2015 CASH CATALOG

AGUE





WATER CONTROL VALVES THAT STAND THE TEST OF TIME

In 1893, A.W. Cash designed a valve for U.S. Navy submarines. With the bottom of the sea as his testing ground, the valve became celebrated for its performance, reliability and dependability. Today, every water control valve we make it developed to these same standards.

With more than 100 million valves produced and counting, Cash Acme is the world's largest volume T&P valve producer—and is a trusted manufacturer of water control valves to safeguard water delivery in residential, commercial and industrial settings.

It's our commitment to quality that has driven a century of success with water control valves that stand the test of time. Proudly built in America for more than 100 years, Cash Acme's ISO 9001-certified quality assurance processes ensure that every valve that leaves our facility is 100% tested and meets all standards.



USA: www.cashacme.com • Canada: www.cashacme.ca

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| | BACK | FLOW | PREV | ENTERS |
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V-3 VACUUM BREAKER VB-222 VACUUM BREAKER V-101 ANTI-SIPHON VACUUM BREAKER BF DUAL CHECK VALVE BFP DUAL CHECK VALVE DC500 DOUBLE CHECK RP500 REDUCED PRESSURE ZONE PRESSURE VACUUM BREAKER BACKFLOW REPAIR KITS

GENERAL PLUMBING & HEATING

WASHING MACHINE SHUT-OFF VALVE A-41 AND AB-40 A-89 BFAC CBL CQ-M CR AIR SEPARATOR AIR SEPARATOR AIR PURGER AIR VENT SHARKBITE CONNECTION SYSTEM

MADE IN THE USA

LIMITED WARRANTY

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P R E S S U R E REGULATINGVALVES





COMMERCIAL, RESIDENTIAL

The EB45 Pressure Regulator features a half cartridge design that offers the performance of a high end, cartridge based valve and the price of a traditional regulator. The valve construction is similar to a traditional regulator in that it retains a separate spring chamber and adjusting screw, but offers the simplicity and maintenance benefits or a cartridge based valve. The EB45 comes factory set at 45 psi but may be adjusted between 10–70 psi.

FEATURES AND BENEFITS:

- Rugged bronze body
- Compact pressure reducing mechanism
- Back-pass check mechanism integral with the cartridge
- Modular Cartridge Design reduces the number of parts requiring service
- Serviceable in line
- Every valve is tested for performance prior to shipping

PERFORMANCE:

| Maximum pressure: | 400 psi (1/2", 3/4" and 1") |
|------------------------|---------------------------------|
| | 300 psi (1-1/4", 1-1/2" and 2") |
| Maximum temperature: | 180°F (93°C) |
| Service: | Water |
| Outlet pressure range: | 10-70 psi |
| | |

APPLICATIONS: Commercial and domestic water applications.

AVAILABLE CONNECTIONS:

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

| Threaded (NPT) | 1/2", 3/4", 1", 1–1/4", 1–1/2" and 2" |
|-----------------------------|---------------------------------------|
| Threaded (NPT) Single Union | 1/2", 3/4", 1", 1–1/4", 1–1/2" and 2" |
| Sweat Copper Single Union | 1/2", 3/4", 1", 1–1/4", 1–1/2" and 2" |
| Threaded (NPT) Double Union | , , , , , , , , |
| Sweat Copper Double Union | 1/2", 3/4", 1", 1–1/4", 1–1/2" and 2" |
| CPVC Double Union | 3/4" and 1" |
| PEX Barb Double Union | 3/4" and 1" |

3/4" and 1" models are also available with a pressure gauge *Except for Direct SharkBite models.

APPROVALS AND LISTINGS: ASSE 1003, CSA B356, NSF/ANSI 372 (Lead Free), NSF/ANSI 61. Listed by IAPMO, CSA and ASSE.





| DIMENSIONS (Inches) | | | | | | |
|---------------------|------------|---------|-----------------|-----------------|---------|-------|
| | Connection | A | | | | |
| Size | Style | Direct | Single Union | Double Union | В | С |
| 1/2 | NPT | 3–1/4 | 4 | 4-3/4 | | |
| 1/2 | Sweat | - | 4 | 4-3/4 | | |
| | NPT | 3-7/16 | 4-3/16 | 4-15/16 | 4 2/0 | 3/4 |
| 2/4 | Sweat | - | 4-5/16 | 5–1/4 | 4-3/8 | |
| 3/4 | CPVC | - | - | 5-3/8 | | |
| | Barb | - | - | 5-11/16 | | |
| | NPT | 4-3/16 | 5-3/16 | 6-3/16 | 4-3/8 | |
| 1 | Sweat | - | 5-5/16 | 6-7/16 | | 1 |
| 1 | CPVC | - | - | 6-1/2 | | 1 |
| | Barb | - | - | 7 | | |
| 1 1/4 | NPT | 4-13/16 | 5-11/16 | 6-9/16 | | 1.2/0 |
| 1–1/4 | Sweat | - | 5-7/8 | 6-15/16 | 7-11/16 | 1–3/8 |
| 1 1/2 | NPT | 4-13/16 | 5-15/16 | 7 | | 1 5/0 |
| 1–1/2 | Sweat | - | 6 | 7-3/16 | | 1–5/8 |
| 2 | NPT | 4-13/16 | 6 | 7-3/16 | 1 | 1 7/0 |
| 2 | Sweat | - | 6-1/4 | 7-11/16 | 1 | 1–7/8 |

EB45 CONT.







EB45 SHARKBITE

COMMERCIAL, RESIDENTIAL

The EB45 Pressure Regulator with SharkBite push-fit connections features a half cartridge design that offers the performance of a high end, cartridge based valve and the price of a traditional regulator. The valve construction is similar to a traditional regulator in that it retains a separate spring chamber and adjusting screw, but offers the simplicity and maintenance benefits or a cartridge based valve. The EB45 comes factory set at 45 psi but may be adjusted between 10–70 psi. The EB45 is available with several different SharkBite connections for ease of installation, and a trustworthy watertight seal. EB45 SharkBite options include Double Union SharkBite, Direct SharkBite, or Direct SharkBite with Slip Feature.

FEATURES AND BENEFITS:

- Instant push-fit connections. No soldering, glue or tools required to make connection.
- Rugged bronze body
- Compact pressure reducing mechanism
- Back-pass check mechanism integral with the cartridge
- Modular Cartridge Design reduces the number of parts requiring service
- Serviceable in line
- Every valve is tested for performance prior to shipping

The EB45 Direct SharkBite with slip feature allows for a quick and easy installation on existing copper and CTS CPVC pipe.

PERFORMANCE:

| Maximum pressure: | 200 psi |
|------------------------|---------------|
| Maximum temperature: | 180°F (93°C) |
| Service: | Potable Water |
| Outlet pressure range: | 10-70 psi |

APPLICATIONS: Commercial and domestic water applications.

AVAILABLE CONNECTIONS:

Union SharkBite Inlet and Outlet1/2", 3/4" and 1"Direct SharkBite Inlet and Outlet1/2", 3/4", 1", 1-1/4", 1-1/2" and 2"Direct SharkBite Inlet and Outlet with Slip Feature1/2" and 3/4"

APPROVALS AND LISTINGS: ASSE 1003, CSA B356, NSF/ANSI 372 (Lead Free), NSF/ANSI 61. Listed by IAPMO, CSA and ASSE.

