGGED	2 - 10 - 35 PSIG RANGE	PR - PRESS**
	3 - SINGLE UNION SOLDER X NPT	05 - 1"	G - W/ GAUGE	3 - 75 - 125 PSIG RANGE	X2 - PEX F1960 COLD EXPANSION
	4 - DOUBLE UNION NPT				
	5 - DOUBLE UNION SOLDER				
	9 - DOUBLE UNION PEX F1807**				

*** Available in Direct Connection, and Double Union*

		PRESSURE DIFFERENTIAL (PSI)		
		25	50	75
PIPE SIZE	*FALLOFF (PSI)	WATER CAPACITY (GPM)		
1/2"	5	1.3	1.5	1.7
	10	4.7	5.5	6.3
	15	10.6	12.5	14.4
	20	15.3	18.0	20.7
	30	20	24	27
3/4"	5	2.1	2.5	2.9
	10	6.8	8.0	9.2
	15	13.2	15.5	17.8
	20	18.3	21.5	24.7
	30	27	31	35
1"	5	2.8	3.3	3.7
	10	8.5	10.0	11.5
	15	15.3	18.0	20.7
	20	21.3	25.0	28.8
	30	40	46	51

**Falloff is the difference between the PRV's set pressure and the flowing pressure at any given demand*

FLOW CURVE



Pressure Differential *is the difference between the inlet supply pressure and the adjusted outlet pressure.*
Pressure Falloff *is the reduction in downstream pressure from the static (set) pressure as the flow increases through the valve.*

36ELF SERIES

The Apollo 36ELF is designed for residential and commercial applications to protect water supplies from excessive pressure. Excellent flow performance at low pressure drop. The dezincification resistant bronze body and dielectric polymer cage provide maximum corrosion resistance. Designed for easy in-line servicing with simple cartridge removal. They meet ASSE 1003 and CSA B356 standards. They are listed with IAPMO and the city of Los Angeles.

FEATURES

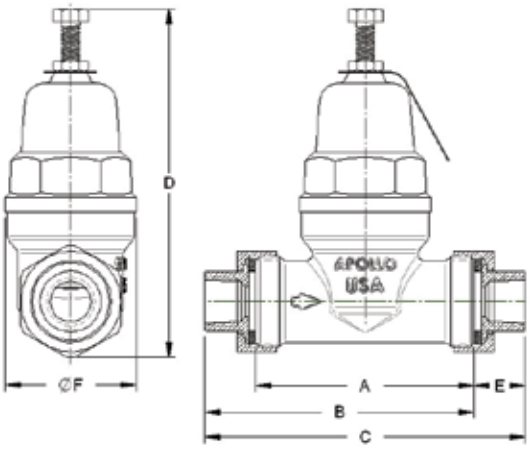
- Balanced Piston Design
- Sealed Cage for Vault Installations
- Built-In Thermal Expansion Bypass
- Integral Stainless Steel Strainer
- Modular Seat Disc and Strainer Cartridge
- Control Pressure Ranges: 15-75 psi and 75-150 psi
- NPT, Solder, PEX A, PEX B/C, CPVC and Press and Push Connections
- Single, Double & Less Union Configurations Available
- Maximum Supply Pressure: 400 psig
- Push & Press Max Supply Pressure: 200 psig
- Working Temperature Range: 33° - 180°F
- **Proudly Made in USA**

OPTIONS

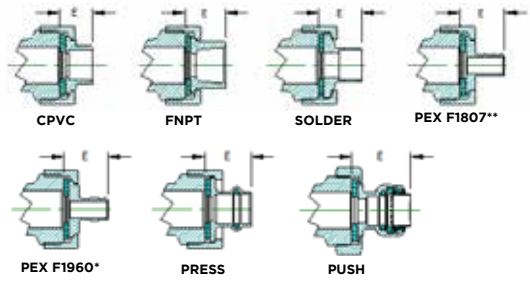
- (-B) Bronze Cap NEW!
- (-X2) PEX A (F1960) Cold Expansion ***NEW!***
- 36E Non-LF Materials for Non-Potable Service, Such as Irrigation

APPROVALS

- ASSE 1003
- CSA B356
- NSF/ANSI/CAN 372 - Lead Free
- NSF/ANSI/CAN 61 - Water Quality
- IAPMO



