

EB-45 Pressure Reducing and Regulating Valve

DESCRIPTION

The EB-45 Series is a half-cartridge based pressure reducing and regulating valve with a bronze body. The valve resembles the traditional regulators with a spring chamber and an adjusting screw, but offers the performance of a cartridge based valve. The EB-45 is assembled using modular construction methods and features end connections threaded for both FIP and union. A connection for pressure gauge is also available for 3/4" and 1" models. These valves are supplied by the factory with a standard delivery setting of 45 psi. The outlet pressure can be adjusted from 10-70 psi without changing the spring.

The EB-45 is intended for use where supply line pressure does not exceed 300 psi (400 psi 1/2", 3/4", and 1"). This regulator is suited for either cold or hot (to 180°F) water service. Lead Free* models are also available.

FEATURES AND BENEFITS

Compact pressure reducing and regulating valves:
Designed for small and economic considerations.

Certified to ASSE Standard 1003 and listed by IAPMO and ASSE:
Inspector Friendly, peace of mind.

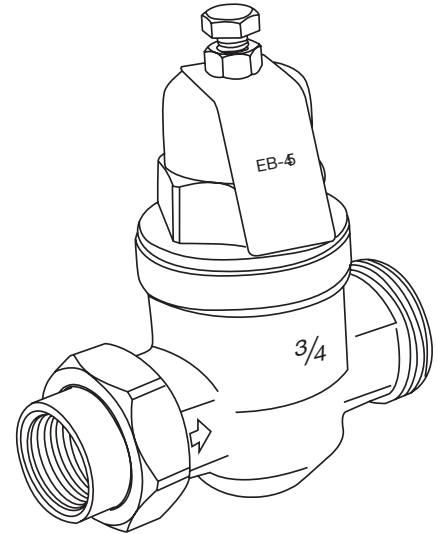
By-pass mechanism integral with the cartridge:
No add-on or small parts, longer life and more reliable performance.

Quick and Easy service:
Back off pressure and remove spring chamber, pressure spring and button and replace cartridge and you have a new valve.

Every valve is tested for performance prior to shipping:
Specify and install with confidence.

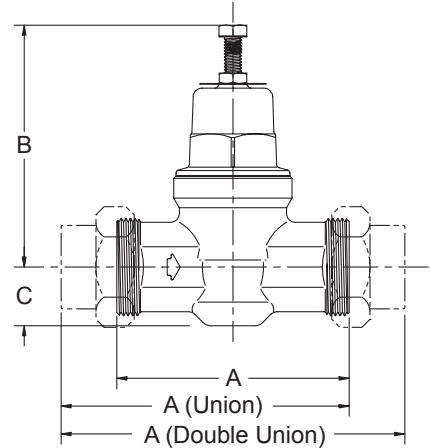
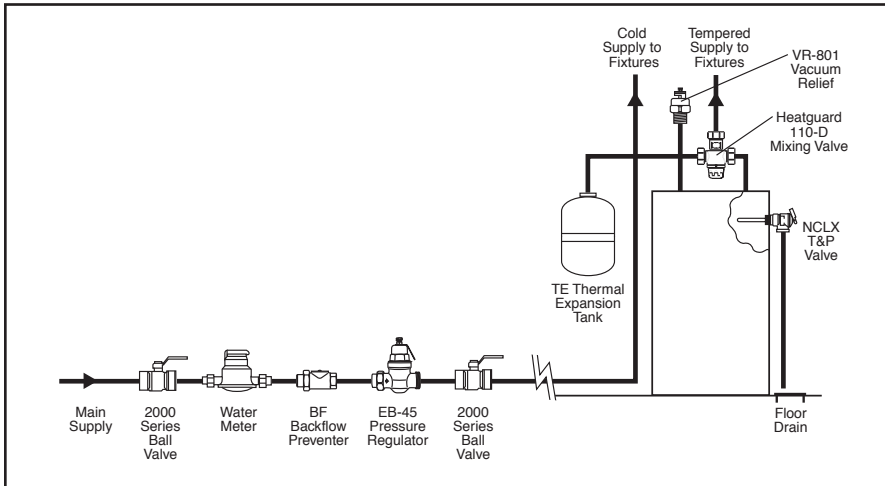
SPECIFICATION

A pressure regulating valve shall be installed to reduce high supplies of incoming water pressure. The valve shall be approved in accordance with **ASSE standard 1003** and **IAPMO**. The valve shall have a bronze body, brass and stainless steel internals, an EP diaphragm, stainless steel strainer screen and an inbuilt back-pass check. The valve shall be a **Cash Acme EB-45**.