EB45 DOUBLE UNION SHARKBITE

| DIMENSIONS (Inches) | | | | |
|---------------------|---------------------------|----------------------------|-------|-------|
| Size | Connection Style | A (Double Union) | В | с |
| 1/2 | | 5-7/8 | 4-3/8 | 3/4 |
| 3/4 | Double Union SharkBite | 7 | 4-5/0 | 5/4 |
| 1 | Shandhe | 8-3/4 | 4-3/8 | 15/16 |







EB45 SHARKBITE CONT.

EB45 DIRECT SHARKBITE

| DIMENSIONS (Inches) | | | | |
|---------------------|----------|--------|-------|--|
| Size | А | В | С | |
| 1/2 | 4-7/8 | 4 2/0 | 2/4 | |
| 3/4 | 5-1/8 | 4–3/8 | 3/4 | |
| 1 | 8-3/4 | 4-3/8 | 15/16 | |
| 1–1/4 | 9–7/16 | 7–9/16 | 1 | |
| 1–1/2 | 9–1/2 | 7–9/16 | 1–1/8 | |
| 2 | 10-10/16 | 7–9/16 | 1–3/8 | |



EB45 DIRECT SHARKBITE WITH SLIP FEATURE

| DIMENSIONS (Inches) | | | | |
|---------------------|---------|-------|-----|--|
| Valve Size | Α | В | С | |
| 1/2 | 6-13/16 | 4-3/8 | 3/4 | |
| 3/4 | 7–5/8 | 4-3/8 | 3/4 | |



The back-pass check feature allows for a reverse flow of water though the regulator in the event that outlet pressure increases to exceed supply pressure. Thermal expansion, created by a water heater for instance, can cause water pressure to increase. Without the back-pass check, water cannot flow in reverse. The added slip feature allows for simple replacement of an existing regulator or allows installation in an existing line where there is little to no play in the pipe system.









COMMERCIAL, RESIDENTIAL

The EB25 brings state-of-the-art water control technology to pressure regulators. The biggest breakthrough is the simple numerical indicator that allows the exact desired pressure to be set even before the valve is installed, making pressure adjustment a quick, one-man job.

With the most advanced design in the industry, the EB25 delivers rock steady flow even with extreme variations in supply pressure. Thanks to a patented single-cartridge design, the EB25 has fewer parts for increased reliability, and it can be serviced without having to remove the valve body. The innovative design also eliminates the water whistle or harmonic hum associated with most pressure regulating valves, thanks to innovative "micro-fingers" that dissipate noise as water flows across the seat.

The EB25 comes factory set at 45 psi but can be manually adjusted between 20-90 psi.

FEATURES AND BENEFITS:

- Convenient orange twist-cap eliminates need for wrench adjustment, numerical indicator shows the pressure without the need for a gauge
- Single piece cartridges can be removed with valve body remaining in place
- Integral back-pass check with the cartridge
- Cutting edge design and production incorporates "micro-fingers" that dissipate noise due to water flow across the seat
- Available with a blanking cap for "rough-in" installations
- · Optional closing cap for direct burial applications
- Serviceable in line
- Every valve is tested for performance prior to shipping

PERFORMANCE:

| Maximum pressure: | 300 psi |
|------------------------|--------------|
| Maximum temperature: | 180°F (93°C) |
| Service: | Water |
| Outlet pressure range: | 20-90 psi |
| Outlet pressure range. | 20-90 psi |

APPLICATIONS: Commercial and domestic water applications.

AVAILABLE CONNECTIONS:

| Threaded (NPT) Inlet and Outlet ¹ | 3/4" and 1" |
|--|---------------------------------------|
| Threaded (NPT) Union, Threaded (NPT) | 1/2", 3/4", 1", 1-1/4", 1-1/2" and 2" |
| Sweat Copper Union, Threaded (NPT) | 1/2", 3/4", 1", 1–1/4", 1–1/2" and 2" |
| Threaded (NPT) Union Inlet and Outlet ¹ | 3/4", 1", 1–1/4", 1–1/2" and 2" |
| Sweat Copper Union Inlet and Outlet ² | 3/4", 1", 1–1/4", 1–1/2" and 2" |
| PEX Barb Union Inlet and Outlet ² | 3/4" and 1" |

¹The 3/4" and 1" models are stainless steel. For more information see the EB25 Stainless Steel section. ²The 3/4" and 1" models use a stainless steel body and lead free brass tailpieces.

APPROVALS AND LISTINGS: ASSE 1003, CSA B356, NSF/ANSI 372 (Lead Free), NSF/ANSI 61. Listed by IAPMO, CSA and ASSE.







| DIMENSIONS (Inches) | | | | | | |
|---------------------|------------|--------------|--------------|---------------------|---------|--------|
| Size | Connection | Connection A | | | | _ |
| 5120 | Style | Direct | Single Union | Double Union | В | c |
| 1/7 | NPT | - | 5-3/4 | - | | 1-1/16 |
| 1/2 | Sweat | - | 5-5/8 | - | | |
| | NPT | - | 5-1/2 | 6-11/16 | | |
| 3/4 | Sweat | - | 5-11/16 | 6-11/16 | 4-15/16 | |
| | Barb | - | - | 7–1/16 | | |
| | NPT | - | 5-3/4 | 7–1/16 | | |
| 1 | Sweat | - | 5-7/8 | 7–1/16 | | |
| | Barb | - | - | 7–5/8 | | |
| 1 1/4 | NPT | - | 5-11/16 | 6-9/16 | _ | 1–3/8 |
| 1–1/4 | Sweat | - | 5-7/8 | 6-15/16 | | |
| 1-1/2 | NPT | - | 5-15/16 | 7 | 7–1/2 | 1 E/0 |
| | Sweat | - | 6 | 7–3/16 | | 1–5/8 |
| 2 | NPT | _ | 6 | 7–3/16 | | 1 7/0 |
| | Sweat | - | 6-1/4 | 7-11/16 | | 1–7/8 |

EB25 CONT.





EB25 STAINLESS STEEL

COMMERCIAL, RESIDENTIAL

The EB25 Stainless Steel brings state-of-the-art water control technology to pressure regulators. The biggest breakthrough is the simple numerical indicator that allows the exact desired pressure to be set even before the valve is installed, making pressure adjustment a quick, one-man job. The EB25 Stainless Steel also features a stainless steel, 100% lead free body.

With the most advanced design in the industry, the EB25 delivers rock steady outflow even with extreme variations in supply pressure. Thanks to a patented single-cartridge design, the EB25 has fewer parts for increased reliability, and it can be serviced without having to remove the valve body. The innovative design also eliminates the water whistle or harmonic hum associated with most pressure regulating valves, thanks to innovative "micro-fingers" that dissipate noise as water flows across the seat.

The EB25 comes factory set at 45 psi but can be manually adjusted between 20-90 psi.

FEATURES AND BENEFITS:

- Convenient orange twist-cap eliminates need for wrench adjustment, numerical indicator shows the pressure without the need for a gauge
- Single piece cartridges can be removed with valve body remaining in place
- Integral back-pass check with the cartridge
- Cutting edge design and production incorporates "micro-fingers" that dissipate noise due to water flow across the seat
- Available with a blanking cap for "rough-in" installations
- · Optional closing cap for direct burial applications
- Serviceable in line
- Every valve is tested for performance prior to shipping

PERFORMANCE:

| Maximum inlet pressure: | 300 psi |
|-------------------------|--------------|
| Maximum temperature: | 180°F (93°C) |
| Service: | Water |
| Outlet pressure range: | 20-90 psi |

APPLICATIONS: Domestic water supply service.