TAILPIECES



DIMENSIONS

CONNECTION TYPE	SIZE (IN.)	DIMENSIONS (IN.)						WEIGHTS (LB.)	
		A	B	C	D	E	F	SINGLE UNION	DOUBLE UNION
Thread - FNPT	1/2	3.625	4.58	5.53	6	0.95	2.75	2.4	2.75
Solder		3.625	4.56	5.49	6	0.93	2.75	2.4	2.75
CPVC		3.625	4.33	5.03	6	0.70	2.75	2.4	2.75
PEX F1960*		3.625	4.83	6.03	6	1.20	2.75	2.7	3.01
PEX F1807**		3.625	4.65	5.67	6	1.02	2.75	2.7	2.99
Push		3.625	4.86	6.09	6	1.23	2.75	2.9	3.02
Push*		3.625	5.10	6.57	6	1.47	2.75	2.8	2.92
Press		3.625	4.62	5.61	6	0.99	2.75	2.9	3.02
Press*		3.625	4.97	6.31	6	1.34	2.75	2.4	2.75
Thread - FNPT	3/4	3.625	4.56	5.49	6	0.93	2.75	2.4	2.75
Solder		3.625	4.56	5.49	6	0.93	2.75	2.4	2.75
CPVC		3.625	4.55	5.47	6	0.92	2.75	2.4	2.75
PEX F1960*		3.625	4.83	6.03	6	1.20	2.75	2.7	3.02
PEX F1807**		3.625	4.88	6.13	6	1.25	2.75	2.7	2.98
Push		3.625	5.41	7.19	6	1.78	2.75	2.9	3.02
Push*		3.625	5.23	6.83	6	1.60	2.75	2.8	3.23
Press		3.625	4.77	5.91	6	1.14	2.75	2.9	3.02
Press*		3.625	5.13	6.63	6	1.50	2.75	2.4	2.75
Thread - FNPT	1	3.625	4.69	5.75	6	1.06	3.38	2.4	2.86
Solder		3.625	4.69	5.75	6	1.06	3.38	2.4	2.86
CPVC		3.625	4.79	5.95	6	1.16	3.38	2.4	2.86
PEX F1960*		3.625	4.80	5.97	6	1.17	3.38	3.2	3.65
PEX F1807**		3.625	5.18	6.73	6	1.55	3.38	3.1	3.56
Push		3.625	5.59	7.55	6	1.96	3.38	3.2	3.65
Push*		3.625	5.54	7.45	6	1.91	3.38	3.3	3.91
Press		3.625	4.81	5.99	6	1.18	3.38	3.2	3.65
Press*		3.625	5.25	6.87	6	1.62	3.38	2.4	2.86

*Direct Connect
PEX A (ASTM F1960) - Cold Expansion PEX | PEX B/C (ASTM F1807) - Crimp Style PEX

36ELF-G SERIES

The Apollo 36ELF-G is designed for residential and commercial applications to protect water supplies from excessive pressure. Excellent flow performance at low pressure drop. The 36ELF-G has a built in gauge that shows the downstream pressure. The dezincification resistant bronze body and dielectric polymer cage provide maximum corrosion resistance. Designed for easy in-line servicing with simple cartridge removal. They meet ASSE 1003 and CSA B356 standards. They are listed with IAPMO and the city of Los Angeles.

FEATURES

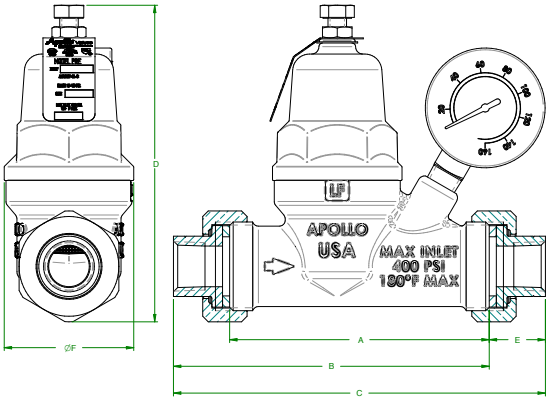
- Balanced Piston Design
- Sealed Cage for Vault Installations
- Built-In Thermal Expansion Bypass
- Integral Stainless Steel Strainer
- Modular Seat Disc and Strainer Cartridge
- Control Pressure Ranges: 15-75 psi and 75-150 psi
- NPT, Solder, PEX F1960*, PEX F1807**, CPVC and Press and Push Connections
- Single, Double & Less Union Configurations Available
- Maximum Supply Pressure: 400 psig
- Push & Press Max Supply Pressure: 200 psig
- Working Temperature Range: 33° - 180°F
- **Proudly Made in USA**

OPTIONS

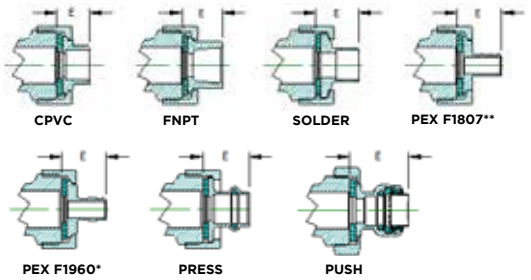
- (-B) Bronze Cap NEW!
- (-X2) PEX A (F1960) Cold Expansion ***NEW!***
- 36E Non-LF Materials for Non-Potable Service, Such as Irrigation
- Example: 36ELF114GIT

APPROVALS

- ASSE 1003
- CSA B356
- NSF/ANS/CANI 372 - Lead Free
- NSF/ANSI/CAN 61 - Water Quality
- IAPMO