EB-45 Pressure Reducing and Regulating Valve

TYPICAL INSTALLATION



Valve Size	A	B	C	
1/2"	3.54	4.35	1.05	
3/4"	3.7			
1"	4.17	7.58	1.35	
1-1/4"	4.80			1.58
1-1/2"				
2"				
1/2" Union	4.31	4.35	1.05	
3/4" Union	4.47			
1" Union	5.17			
1-1/4" Union	5.68	7.58	1.35	
1-1/2" Union	5.90			1.58
2" Union	5.99	7.58	1.84	
1/2" Double Union	5.07			4.35
3/4" Double Union	5.23			
1" Double Union	6.17			
1-1/4" Double Union	6.55	7.58	1.35	
1-1/2" Double Union	6.99			1.58
2" Double Union	7.18	7.58	1.84	

SPECIFICATION DATA

Performance:

Maximum temperature 180°F (water)
 Maximum inlet pressure 400 psi for sizes 1/2", 3/4", and 1"
 300 psi for sizes 1-1/4", 1-1/2" and 2"
 Service Water
 Outlet pressure range 10-70 psi

Materials:

Body Bronze
 Spring Chamber Iron
 Adjusting Spring Steel (zinc plated)
 Pressure Plate Steel (zinc plated)
 Diaphragm EPDM
 Body Seat Engineered Polymer
 Seat Disc EPDM
 Piston Brass
 Strainer Screen Stainless steel
 O-ring EP

CONNECTIONS

All EB45 models include both FIP and union connection threading on both ends.

Threaded (NPT) Inlet & Outlet 1/2", 3/4", 1", 1 1/4", 1 1/2", 2"
 Threaded (NPT) Union, Threaded (NPT) 1/2", 3/4", 1", 1 1/4", 1 1/2", 2"
 Sweat Copper Union, Threaded (NPT) 1/2", 3/4", 1", 1 1/4", 1 1/2", 2"
 Threaded (NPT) Union Inlet & Outlet 1/2", 3/4", 1", 1 1/4", 1 1/2", 2"
 Sweat Copper Union Inlet & Outlet 1/2", 3/4", 1", 1 1/4", 1 1/2", 2"
 SharkBite® Push-Fit Connection Union Inlet & Outlet* 1/2", 3/4", 1"
 CPVC Union Inlet & Outlet 3/4", 1"
 PEX Barb Union Inlet & Outlet 3/4", 1"

3/4" and 1" models are also available with 1/8" NPT connection for pressure gauge.

CERTIFICATIONS

Cash Acme Type EB-45 Pressure Regulators are certified to ASSE 1003 and CSA B356 and are listed by ASSE and IAPMO (cUPC).

*For technical information on the EB-45 with SharkBite® Connection please see the EB-45DSB Spec Sheet (HC005).

WATER CAPACITY (GPM)

Pipe Size	P2 (psi)	Differential Pressure P1-P2 (psi)			
		10	25	50	100+
1/2"	5	1.6	3.3	4.4	5.7
	10	8.9	11.0	12.3	12.4
	15	11.7	16.8	18.8	18.5
	20	12.8	19.2	23.5	23.9
3/4"	5	1.3	1.8	2.5	3.0
	10	8.0	12.5	13.5	15.3
	15	13.9	19.2	22.9	23.9
	20	15.7	23.1	27.4	30.3
1"	5	1.5	2.0	2.7	6.9
	10	8.7	12.8	13.6	17.5
	15	14.2	20.9	27.3	28.0
	20	17.3	25.7	30.9	42.8
1-1/4" 1-1/2" 2"	5	18.5	20.0	25.4	25.7
	10	43.2	45.5	48.6	50.4
	15	64.8	67.4	69.5	70.5
	20	77.7	80.3	87.8	95.2

* For our Lead Free models, surfaces that are in contact with consumable water contain less than 0.25% lead by weight.