AVAILABLE CONNECTIONS:

Threaded (NPT) Inlet and Outlet Threaded (NPT) Union Inlet and Outlet 3/4" and 1" 3/4" and 1"

APPROVALS AND LISTINGS: ASSE 1003, CSA B356, NSF/ANSI 372 (Lead Free), NSF/ANSI 61. Listed by IAPMO, CSA and ASSE.

| DIMENSIONS (Inches) | | | | |
|---------------------|------------------|---------|--------|--|
| Size | Connection Style | А | В | |
| 3/4 | NPT (Both ends) | 4-7/8 | 2-7/16 | |
| 3/4 | Double Union NPT | 6-11/16 | 3-3/8 | |
| 1 | NPT (Both ends) | 4-7/8 | 2-7/16 | |
| 1 | Double Union NPT | 6-13/16 | 3-7/16 | |







EB25 SHARKBITE

COMMERCIAL, RESIDENTIAL

The EB25 Pressure Regulator with SharkBite push-fit connections brings state-of-the-art water control technology to pressure regulators. The biggest breakthrough is the simple numerical indicator that allows the exact desired pressure to be set even before the valve is installed, making pressure adjustment a quick, one-man job.

With the most advanced design in the industry, the EB25 delivers rock steady outflow even with extreme variations in supply pressure. Thanks to a patented single-cartridge design, the EB25 has fewer parts for increased reliability, and it can be serviced without having to remove the valve body. The innovative design also eliminates the water whistle or harmonic hum associated with most pressure regulating valves, thanks to innovative "micro-fingers" that dissipate noise as water flows across the seat.

The EB25 comes factory set at 45 psi but can be manually adjusted between 20–90 psi. Installed with Double Union SharkBite push-fit connections for quick, easy and watertight fit.

FEATURES AND BENEFITS:

- Instant push-fit connection for increased ease of use
- Convenient orange twist-cap eliminates need for wrench adjustment, numerical indicator shows the pressure without the need for a gauge
- Single piece cartridges can be removed with valve body remaining in place
- Integral back-pass check with the cartridge
- Cutting edge design and production incorporates "micro-fingers" that dissipate noise due to water flow across the seat
- · Available with a blanking cap for "rough-in" installations
- Optional closing cap for direct burial applications
- Serviceable in line
- · Every valve is tested for performance prior to shipping

PERFORMANCE:

| 200 psi |
|--------------|
| 180°F (93°C) |
| Water |
| 20-90 psi |
| |

APPLICATIONS: Domestic water supply service.

AVAILABLE CONNECTIONS:

Union SharkBite Connection Inlet and Outlet* 3/4" and 1" *The 3/4" and 1" models use a stainless steel body and lead free brass tailpieces.

APPROVALS AND LISTINGS: ASSE 1003, CSA B356, NSF/ANSI 372 (Lead Free), NSF/ANSI 61. Listed by IAPMO, CSA and ASSE.

| DIMENSIONS (Inches) | | | | | |
|-----------------------|-----------|-------------------|---------|--------|--|
| Size Connection Style | | A Double Union | В | с | |
| 3/4 | SharkBite | 8-3/8 | 4 15/16 | 1 1/10 | |
| 1 | SharkBite | 9–1/4 | 4–15/16 | 1–1/16 | |







EB25 MULTICARTRIDGE

COMMERCIAL, INDUSTRIAL

The EB25 Multi-Cartridge pressure reducing valve eliminates the need for costly two-valve installation in applications subject to wide variation in water demand. Benefits include accurate flow control and pressure regulation, plus simple cartridge change-out for servicing. The Multi-Cartridge design has a convenient orange pressure adjustment twist-cap and numerical indicator that allows for quick adjustment of water pressure. The state-of-the art single piece cartridge design makes servicing the valve fast and easy. The valve is designed to service commercial and institutional water installations that experience wide variation in water demand.

Each cartridge has an adjustable range of 20-90 psi but come factory set at 55 psi, 50 psi, and 45 psi respectively.

FEATURES AND BENEFITS:

- US Patent 8,327,871
- Multi-Cartridge Design eliminates the need to install multiple PRVs in parallel
- Convenient orange twist-cap eliminates need for wrench adjustment, numerical indicator shows the pressure without the need for a gauge
- Single piece cartridges can be removed with valve body remaining in place
- Back-pass check feature integral with the cartridge
- Cutting-edge design and production incorporates "micro-fingers" that dissipate noise due to water flow across the seat
- Regulates pressure at various levels of water demand for accurate flow control
- Serviceable in line
- Every valve is tested for performance prior to shipping

PERFORMANCE:

| C) |
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| |

APPLICATIONS: Commercial and industrial water applications.

AVAILABLE CONNECTIONS:

| Threaded (FIP) | 2-1/2" and 3" |
|---------------------|----------------------|
| ANSI CL 150 Flanged | 2-1/2" and 3" and 4" |

APPROVALS AND LISTINGS: N/A.

| DIMENSIONS (Inches) | | | | |
|---------------------|--------|-------|--------|--|
| Dimensions | А | В | с | |
| 2–1/2 FIP | 13-3/8 | 7–1/2 | 2-3/16 | |
| 2–1/2 Flanged | 13 | 7–1/2 | 3–1/2 | |
| 3 FIP | 15–3/8 | 7–1/2 | 2-9/16 | |
| 3 Flanged | 13–1/8 | 7–1/2 | 3-3/4 | |
| 4 Flanged | 13–7/8 | 7–1/2 | 4-1/2 | |









E3

COMMERCIAL, RESIDENTIAL

The Cash Acme E3 Pressure Reducing and Regulating Valve automatically reduces a high inlet pressure to a lower delivery pressure and maintains the lower pressure within acceptable limits. The valve provides substantially higher capacity and closer regulation for more demanding and higher quality installations. The Cash Acme E3 incorporates a yoke-type design, allowing the regulator to close against the inlet pressure and provide quieter operation under wide and varying flow conditions.

The E3 is designed for use where supply line inlet pressure does not exceed 300 psi and is suitable for either cold or hot (to 180°F) water service for a variety of applications. The Cash Acme E3 is set at 45 psi and comes with an adjustable spring range of 20–70 psi. Low pressure (10–40 psi) and high pressure (71–150 psi) settings are also available.

FEATURES AND BENEFITS:

- Automatically reduces a high inlet pressure to a lower delivery pressure
- · Solves problems of water hammer, pipe noise and rapid wearing of fixtures, faucets and valves
- Rugged bronze body
- Every valve is tested for performance prior to shipping

PERFORMANCE:

Maximum initial pressure:250 psiMaximum temperature:180°F (93°C)Service:WaterOutlet pressure range:20-70 psi*

*Low (10-40 psi) and High (71-150 psi) pressure ranges are also available upon request.

APPLICATIONS: Commercial and domestic water applications.