TAILPIECES



DIMENSIONS

CONNECTION TYPE	SIZE (IN.)	DIMENSIONS (IN.)						WEIGHTS (LB.)	
		A	B	C	D	E	F	SINGLE UNION	DOUBLE UNION
Thread - FNPT	1/2	4.39	5.34	6.29	6	0.95	2.75	2.6	2.9
Solder		4.39	5.32	6.25	6	0.93	2.75	2.6	2.9
CPVC		4.39	5.09	5.79	6	0.70	2.75	2.6	2.9
PEX F1960*		4.39	5.59	6.79	6	1.20	2.75	2.9	3.2
PEX F1807**		4.39	5.41	6.43	6	1.02	2.75	2.9	3.2
Push		4.39	5.62	6.85	6	1.23	2.75	3.1	3.2
Push*		4.39	5.86	7.33	6	1.47	2.75	3.0	3.1
Press		4.39	5.38	6.37	6	0.99	2.75	3.1	3.2
Press*		4.39	5.73	7.07	6	1.34	2.75	2.6	2.9
Thread - FNPT	3/4	4.39	5.32	6.25	6	0.93	2.75	2.6	2.9
Solder		4.39	5.32	6.25	6	0.93	2.75	2.6	2.9
CPVC		4.39	5.31	6.23	6	0.92	2.75	2.6	2.9
PEX F1960*		4.39	5.59	6.79	6	1.20	2.75	2.9	3.2
PEX F1807**		4.39	5.64	6.89	6	1.25	2.75	2.9	3.1
Push		4.39	6.17	7.95	6	1.78	2.75	3.1	3.2
Push*		4.39	5.99	7.59	6	1.60	2.75	3.0	3.4
Press		4.39	5.53	6.67	6	1.14	2.75	3.1	3.2
Press*		4.39	5.89	7.39	6	1.50	2.75	2.6	2.9
Thread - FNPT	1	3.64	4.70	5.76	6	1.06	3.38	2.4	2.9
Solder		3.64	4.70	5.76	6	1.06	3.38	2.4	2.9
CPVC		3.64	4.80	5.96	6	1.16	3.38	2.4	2.9
PEX F1960*		3.64	4.81	5.98	6	1.17	3.38	3.2	3.7
PEX F1807**		3.64	5.19	6.74	6	1.55	3.38	3.1	3.6
Push		3.64	5.60	7.56	6	1.96	3.38	3.2	3.7
Push*		3.64	5.55	7.46	6	1.91	3.38	3.3	3.9
Press		3.64	4.82	6.00	6	1.18	3.38	3.2	3.7
Press*		3.64	5.26	6.88	6	1.62	3.38	2.4	2.9

36ELF / 36ELF-G SERIES

STANDARD MATERIALS LIST

BODY	Bronze, ASTM B584
	LF Bronze, UNS 89836
CAP	Noryl™
SPRING	Steel, ASTM 228
ADJUSTING SCREW/NUT	Stainless Steel
UNION NUT	Brass, ASTM B16
TAILPIECE	Brass, ASTM B16
	LF Brass, UNS C27451
SCREEN	Stainless Steel
DIAPHRAGM	NSF Grade EPDM
SEAT DISC	NSF Grade EPDM
O-RINGS	NSF Grade EPDM

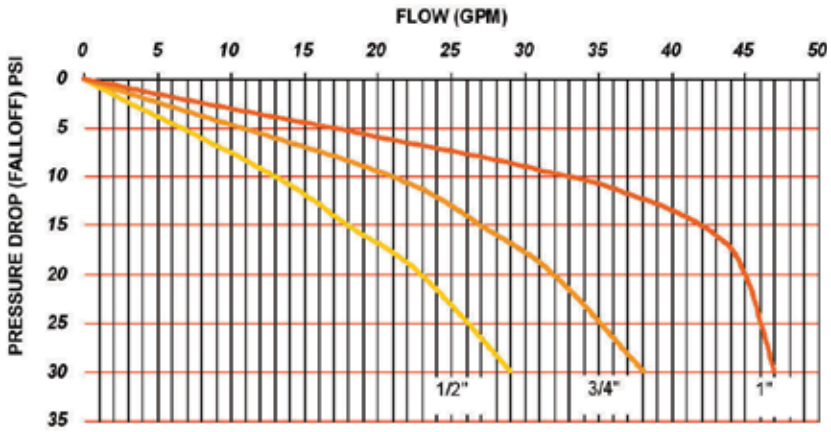
PART NUMBER MATRIX

36ELF 36E	**1**	**X**	**X**	**XX**	**X**	**X**
SERIES	STYLE	UNION	SIZE	PRESSURE RANGE	CONNECTION	OPTION
36ELF (LEAD FREE)	1	0 - NO UNION NPT	3 - 1/2"	01 - 15 - 75 PSIG RANGE	T - FNPT THREAD	B - BRONZE CAP
36E - BRONZE		1 - SINGLE UNION	4 - 3/4"	03 - 75 - 150 PSIG RANGE	S - SOLDER	
		2 - DOUBLE UNION	5 - 1"	**WITH GAUGE (LF ONLY)**	C - CPVC	
				G1 - 15 - 75 PSIG RANGE	X - PEX F1807**	
				G3 - 75 - 150 PSIG RANGE	P - PUSH*	
					PR - PRESS**	
					X2 - PEX F1960*	

PEX A (ASTM F1960) - Cold Expansion PEX
PEX B/C (ASTM F1807) - Crimp Style PEX
** Available in Direct Connection, Single Union x NPT, and Double Union*
*** Available in Direct Connection, and Double Union*

FLOW CURVE

PIPE SIZE	*FALLOFF (PSI)	PRESSURE DIFFERENTIAL (PSI)		
		25	50	75
		WATER CAPACITY (GPM)		
1/2"	10	10	13	16
	15	13	18	22
	20	17	23	29
	30	22	29	36
3/4"	10	16	21	26
	15	20	27	32
	20	24	32	40
	30	29	38	48
1"	10	25	33	41
	15	30	42	52
	20	34	45	56
	30	35	47	59



***Falloff** is the difference between the PRV's set pressure and the flowing pressure at any given demand*
***Pressure Differential** is the difference between the inlet supply pressure and the adjusted outlet pressure.*
***Pressure Falloff** is the reduction in downstream pressure from the static (set) pressure as the flow increases through the valve.*

36 SERIES TAILPIECE KITS (TPK)

36/36LF, 36C/36CLF, 36E/36ELF

36 Series bodies are threaded to accept unions. TPK Tailpiece Kits allow for customization of the end connection configurations in the field. Union connections can easily be added and tailpieces can be mixed to match the requirements at the jobsite. NPT x Solder? PEX x Press? - no problem!