AVAILABLE CONNECTIONS:

Threaded (NPT)

1/2", 3/4", 1", 1-1/4", 1-1/2" and 2"

APPROVALS AND LISTINGS: ASSE 1003. Listed by ASSE and IAPMO.

| DIMENSIONS (Inches) | | | | |
|---------------------|---------|---------|---------|--|
| Dimensions | А | В | с | |
| 1/2 | 5 | 5–1/4 | 1–3/4 | |
| 3/4 | 5–1/2 | 5-15/16 | 1–7/8 | |
| 1 | 6-7/16 | 7 | 2–11/16 | |
| 1–1/4 | 7–5/8 | 7–1/2 | 3 | |
| 1–1/2 | 8–7/8 | 8–1/2 | 3–1/4 | |
| 2 | 10-7/16 | 10–1/4 | 3-3/16 | |







E41

COMMERCIAL, RESIDENTIAL AND INDUSTRIAL

The Cash Acme E41 Pressure Reducing and Regulating Valve automatically reduces a high inlet pressure to a lower delivery pressure and maintains the lower pressure within acceptable limits. The valve provides high capacity and close regulation for more demanding and higher quality installations. The E41 is similar in internal design to the E3 regulator with the exception that it is not fitted with an inbuilt strainer for systems which do not require the feature, or where separate individual strainers are preferred.

The E41 is suitable for installation in domestic water supply lines (after the meter) in systems where inlet pressures do not exceed 300 psi and where system temperatures do not exceed 180°F. The E41 is set at 45 psi and comes with an adjustable spring range of 20–70 psi. Low pressure (10–40 psi) and high pressure (71–150 psi) settings are also available.

FEATURES AND BENEFITS:

- Automatically reduces a high inlet pressure to a lower delivery pressure
- High capacities for higher quality installations
- Rugged bronze body
- Every valve is tested for performance prior to shipping

PERFORMANCE:

| Maximum initial pressure: | 300 psi |
|-----------------------------------|---|
| Maximum temperature: | 180°F (93°C) |
| Service: | Air and water |
| Outlet pressure range: | 20-70 psi* |
| *Low (10-40 psi) and High (71-150 | psi) pressure ranges are also available upon request. |

APPLICATIONS: Commercial and domestic water applications.

AVAILABLE CONNECTIONS:

Threaded (NPT) 1/2", 3/4", 1", 1–1/4", 1–1/2" and 2"

APPROVALS AND LISTINGS: ASSE 1003. Listed by ASSE.

| DIMENSIONS (Inches) | | | | |
|---------------------|---------|---------|--------|--|
| Dimensions | А | В | с | |
| 1/2 | 3-3/8 | 5–1/4 | 1-1/2 | |
| 3/4 | 4–1/16 | 5-15/16 | 1–7/8 | |
| 1 | 4-9/16 | 7 | 2–5/16 | |
| 1–1/4 | 5-3/16 | 8 | 2–3/8 | |
| 1-1/2 | 5–13/16 | 8–1/2 | 2–5/8 | |
| 2 | 6–1/2 | 10–1/4 | 2–3/4 | |







E56

COMMERCIAL, INDUSTRIAL

The E56 Piston Type Pressure Regulating Valve automatically reduces a high inlet pressure to a lower delivery pressure and maintains the lower pressure within acceptable limits. The valve is designed for water, air, light oil, gases (except steam) and other fluids not corrosive to brass. The E56 is exceptionally simple in construction and does not have a diaphragm. Instead it incorporates a chrome plated spring-opposed, balanced piston design. The balanced piston allows for extreme fluctuations in inlet pressures to act uniformly on the piston, producing more sensitive operation while providing for closer regulation and quiet performance.

The E56 is available with threaded or flanged connections in 2", 2–1/2", and 3" sizes. The E56 is available with a variety of factory set pressures ranging from 15–125 psi. The available spring ranges depend on the spring installed: 15–50 psi, 40–60 psi, 50–110 psi, or 80–125 psi.

FEATURES AND BENEFITS:

- · Automatically reduces a high inlet pressure to a lower delivery pressure
- Large commercial and industrial water or air service installations
- · Balanced piston design provides for closer regulation and quiet performance
- Simple, dependable construction
- · Available with threaded or flanged ends
- Every valve is tested for performance prior to shipping

PERFORMANCE:

| Maximum initial pressure: | 400 psi (threaded), 225 psi (150 lb ANSI flanged) |
|---------------------------|---|
| Maximum temperature: | 180°F (93°C) |
| Service: | Air, water, light oils and gasses (except steam) |
| Outlet pressure range: | 15-50 psi, 40-60 psi, 50-110 psi and 80-125 psi |

APPLICATIONS: Large commercial and industrial water, air, light oil and gas (except steam) service installations.

AVAILABLE CONNECTIONS:

| Threaded (NPT) | 2", 2–1/2" and 3" |
|---------------------|-------------------|
| ANSI CL 150 Flanged | 2", 2-1/2" and 3" |

APPROVALS AND LISTINGS: N/A

| DIMENSIONS (Inches) | | | | | | | |
|---------------------|-----------------------|-------|---|-------|--|--|--|
| Size | Size Connection Style | | В | с | | | |
| 2 | Threaded | 7–1/2 | 7 | 3-1/2 | | | |
| 2–1/2 | Threaded | 7–1/2 | 7 | 3–1/2 | | | |
| 3 | Threaded | 9–1/4 | 7 | 3-1/2 | | | |
| 2 | 150 lb MSS Flanges | 8-1/4 | 7 | 3-1/2 | | | |
| 2–1/2 | 150 lb MSS Flanges | 8–1/4 | 7 | 3–1/2 | | | |
| 3 | 150 lb MSS Flanges | 8-1/4 | 7 | 3-3/4 | | | |









INDUSTRIAL

The EB75 is a compact, iron-body pressure reducing and regulating valve designed for installations where small size and economy are important. Because of the iron body, this valve is not recommended for use in potable water applications. The EB75 comes factory set at 45 psi but has an adjustment range of 10–70 psi. The valve also comes in a low pressure range of 0–20 psi.

FEATURES AND BENEFITS:

- Inbuilt back-pass check allows water to flow back through the regulator in cases of thermal expansion caused by hot water heating devices
- Fully pressure-balanced piston automatically reduces and regulates high inlet pressures from a maximum of 300 psi down to 45 psi at standard factory setting
- Every valve is tested for performance prior to shipping

PERFORMANCE:

| Maximum initial pressure: | 300 psi |
|------------------------------------|--------------|
| Maximum temperature: | 180°F (93°C) |
| Service: | Water |
| Outlet pressure range: | 10-70 psi* |
| *0–20 psi is also available upon r | eauest |

APPLICATIONS: Non-potable industrial water system applications.

AVAILABLE CONNECTIONS: Threaded (NPT) 1/2" and 3/4"

APPROVALS AND LISTINGS: N/A

The back-pass check feature allows for a reverse flow of water though the regulator in the event that outlet pressure increases to exceed supply pressure. Thermal expansion, created by a water heater for instance, can cause water pressure to increase. Without the back-pass check, water cannot flow in reverse.



PRV REPAIR KITS

RESIDENTIAL

Pressure Regulator Repair Kits contain internal components to repair Cash Acme PRV products. The applicable kit configuration(s) matches up with existing Cash Acme PRV model numbers and sizes.

APPLICATIONS: Used for the maintenance and repair of the internal components of existing PRV devices.

AVAILABLE CONNECTIONS:

EB45 Cartridge Kits EB25 Cartridge Kits E3 Repair Kits E41 Repair Kits E56 Repair Kits

THERMOSTATIC MIXING VALVES

Cash Acme is an experienced supplier of thermostatic mixing valves (TMVs), providing an extensive range of devices for residential, commercial, industrial and even hydronic heating applications. Available with a wide range of connections, our TMVs accurately control the temperature of hot water at the source of heat (water heater) or at the point-of-use to individual or multiple fixtures (sinks, lavatories, bath tubs, etc.) to deliver water at a safe temperature, regulate water distribution and flow and provide sanitary anti-scald protection.

Cash Acme TMVs can also be used to blend the flow and return in underfloor hydronic heating systems. They provide a safe, energy efficient and stable temperature in the heating system, preventing heat damage to the building and creating safer underfloor surfaces.

Cash Acme thermostatic mixing valves are manufactured in state-of-art ISO 9001 compliant Brisbane, Australia facility and certified to various plumbing standards such as ASSE 1017, ASSE 1069, ASSE 1070, CSAB125, NSF 372, NSF61 and listed with ASSE, CSA & IAPMO for use in accordance with U.S. and Canadian plumbing codes. Every valve is 100% tested for function, safety, and performance before it is shipped from the factory. CASH ACME HEAT



THERMOSTATIC MIXING VALVES

TANK BOOSTER

COMMERCIAL, RESIDENTIAL

The Cash Acme Tank Booster combines a Thermostatic Mixing Valve (TMV), a Flexible Connector and a Water Heater Tee in one package, and when combined with elevated storage temperatures, can effectively double a household's hot water heater capacity while delivering hot water at safe temperatures in residential/commercial applications. Available in regular and "PRO" models, both versions of the TMV are factory set at 120°F (49°C), but may be easily adjusted, and can be used with SharkBite Flexible Water Heater Connectors and Ball Valves for easy installation in systems using copper, CPVC or PEX tubing — no need for additional transition fittings.

Tank Booster model features a knob adjustment with tamper-evident sticker, lockable adjustment, with a temperature range of 90°F (32°C) – 130°F (54°C), non-return check valves at both inlets, and filters at both inlets.

Tank Booster PRO model features a lockable adjustment with a temperature range of 90°F (32°C) – 130°F (54°C), recirculation port, non-return check valves and filters at both inlets. It is dual listed for water distribution and for sanitary applications.

FEATURES AND BENEFITS:

- Precise temperature control means safer hot water from all outlets
- Allows the water heater to be set at 140°F (60°C) or higher, yielding greater effective hot water volume and reducing the chance of growth of Legionella bacteria
- Every valve is tested for performance on an automated testing station during the assembly process
- Robust, low complexity construction for superior reliability.
- Mixed outlet flow of water reduces to a trickle in case of cold water supply failure, providing greater end user safety
- Adjustable and lockable mechanism minimizes unauthorized tampering with valve setting
- Factory set, locked to maximum 120°F (49°C)
- Recirculation port with plug decreases potential heat loss

PERFORMANCE:

| Outlet temperature range | 90 – 130°F (32 – 54°C) |
|-------------------------------|-----------------------------|
| Factory set temperature range | 115 – 120°F (46 – 48.9°C) |
| Temp. hot supply | 120 – 180°F (48.9 – 82.2°C) |
| Temp. cold supply | 39 – 80°F (3.9 – 26.7°C) |
| Maximum pressure | 230 psi (1600 kPa) |
| Flow rate, minimum | 1 gpm (3.8 l/min) |
| Flow rate, maximum | 11 gpm (42 l/min) at 45 psi |

APPLICATIONS: Domestic and commercial hot water distribution. To control water temperature at the source of heat (hot water tank) or point-of-use* (sinks, lavatories, or bath tubs).

AVAILABLE CONNECTIONS:

3/4" MNPT mix outlet x 3/4" FNPT union fitting x 3/4" NPSH cold inlet.

APPROVALS AND LISTINGS:

ASSE 1017 ASSE 1070* CSA B125.3* NSF/ANSI 372 (Lead Free) NSF/ANSI 61 Listed by ASSE and IAPMO.







TANK BOOSTER CONT.

TANK BOOSTER CONNECTIONS





TANK BOOSTER PRO CONNECTIONS







THERMOSTATIC MIXING VALVES



COMMERCIAL, RESIDENTIAL

The HG110 D LF, a triple-listed thermostatic mixing valve, delivers water at a safe 120°F (49°C) or lower from all outlets, while allowing the water heater to be set at a germ-killing 140°F (60°C) or higher which aids in preventing the growth of Legionella bacteria in the water heater. The higher tank temperature means that hot water demands can be satisfied longer. Every valve is tested for performance prior to shipping. Adjustable and lockable mechanism minimizes unauthorized tampering with valve setting. Each valve is factory set and locked to a maximum 120°F (49°C). Adj. outlet temperature range: 85–130°F (29–54°C).

FEATURES AND BENEFITS:

- Certified for distribution and individual/multiple point-of-use applications for safer hot water from all outlets
- Allows the water heater to be set at 140°F (60°C) or higher, yielding greater effective hot water volume and reducing the chance of growth of Legionella bacteria
- Every valve is tested for performance on an automated testing station during the assembly process
- · Robust, low complexity construction for superior reliability
- Mixed outlet flow of water reduces to a trickle in case of cold water supply failure, providing greater end user safety
- · Adjustable and lockable mechanism minimizes unauthorized tampering with valve setting
- Factory set, locked to maximum 120°F (49°C)

PERFORMANCE:

| Outlet temperature range | perature range 85 – 130°F (29 – 54°C) Factory set and locked 120°F (49°C) | |
|--------------------------|---|----------------|
| Factory set and locked | 120°F (48.9°C) | |
| Temp. hot supply | 120 – 180°F (48.9 – 82.2°C) | |
| Temp. cold supply | 39 – 80°F (3.9 – 26.7°C) | |
| Maximum pressure | 230 psi (1600 kPa) | (17-21) (C-23) |
| Flow rate, minimum | 1 gpm (3.8 l/min) | 3.6" (92) |
| Flow rate, maximum | 20 gpm (76 l/min) | 3.3" 84 |

APPLICATIONS: Domestic and Commercial hot water distribution. To control water temperature at the source of heat (hot water tank), point-of-use (sinks, lavatories, or bath tubs) or multiple fixtures (multiple sinks or gang shower applications where bather has no access to temperature control).

AVAILABLE CONNECTIONS:

| Sweat | 1/2", 3/4" and 1" |
|----------------|-------------------|
| Barb (PEX) | 1/2" and 3/4" |
| Threaded (NPT) | 1/2" and 3/4" |
| CPVC | 1/2" and 3/4" |
| SharkBite | 1/2" and 3/4" |
| | |

APPROVALS AND LISTINGS:

ASSE 1017, 1069 & 1070 CSA B125.3 NSF/ANSI 372 (Lead Free) NSF/ANSI 61 Listed by ASSE, CSA and IAPMO



RIPLE LISTED ASSE 1017, ASSE 1069 & ASSE 1070.