Each TPK includes one each tailpiece, union nut and washer.

SIZE	LEAD FREE	STANDARD	CONNECTION
1/2"	TPK12CLF	TPK12C	CPVC
1/2"	TPK12PLF	TPK12P	PUSH
1/2"	TPK12PRLF	TPK12PR	PRESS
1/2"	TPK12SLF	TPK12S	SOLDER
1/2"	TPK12TLF	TPK12T	NPT
1/2"	TPK12X2LF	-	PEX F1960*
1/2"	TPK12XLF	TPK12X	PEX F1807**
3/4"	TPK34CLF	TPK34C	CPVC
3/4"	TPK34PLF	TPK34P	PUSH
3/4"	TPK34PRLF	TPK34PR	PRESS
3/4"	TPK34SLF	TPK34S	SOLDER
3/4"	TPK34TLF	TPK34T	NPT
3/4"	TPK34X2LF	-	PEX F1960*
3/4"	TPK34XLF	TPK34X	PEX F1807**
1"	TPK1CLF	TPK1C	CPVC

SIZE	LEAD FREE	STANDARD	CONNECTION
1"	TPK1PLF	TPK1P	PUSH
1"	TPK1PRLF	TPK1PR	PRESS
1"	TPK1SLF	TPK1S	SOLDER
1"	TPK1TLF	TPK1T	NPT
1"	TPK1X2LF	-	PEX F1960*
1"	TPK1XLF	TPK1X	PEX F1807**
1-1/4"	TPK114PRLF	TPK114PR	PRESS
1-1/4"	TPK114SLF	TPK114S	SOLDER
1-1/4"	TPK114TLF	TPK114T	NPT
1-1/2"	TPK112PRLF	TPK112PR	PRESS
1-1/2"	TPK112SLF	TPK112S	SOLDER
1-1/2"	TPK112TLF	TPK112T	NPT
2"	TPK2PRLF	TPK2PR	PRESS
2"	TPK2SLF	TPK2S	SOLDER
2"	TPK2TLF	TPK2T	NPT

36ELF SPACER

SPACERS DESIGNED TO ALLOW SYSTEM FLUSH PRIOR TO INSTALLING WPRV

36ESP1 - 1" Connections
36ESP114 - 1-1/4" Connections

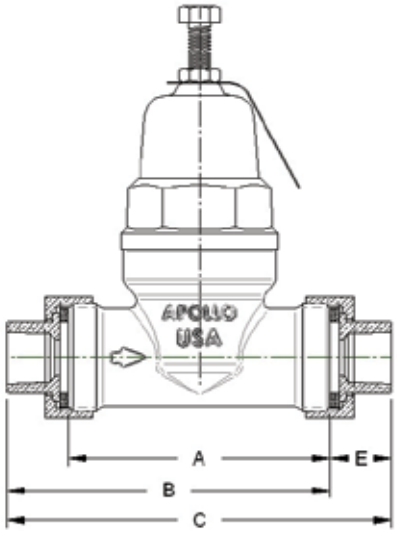
36ELF SERIES
LARGE DIAMETER

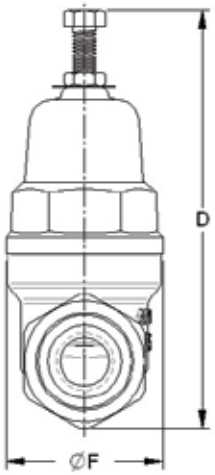
The new large diameter Apollo 36ELF Lead Free Pressure Reducing Valve is designed to conserve water and protect water distribution systems by automatically reducing elevated supply pressures. The dezincification resistant bronze body, stainless steel adjusting screw and dielectric polymer cage provide maximum corrosion resistance. Designed for easy in-line servicing with simple cartridge removal.

FEATURES
- Balanced Piston Design
- SS Adjusting Screw & Nut
- Sealed Cage for Vault Installations
- Built-In Thermal Expansion Bypass
- Large Area Integral Stainless Steel Strainer
- Modular Seat Disc and Strainer Cartridge
  Control Pressure Ranges:
  15-75 psi and 75-150 psi
- High Flow / High Efficiency Design
- NPT and Solder Connections
- Union Press Connections:
  1-1/4" - 2" (Max 300 psi) ***NEW!***
- Factory Tested and Preset at 60 psi
- Single Union, Double Union and Less Union Configurations Available
- **Proudly Made in USA**

OPTIONS
- (-B) Bronze Cap ***NEW!***
- (-P) Tapped 1/4" & Plugged
- (-G) With Pressure Gauge

APPROVALS
- ASSE 1003
- CSA B356
- IAPMO/UPC
- NSF/ANSI/CAN 372 - Lead Free
- NSF/ANSI/CAN 61 - Water Quality