HG160

COMMERCIAL, RESIDENTIAL

The HG160 LF is a next generation Temperature Actuated Mixing Valve that mixes hot water with cold to deliver tempered water at a controlled temperature, at flow rates as low as 0.34 gpm (1.3 l/min) or as high as 11 gpm (42 l/m). The Heatguard 160 is designed to assist in prevention of scalding and thermal shock. The Heatguard 160 LF is a compact, robust, simple product incorporating the latest in thermostatic technology. Every valve is tested for performance prior to shipping. Adjustable and lockable mechanism minimizes unauthorized tampering with valve setting. Each valve is factory set and locked to a maximum 120°F (49°C). Adj. outlet temperature range: 95–120°F (35–48.9°C).

FEATURES AND BENEFITS:

- Accurate temperature control, even under varying supply conditions
- · Robust, low complexity construction for superior reliability
- Mixed outlet flow of water reduces to a trickle in case of cold water supply failure, providing greater end user safety
- · Unique, purpose designed adjuster tool minimizes unauthorized tampering with valve setting
- · Every valve is tested for performance on an automated testing station during the assembly process

PERFORMANCE:

| Adj. outlet temperature range | 95 – 120°F (35 – 48.9°C) |
|-------------------------------|-----------------------------|
| Factory set temperature range | 115 – 120°F (46.1 – 48.9°C) |
| Temp. hot supply | 120 – 180°F (48.9 – 82.2°C) |
| Temp. cold supply | 39 – 80°F (3.9 – 26.7°C) |
| Maximum pressure | 145 psi (1000 kPa) |
| Flow rate, minimum | 0.34 gpm (1.3 l/min) |
| Flow rate, maximum | 11 gpm (42 l/min) |

APPLICATIONS: Domestic and Commercial point-of-use. The Heatguard 160 is intended to control the water temperature to individual or multiple fixtures such as sinks, lavatories, or bath tubs to reduce the risk of scalding and thermal shock, where more flow is required than the HG 145. It can also be installed in gang shower applications where the bather has no access to the temperature adjustment means.

AVAILABLE CONNECTIONS:

| Sweat | 1/2" |
|----------------|---------------|
| Barb (PEX) | 1/2" and 3/4" |
| Threaded (NPT) | 1/2" and 3/4" |
| CPVC | 1/2" and 3/4" |
| SharkBite | 1/2" and 3/4" |
| | |

APPROVALS AND LISTINGS:

ASSE 1069 & 1070 CSA B125.3 NSF/ANSI 372 (Lead Free) NSF/ANSI 61 Listed by ASSE, CSA and IAPMO







THERMOSTATIC MIXING VALVES



COMMERCIAL, RESIDENTIAL

The HG145 LF is a point-of-use thermostatic mixing valve designed to assist in the prevention of scalding. Superior, fast acting thermostatic element provides stable operation at flow rates as low as 0.34 gpm (1.3 l/min) or as high as 5.8 gpm (22 l/min). The Heatguard[®] valve also reduces the outlet flow to a trickle in the event of cold water supply failure. Inlet connections are typical supply line 3/8" compression for 3/8" OD tube. The valve is supplied standard with check valves at hot and cold water inlets. Compact design easily fits under or behind a single basin. Adj. outlet temperature range: 95–118°F (35–48°C).

FEATURES AND BENEFITS:

- Compact design easily fits under or behind a single basin
- Accurate temperature control with flows as low as 0.34 gpm (1.3 l/min) for increased user comfort and convenience, (especially with sensor faucets)
- · Robust, low complexity construction for superior reliability
- Mixed outlet flow of water reduces to a trickle in case of cold water supply failure, providing greater end user safety
- Every valve is tested for performance on an automated testing station during the assembly process

PERFORMANCE:

Adj. outlet temperature range $95 - 118^{\circ}F(35 - 48^{\circ}C)$ Factory set temperature range $104 - 110^{\circ}F(40 - 43.3^{\circ}C)$ Temp. hot supply $120 - 194^{\circ}F(48.9 - 90^{\circ}C)$ Temp. cold supply $39 - 85^{\circ}F(3.9 - 30^{\circ}C)$ Maximum pressure230 psi(1600 kPa)Flow rate, minimum0.34 gpm(1.3 l/min)Flow rate, maximum@ 45 psi 5.8 gpm(22 l/min)

APPLICATIONS: Intended for under sink installations to provide safe outlet water temperature; ideal for individual faucets and electronic faucets.

AVAILABLE CONNECTIONS:

Compression suitable for 3/8" OD tube. Also available with cold water bypass and elbow insert fittings.

APPROVALS AND LISTINGS:

ASSE 1070 CSA B125.3 NSF/ANSI 372 (Lead Free) NSF/ANSI 61 Listed by ASSE, CSA and IAPMO









HG110-HX

COMMERCIAL, RESIDENTIAL

The HG110-HX LF temperature actuated thermostatic mixing valve mixes hot and cold water to deliver reduced temperature hot water. This Heatguard[®] valve offers a high flow rate which reduces system pressure losses, and robust, low complexity construction. An adjustable and lockable handle prevents tampering. The extended outlet temperature range – up to 176°F (80°C) – makes the 110-HX LF ideal for heating system applications. Adj. outlet temperature range: 85-176°F (29-80°C).

FEATURES AND BENEFITS:

- High flow rate design for lower pressure losses within the system providing efficient system performance for lower running costs
- Robust, low complexity construction for superior reliability
- Integral union connections on all three ports for Easy and quick install and service
- Unique, purpose designed adjuster tool integrated with cap minimizes unauthorized tampering with valve setting
- Every valve is tested for performance on an automated testing station during the assembly process

PERFORMANCE:

Adj. outlet temperature range Factory set outlet temperature range Temp. hot supply Temp. cold supply Maximum pressure Flow rate, minimum Flow rate, maximum 85 – 176°F (29 – 80°C) 115 – 120°F (46 – 49°C) 120 – 180°F (48.9 – 82.2°C) 39 – 80°F (3.9 – 26.7°C) 230 psi (1600 kPa) 1 gpm (3.8 l/min) 20 gpm (76 l/min)

APPLICATIONS: Hydronic and radiant heating systems.

AVAILABLE CONNECTIONS:

Sweat Threaded (NPT) 1/2", 3/4" and 1" 1/2" and 3/4"

APPROVALS AND LISTINGS: ASSE 1017 CSA B125.3 NSF/ANSI 372 (Lead Free) NSF/ANSI 61 Listed by ASSE and IAPMO









THERMOSTATIC MIXING VALVES



COMMERCIAL, RESIDENTIAL

The HG115 LF thermostatic mixing valve offers the same reliable protection of the 110–D, but on a larger scale. A fast acting, high quality thermostatic element senses the outlet water temperature and reacts to maintain a stable delivery temperature even under changing flows or variations in supply temperatures. This Heatguard® valve also greatly reduces the outlet flow in the event of a cold water supply failure. The adjusting handle can be locked at a desired temperature or function in an adjusting mode. It is clearly marked to indicate the direction to turn to achieve hotter or colder water temperatures. The valve delivers water at a maximum of 120°F (49°C), allowing the heater to be set at 140°F (60°C) or higher, thus providing a greater effective volume of hot water and reducing the chances of Legionella bacteria growth in the water. The maximum outlet water flow rate is 27.2 gpm, making it suitable for larger residential and commercial installations. Adj. outlet temperature range: 85–176°F (29–80°C).

FEATURES AND BENEFITS:

• Delivers water at a maximum of 120°F (49°C) throughout the system for safer hot water from all outlets

- Allows the water heater to be set at 140°F (60°C) or higher, yielding greater effective hot water volume and reducing the chance of growth of Legionella bacteria
- Large sized valve with high flow rates can supply controlled water to a large installation
- Robust, low complexity construction for superior reliability
- Mixed outlet flow of water reduces to a trickle in case of cold water supply failure, providing greater end user safety
- Integral union connections on all three ports for easy and quick install and service

PERFORMANCE:

| Adj. outlet temperature range | 85 – 176°F (29 – 80°C) |
|-------------------------------|-----------------------------|
| Temp. hot supply | 120 – 180°F (48.9 – 82.2°C) |
| Temp. cold supply | 39 – 80°F (3.9 – 26.7°C) |
| Maximum pressure | 230 psi (1600 kPa) |
| Flow rate, minimum | 2.5 gpm (9.5 l/min) |
| Flow rate, maximum | 27.2 gpm (100 l/min) |

APPLICATIONS: Widely used in large domestic and standard commercial water distribution systems. Ideal for installation in: a) hydronic radiant heating systems in conjunction with the water heating source to distribute tempered water to the system; and b) a hot water

system at the water heater to distribute controlled temperature water.

AVAILABLE CONNECTIONS:

Sweat Threaded (NPT) 3/4", 1" and 1-1/4" 3/4" and 1"

APPROVALS AND LISTINGS:

ASSE 1017 CSA B125.3 NSF/ANSI 372 (Lead Free) NSF/ANSI 61 Listed by ASSE and IAPMO

CASH ACA







TAFR

COMMERCIAL, RESIDENTIAL

The Temperature Actuated Flow Reducer (TAFR) is designed to help protect against scalding. Automatically reduces water flow through fixture to 0.25 gpm if water temperature exceeds set temperature of 117°F (47°C). Thermal element senses high temperature water and shuts off flow to protect user. Device will only reset when water temperature drops to a safe level.

Available to suit shower heads and faucets (male and female thread).

FEATURES AND BENEFITS:

- Conforms to international safety standards
- Simple and effective scald prevention
- Quick installation and fits most showers and taps
- Strong lead free brass construction with a sleek chrome finish design
- Perfect for remodeling applications
- · Ease of installation provides cost effective scald protection

PERFORMANCE:

Heatguard[®] ShowerSafe Device Performance:

| Hot water supply temperature | 185°F (85°C) max. |
|------------------------------|-------------------------|
| Max. flow rate | 4.0 gpm |
| Shut-down | less than 0.25 gpm |
| Nominal set temperature | 117°F (47°C) ± 2°F |
| Max. operating pressure | 145 psi |
| Min. operating pressure | less than 1.5 psi |
| Threads | 1/2" NPT (inlet/outlet) |
| | |

Heatguard® TapSafe Device Performance:

| Hot water supply temperature | 185°F (85°C) max. |
|------------------------------|---|
| Max. flow rate | 2.5 gpm |
| Shut-down | less than 0.25 gpm |
| Nominal set temperature | 117°F (47°C) ± 2°F |
| Max. operating pressure | 145 psi |
| Min. operating pressure | less than 1.5 psi |
| Threads | Adaptor for standard male or female laundry faucets |

APPLICATIONS: For shower or faucet spouts in private and public housing, child care centers, hospitals, hotels/motels, nursing homes and more.

APPROVALS AND LISTINGS:

ASSE 1062 CSA B125.3 NSF/ANSI 372 (Lead Free) NSF/ANSI 61 Listed by ASSE and IAPMO



ShowerSafe 24718





TapSafe 24719



HERMOSTATIC MIXING VALVES

MASTERGUARD 800

COMMERCIAL, INDUSTRIAL

The Masterguard[®] 800 Series features a range of high flow rate valves that mix hot water with cold water to deliver water at a safe controlled temperature, typically 120°F (49°C). It features, state of art, fast acting, high quality thermostatic mixing valve elements that sense the outlet temperature and react to maintain a stable delivery temperature even under varying and extremely low flows. The adjusting handle can be locked at a desired temperature. Each valve has integral mounting feet to allow it to be securely fixed to a wall or frame. Complete with 4 in 1 service fittings on each inlet. Every valve is factory tested.

Adj. outlet temperature range: 95-150°F (35-65°C) The Masterguard® 800 Series features a range of high flow rate valves that mix hot water with cold water to deliver water at a safe controlled temperature, typically 120°F (49°C). It features, state of art, fast acting, high quality thermostatic elements that sense the outlet temperature and react to maintain a stable delivery temperature even under varying and extremely low flows. The adjusting handle can be locked at a desired temperature. Each valve has integral mounting feet to allow it to be securely fixed to a wall or frame. Complete with 4 in 1 service fittings on each inlet. Every valve is factory tested.

FEATURES AND BENEFITS:

- · Accurate temperature control, even at very low flows
- Integral mounting feet on valve body, meaning no extra brackets to buy, lower cost and more secure installation
- Fast reaction to changes in flow rate or supply temperature results in constant outlet temperature
- · Robust, low complexity construction for superior reliability

PERFORMANCE:

Outlet temperature range Factory set temp. range Temp. hot supply Temp. cold supply Maximum pressure 95 – 150°F (35 – 65°C) 117.5°F ± 35.6°F (47.5°C ± 2°C) 120 – 180°F (48.9 – 82.2°C) 39 – 80°F (3.9 – 26.7°C) 145 psi (1000 kPa)

APPLICATIONS: Commercial and industrial facilities to distribute controlled temperature water to the domestic hot water system of the entire building or a section of the building.

APPROVALS AND LISTINGS:

ASSE 1017 CSA B125.3 Listed by ASSE and IAPMO



| Measurement in inches | | | | | | | | | | | | |
|-----------------------|----------------|-----------------|------------------|------------------|------|-----|------|------|-----|-----|-----|-----|
| Product | Inlet (NPT) | Outlet (NPT) | Flow @ 45 psi | Min flow rate | А | В | с | D | E | F | G | н |
| 830 | 3/4 | 1 | 51 gpm | 4 gpm | 10.6 | 3.2 | 10.3 | 13.8 | 1.7 | 6.5 | 3.5 | 2.7 |
| 840 | 1 | 1–1/4 | 75 gpm | 8 gpm | 11.0 | 3.6 | 10.3 | 13.8 | 1.7 | 6.5 | 3.5 | 2.8 |
| 850 | 1–1/4 | 1–1/2 | 105 gpm | 13 gpm | 13.2 | 4.2 | 14.6 | 19.8 | 2.5 | 9.3 | 5.1 | 2.7 |
| 860 | 1–1/2 | 2 | 149 gpm | 18.5 gpm | 13.7 | 4.7 | 14.6 | 19.8 | 2.5 | 9.3 | 5.1 | 1.9 |



Cash Acme is an industry leader in producing Temperature & Pressure (T&P) Relief Valves for water heaters and hot water storage tanks. Cash Acme offers an extensive line of temperature and pressure relief valve products, including robust high capacity commercial products, compact residential models, and agricultural products.

Each pressure relief valve is tested for performance, quality and efficiency before it leaves our factory.

Our products include models that are ASME, ANSI and CSA (AGA) approved to protect water heaters from excess pressures and temperatures by discharging water. Relief valves are completely automatic and reset after the pressure has been relieved.