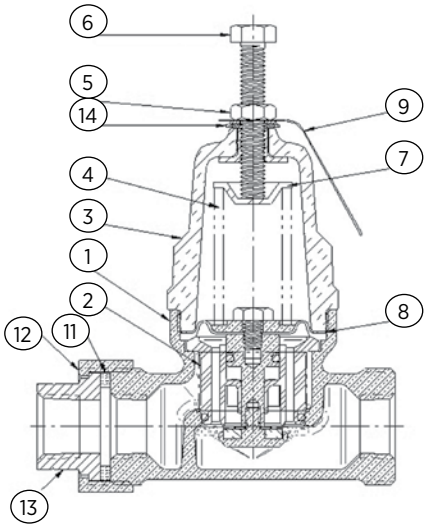




DIMENSIONS

SIZE (IN.)	DIMENSIONS (IN.)						SINGLE UNION WT. (LB.)	DOUBLE UNION WT. (LB.)
	A	B	C	D	E	F		
THREADED								
1-1/4"	5.5	6.62	7.74	10	1.12	3.38	7.22	8.34
1-1/2"	5.5	6.8	8.1	10	1.3	3.38	7.61	8.92
2"	5.5	6.93	8.36	10	1.43	3.38	9.2	11.6
SOLDER								
1-1/4"	5.5	6.62	7.74	10	1.12	3.38	7.22	8.34
1-1/2"	5.5	6.8	8.1	10	1.3	3.38	7.61	8.92
2"	5.5	6.93	8.36	10	1.43	3.38	9.2	11.6
PRESS (WITH UNIONS)								
1-1/4"	5.5	6.80	8.10	10	1.30	3.38	8.4	9.4
1-1/2"	5.5	7.22	8.94	10	1.72	3.38	8.2	9.5
2"	5.5	7.44	9.38	10	1.94	3.38	9.7	11.6
PRESS (DIRECT CONNECTORS)								
1-1/4"	5.5	N/A	7.98	10	1.24	3.38	N/A	9.4
1-1/2"	5.5	N/A	8.72	10	1.61	3.38	N/A	9.5
2"	5.5	N/A	9.12	10	1.81	3.38	N/A	11.6

36ELF SERIES
LARGE DIAMETER



STANDARD MATERIALS LIST

1	LF Body (Bronze, ASTM B584-C89836)
2	Assy, Cartridge (Noryl™/LF Brass/EPDM) includes Stainless Steel screen
3	Cap (Noryl™)
4	Spring (Music Wire ASTM A228)
5	Nut (Stainless Steel)
6	Bolt (Stainless Steel)
7	Washer, Spring (Steel Plated)
8	Friction Ring (Lead Free Brass)
9	Nameplate (Aluminum)
11	Washer (BUNA-N)
12	Nut, Union (Brass)
13	Tailpiece (Lead Free Brass)
14	Cage Seal (Nitrile)

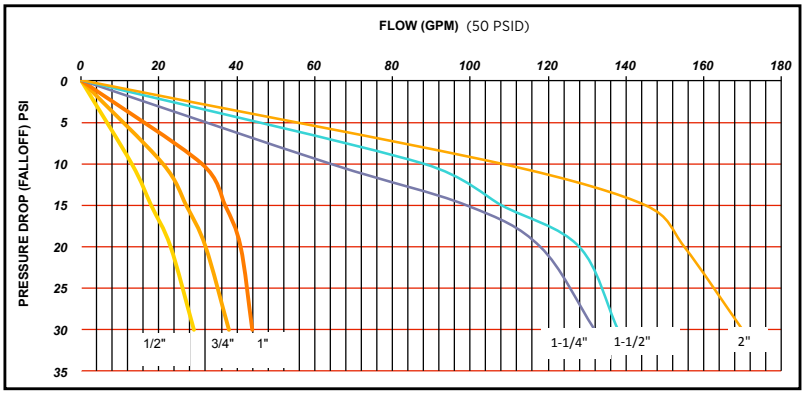
PART NUMBER MATRIX

36ELF 36E	1	X	X	X	X	X	X
SERIES	STYLE	UNION	SIZE	OPTION	PRESSURE RANGE	CONNECTION	OPTION
36ELF (LEAD FREE)	1	0 - NO UNION (NPT)	6 - 1-1/4"	0 - NO GAUGE	1 - 15-75 PSIG	T - FNPT THREAD	BLANK - STANDARD POLYMER CAP
36E - BRONZE		1 - SINGLE UNION	7 - 1-1/2"	P - TAPPED & PLUGGED	3 - 75-150 PSIG	S - SOLDER	B - BRONZE CAP
		2 - DOUBLE UNION	8 - 2"	G - W/ GAUGE		PR - PRESS	Y - W/ WYE STRAINER

PIPE SIZE	FALL-OFF (PSI)	PRESSURE DIFFERENTIAL (PSI)		
		25	50	75
		GPM		
1-1/4"	10	35	47	59
	15	58	77	96
	20	85	113	141
	30	99	132	165
1-1/2"	10	66	88	110
	15	81	108	135
	20	96	128	160
	30	104	138	172
2"	10	81	108	135
	15	109	145	181
	20	116	155	194
	30	128	170	212

Pressure Differential is the difference between the inlet supply pressure and the adjusted outlet pressure.
Pressure Falloff is the reduction in downstream pressure from the static (set) pressure as the flow increases through the valve.

FLOW CURVE



36HLF SERIES
HIGH CAPACITY

Apollo 36HLF Series pressure reducing valves offer high performance in heavy-duty applications. They're designed with a larger diaphragm and orifice area to yield the highest water flow water capacities in the industry.

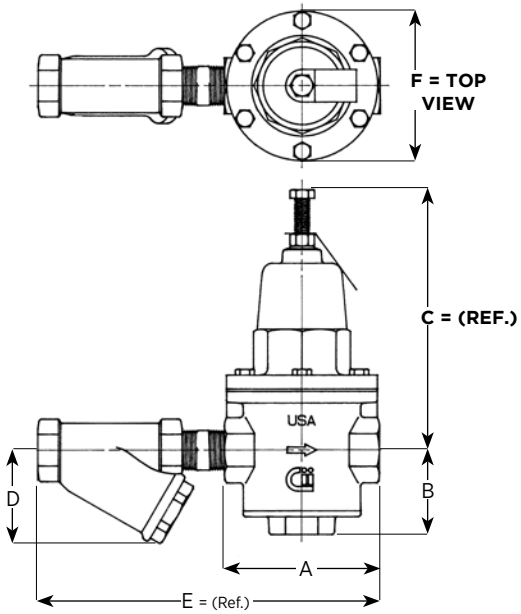
The 36HLF pressure reducing valves' integral bypass protects against thermal expansion. Built for extended service, these models include bronze body construction and stainless steel replaceable seat. They meet ASSE 1003 and CSA B356 standards. They are listed with IAMPO and city of Los Angeles.

These heavy-duty valves are available with optional in-line strainer and 150 lb. ANSI B16.24 integral bronze flange connections. (2-1/2" and 3" only)

FEATURES
- Bronze Body and Spring Cage for Superior Corrosion Resistance and Dependability
- SS Fasteners, Spring, Seat, and Adjustment Screw
- Sealed Spring Cage for Vault Installations
- Standard Factory Setting is 50 psi
- Operating Temperature: 33° - 180°F Suitable for Supply Pressures to 400 psi
- Every Valve is 100% Factory Set and Tested
- Integral Thermal Expansion Bypass
- In-line Repairable, Bottom Access
- **Proudly Made in USA**

OPTIONS
- (-02) Low Pressure 10-35 psi
- (-03) High Pressure 75-125 psi
- Bronze Strainer
- 36HLF700 Series w/ 150# ANSI Flanges

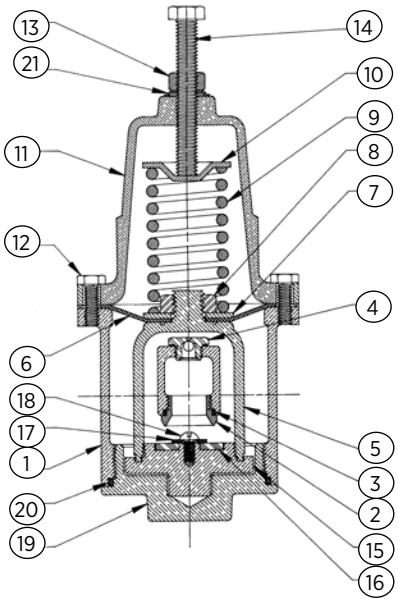
APPROVALS
- ASSE 1003
- CSA B356
- NSF/ANSI/CAN 372 - Lead Free
- IAPMO



DIMENSIONS

SIZE (IN.)	DIMENSIONS (IN.)						WEIGHT (LB.)	
	A	B	C	D	E	F	W / STRAINER	W/O STRAINER
THREADED								
1/2"	4.13	2.25	7.00	1.88	8.38	4.00	7.0	6.00
3/4"	4.13	2.25	7.00	2.44	9.00	4.00	8.0	6.00
1"	4.81	2.31	7.50	4.00	10.25	4.69	12.0	8.00
1-1/4"	6.75	3.81	10.00	3.38	12.50	6.50	29.0	24.00
1-1/2"	6.75	3.19	10.00	3.88	13.13	6.50	29.0	23.00
2"	8.13	3.50	12.50	4.63	16.00	7.63	47.0	38.00
2-1/2"	8.13	3.50	12.50	5.94	16.69	7.63	49.0	37.00
3"	10.38	3.94	15.13	6.94	20.50	9.75	87.0	70.00
FLANGED								
2-1/2"	10.38	3.50	12.50	7.13	21.69	7.63	105.0	55.00
3"	12.50	3.94	15.13	8.13	24.50	9.75	136.0	92.00

36HLF SERIES
HIGH CAPACITY



STANDARD MATERIALS LIST

1	Body (LF Bronze)
2	Seat (SS)
3	Seat O-Ring (Nitrile)
4	Bypass Assembly
5	Yoke (LF Bronze)
6	Diaphragm (Nitrile w/Nylon Reinforcement)
7	Diaphragm Washer (SS)
8	Diaphragm Nut (SS)
9	Spring (SS)
10	Spring Retainer (SS)

11	Cap (Bronze)
12	Cap Bolts (SS)
13	Lock Nut (SS)
14	Adjustment Screw (SS)
15	Seat Disc Holder (LF Bronze)
16	Seat Disc (EPDM)
17	Seat Disc Washer (SS)
18	Seat Screw (SS)
19	Bottom Cover (LF Bronze)
20	Bottom Cover O-Ring (Nitrile)
21	Cage-Sealing Washer (SS)

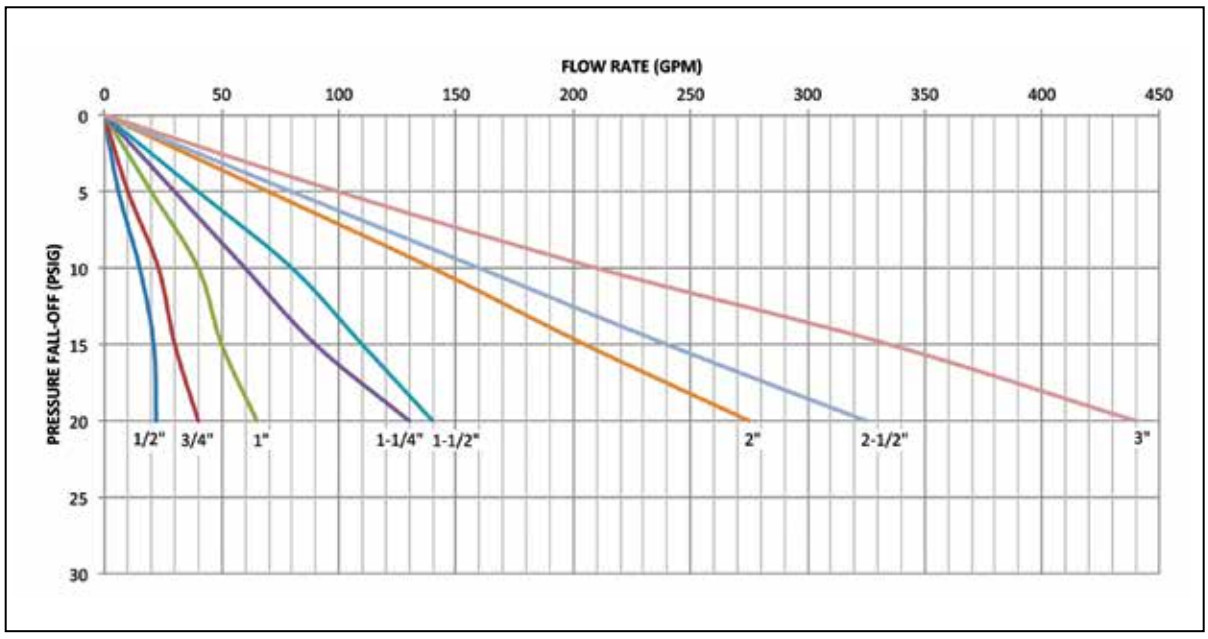
PART NUMBER MATRIX

36HLF 36H	**X**	**X**	**X**	**0X**
SERIES	END CONNECTIONS	OPTIONS	SIZE	PRESSURE RANGE
36HLF (LEAD FREE)	2 - FNPT X FNPT (STANDARD)	0 - STANDARD	3 - 1/2"	01 - 25-75
36H - BRONZE	7 - FLANGED (2-1/2" - 3" ONLY)	1 - W/ Y-STRAINER	4 - 3/4"	02 - 10-35
			5 - 1"	03 - 75-125
			6 - 1-1/4"	
			7 - 1-1/2"	
			8 - 2"	
			9 - 2-1/2"	
			0 - 3"	

36HLF SERIES
HIGH CAPACITY

		PRESSURE DIFFERENTIAL (PSI)		
		25	50	75
PIPE SIZE	*FALLOFF (PSI)	WATER CAPACITY (GPM)		
1/2"	5	8.5	10.0	11.5
	10	13.6	16.0	18.4
	15	17.9	21.0	24.2
	20	21.3	25.0	28.8
3/4"	5	10.6	12.5	14.4
	10	20.4	24.0	27.6
	15	28.1	33.0	38.0
	20	34.0	40.0	46.0
1"	5	17.0	20.0	23.0
	10	29.8	35.0	40.3
	15	40.8	48.0	55.2
	20	51.0	60.0	69.0
1-1/4"	5	21.3	25.0	28.8
	10	51.9	61.0	70.2
	15	80.8	95.0	109.3
	20	113.1	125.0	143.8
1-1/2"	5	29.8	35.0	40.3
	10	61.5	72.3	83.1
	15	90.1	106.0	121.0
	20	113.1	133.0	153.0
2"	5	55.3	65.0	74.8
	10	126.7	149.0	171.4
	15	174.3	205.0	235.8
	20	231.20	272.0	312.80
2-1/2"	5	58.7	69.0	79.4
	10	132.6	156.0	179.4
	15	200.6	236.0	271.40
	20	271.20	319.0	366.9
3"	5	80.8	95.0	109.3
	10	176	207	238.1
	15	282.5	332.4	382.3
	20	365.5	430.0	494.5

FLOW CURVE



Pressure Differential *is the difference between the inlet supply pressure and the adjusted outlet pressure.*
Pressure Falloff *is the reduction in downstream pressure from the static (set) pressure as the flow increases through the valve.*

A127 SERIES
PILOT OPERATED AUTOMATIC CONTROL VALVE

Apollo pilot operated control valves are ideal for a wide range of commercial and industrial applications, wherever the supply pressure needs to be reduced to a lower constant pressure.

Hydraulically operated diaphragm main valve automatically controls non-corrosive, non-abrasive fluids by means of a wide range of pilots.

FEATURES
- Ductile Iron Body & Bonnet, ASTM A536 Grade 65-45-12
- NSF Epoxy Coated
- Bronze / Stainless Steel Internals
- EPDM Elastomers 40°F - 180°F
- Lead Free Components Used Throughout
- Lead Free Wye Strainer Protects Pilot System from Debris
- Isolation Ball Valves Simplify Maintenance and Troubleshooting
- Each Valve is 100% Factory Tested and Can be Set to Your Requirements
- Wide Range of Control Pilots and Functions
- Opening Speed Control is Standard
- Automatically Reduces a Higher Upstream Pressure to a Constant Lower Downstream Pressure
- Constant Outlet Pressure Regardless of Variations in Upstream Pressure or Flow
- Pilot Operated Main Valve is Not Subject to Pressure Falloff
- Outlet Pressure is Adjustable with a Single Screw
- Optional Low-Flow Bypass A127-LF or A727-LF (when wide extremes in flow demand are anticipated)

APPROVALS
- NSF/ANSI 372 - Lead Free
- NSF/ANSI/CAN 61 - Water Quality

MATERIAL OPTIONS
- Body: Ductile Iron (NSF 61 Epoxy Coated), Cast Steel, Stainless Steel, Bronze
- Pilot/Fittings: Bronze/Brass, Stainless Steel
- Tubing: Copper, Stainless Steel
- Elastomers: EPDM, Buna N, Viton

*For use with potable water, use ductile iron (NSF 61 epoxy coated) body, lead free bronze/brass pilot and fittings, copper tubing and EPDM elastomers.

VALVE SIZES	
Globe Flanged	1-1/4" - 24"
Angle Flanged	1-1/4" - 16"
Globe / Angle Threaded	1-1/4" - 3"
Globe / Angle Grooved	1-1/2" - 6"*
SERVICE RATINGS - DUCTILE IRON	
150# Flanged	250 psi MAWP
300# Flanged	640 psi MAWP
Threaded	640 psi MAWP
Grooved	300 psi MAWP

**6" grooved globe style only*

STANDARD MATERIALS LIST

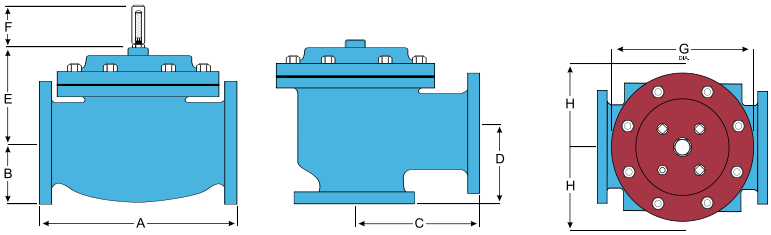
BODY	Epoxy Coated Ductile Iron
SEAT RING	LF Bronze (Options Available)
STEM	Stainless Steel
DIAPHRAGM	EPDM (Options Available)
PILOT(S)	Stainless Steel
TUBING	Copper (Optional Stainless Steel)
FITTINGS	Brass (Optional Stainless Steel)

OTHER CONTROL FUNCTIONS

A94	Diaphragm Check Valve
A108-2	Pressure Relief/Pressure Sustaining
A110	Differential Control
A115-2	Solenoid Control
A115-4	Solenoid Control/High Capacity Pilot
A120	Rate of Flow Control
A127LF	Pressure Reducing with Low Flow Bypass
A727	Pressure Reducing with Reduced Port
A727LF	Pressure Reducing with Reduced Port and Low Flow Bypass
A800	Float Controlled On/Off Service
A810	Float Controlled, Modulating
A22 / A88	Digital Electronic Control, Regulates Pressure, Flow or Level

**Contact customer service for assistance with sizing, selection and model numbers*
***See brochure ACVBR9000 for additional information*

A127 SERIES
PILOT OPERATED AUTOMATIC CONTROL VALVE



GLOBE STYLE ANGLE STYLE

DIMENSIONS

	END CONNECTIONS A				END CONNECTIONS C				END CONNECTIONS D				E	H
SIZE (IN.)	SCREWED	GROOVED	150# FLANGED	300# FLANGED	SCREWED	GROOVED	150# FLANGED	300# FLANGED	SCREWED	GROOVED	150# FLANGED	300# FLANGED	ALL	ALL
1-1/4 - 1-1/2	8-3/4	8-3/4	8-1/2	8-3/4	4-3/8	4-3/8*	4-1/4	4-3/8	3-1/8	3-1/8*	3	3-1/8	6	10
2	9-7/8	9-7/8	9-3/8	9-7/8	4-3/4	4-3/4	4-3/4	5	3-7/8	3-7/8	3-7/8	4-1/8	6	11
2-1/2	10-1/2	10-1/2	10-1/2	11-1/8	6	6	6	6-3/8	4	4	4	4-3/8	7	11
3	13	13	12	12-3/4	6-1/2	6-1/2	6	6-3/8	4-1/2	4-1/2	4	4-3/8	6-1/2	11
4	–	15-1/4	15	15-5/8	–	7-5/8	7-1/2	7-13/16	–	5-5/8	5-1/2	5-13/16	8	12
6	–	20	17-3/4	18-5/8	–	–	10	10-1/2	–	–	6	6-1/2	10	13
8	–	–	25-3/8	26-3/8	–	–	12-11/16	13-3/16	–	–	8	8-1/2	11-7/8	14
10	–	–	29-3/4	31-1/8	–	–	14-7/8	15-9/16	–	–	11-3/8	12-1/16	15-3/8	17
12	–	–	34	35-1/2	–	–	17	17-3/4	–	–	11	11-3/4	17	18
14	–	–	39	40-1/2	–	–	–	–	–	–	–	–	18	20
16	–	–	40-3/8	42	–	–	20-13/16	21-5/8	–	–	15-11/16	16-1/2	19	20
24	–	–	62	63-3/4	–	–	–	–	–	–	–	–	27	28-1/2

**Grooved End Not Available in 1-1/4"*

W-8078-00 SERIES

LEADFREE OPTIONS

These pressure gauges are used for testing water pressure.
Temp. Range: 50°-130° F - P/N W807800. Includes a high-pressure indicator.

PART NUMBER	LF PART NUMBER	CONNECTION	PRESSURE RANGE	NET WT. (LB.)
W-8078-00	–	3/4" hose thread	0-300 psig	.46
–	W-2799-00	1/4" NPT	0-160 psig	.70

W-8078-00

W-2799-00