RESIDENTIAL

The NCLX features include a cast bronze body, brass and stainless steel internal parts, silicone seat disc and stainless steel spring. The NCLX incorporates an inert thermal element coating that provides effective isolation from mineral deposits (liming). The NCLX comes standard with a test lever. The valve is completely automatic and reseats after either temperature or pressure relief. The NCLX is available in male inlets and female outlets with several options in shank and element lengths.

FEATURES AND BENEFITS:

- Incorporates an inert thermal element coating to provide effective isolation from mineral deposits (liming) and galvanic corrosion
- · Completely automatic and reseats after temperature or pressure relief
- Ideal for all domestic water heater applications
- Every valve is tested for performance prior to shipping

PERFORMANCE:

| Available Set Pressures | 150 psi standard |
|-------------------------|---|
| | (75, 100, 125, and 175 psi available for select models; see Rating Table) |
| Temperature Relief | 210°F standard |
| - | (180°F available for select models; see Rating Table) |
| Service | Hot Water |

| _ | Size | CSA Rating | ASME Rating at Pressure Setting Indicated | | | | | |
|----------|-------|-------------|---|----------------------|----------------------|----------------------|----------------------|--|
| Туре | (NPS) | (BTU/hr)ັ | 75 psig (BTU/hr) | 100 psig (BTU/hr) | 125 psig (BTU/hr) | 150 psig (BTU/hr) | 175 psig (BTU/hr) | |
| NCLX-1 | 1/2" | 15,000 | - | - | N/R | N/R | - | |
| NCLX-1 | 3/4" | 95,000 | 300,000 | - | 500,000 | 500,000 | N/R | |
| NCLX-5 | 1/2" | 15,000 | - | - | N/R | N/R | - | |
| NCLX-5 | 3/4" | 105,000 (1) | 300,000 | N/R (2) | 500,000 | 500,000 | N/R (1) | |
| NCLX-5L | 3/4" | 105,000 | - | - | - | 500,000 | - | |
| NCLX-5LX | 3/4" | 105,000 | - | N/R (2) | 500,000 | 500,000 | - | |
| NCLX-LS | 3/4" | 105,000 | _ | - | - | 500,000 | - | |
| NCLX-A | 3/4" | 105,000 | _ | N/R (2) | - | 500,000 | - | |
| NCLX-8 | 3/4" | 105,000 | _ | - | 500,000 | 500,000 | - | |

CSA (ANSI Z21.22/CSA 4.4) and ASME (Boiler Code Section IV) Ratings

(1) For 3/4" NCLX-5 at 175 psig CSA Rating is 95,000 BTU/hr.

(2) The 100 psig pressure set is only offered with the 180°F temperature relief.

(3) N/R indicates Type is available but Not ASME Rated at the indicated pressure set.

APPLICATIONS: Provides temperature and pressure protection for domestic water heater and storage tanks.

AVAILABLE CONNECTIONS:

Threaded (NPT) Male inlet and female outlet

APPROVALS AND LISTINGS:

CSA Listed to ANSI Z21.22/CSA 4.4; NB listed to ASME Boiler Code Section IV (1/2" sizes are CSA Listed Only).



| | Size | | | | | |
|----------|-------|--------|--------|----------------------|--------|--------|
| Туре | (NPS) | A | В | MENSIONS (inche C | D | E |
| NCLX-1 | 1/2 | 1-3/32 | 1-9/16 | 3-3/16 | 1-3/16 | 1-7/16 |
| NCLX-1 | 3/4 | 1-5/32 | 1-9/16 | 3-3/16 | 1-3/16 | 1-5/16 |
| NCLX-5 | 1/2 | 1-3/32 | 1-9/16 | 4-7/8 | 1-3/16 | 3-1/8 |
| NCLX-5 | 3/4 | 1-5/32 | 1-9/16 | 4-7/8 | 1–3/16 | 3-1/16 |
| NCLX-5L | 3/4 | 1-5/32 | 1-9/16 | 4-7/8 | 2-3/32 | 2–1/8 |
| NCLX-5LX | 3/4 | 1-5/32 | 1-9/16 | 4-7/8 | 2-5/16 | 1–7/8 |
| NCLX-LS | 3/4 | 1-5/32 | 1-9/16 | 4-7/8 | 2–5/8 | 1-9/16 |
| NCLX-A | 3/4 | 1-5/32 | 1-9/16 | 4-7/8 | 3-5/16 | 7/8 |
| NCLX-8 | 3/4 | 1-5/32 | 1-9/16 | 9-3/4 | 1-3/16 | 7–7/8 |

NCLX CONT.







FVX/FVMX

COMMERCIAL, RESIDENTIAL

The FVX Series combination temperature and pressure relief valves are designed to offer high capacity protection for domestic and commercial water heating devices. The FVX Series Valves are fully automatic with the valves resetting after either temperature or pressure relief.

The larger FVX Series Valves are well suited for such commercial applications as restaurants, hospitals and laundries.

All FVX Series valves through 1–1/4" have coated thermal elements that protect against mineral build-up. The 1–1/2" and 2" valves have stainless steel elements. The FVX Series Valves are available with male (FVMX) or female (FVX) inlet connections and female only outlet connections.

FEATURES AND BENEFITS:

- · Offers high capacity protection for domestic and commercial hot water heating devices
- The valves reseat automatically after either temperature or pressure relief
- The larger series valves are well suited for commercial applications
- Every valve is tested for performance prior to shipping

PERFORMANCE:

Available Set Pressures Temperature Relief Service 75-150 psi 210°F Hot water

| | FVX Series (Female Inlet) | | | | | | | |
|--------|---|------------|------------------|---------------------|-----------------------|-------------------|--|--|
| | CSA (ANSI Z21.22/CSA 4.4) and ASME (Boiler Code Section IV) Ratings | | | | | | | |
| | | CSA Rating | | ASME Rating at Pres | sure Setting Indicate | d | | |
| Туре | Inlet Size (NPS) | (BTU/hr) | 75 psig (BTU/hr) | 100 psig (BTU/hr) | 125 psig (BTU/hr) | 150 psig (BTU/hr) | | |
| FVX-3C | 3/4" | 185,000 | 1,034,000 | 1,327,000 | 1,619,000 | 1,912,000 | | |
| FVX-5C | 3/4" | 205,000 | 1,034,000 | 1,327,000 | 1,619,000 | 1,912,000 | | |
| FVX-8C | 3/4" | 205,000 | 1,034,000 | 1,327,000 | 1,619,000 | 1,912,000 | | |
| FVX-3C | 1" | 500,000 | 1,165,000 | 1,495,000 | 1,825,000 | 2,155,000 | | |
| FVX-5C | 1" | 500,000 | 1,165,000 | 1,495,000 | 1,825,000 | 2,155,000 | | |
| FVX-5L | 1" | 750,000 | 1,960,000 | 2,515,000 | 3,070,000 | 3,625,000 | | |
| FVX-8L | 1" | 750,000 | 1,960,000 | 2,515,000 | 3,070,000 | 3,625,000 | | |
| FVX-4 | 1–1/2" | 1,200,000 | 3,273,000 | 4,199,000 | 5,125,000 | 6,050,000 | | |

| | FVMX Series (Male Inlet) | | | | | | |
|----------|--------------------------|------------------|--------------------|---------------------|-----------------------|-------------------|--|
| | CSA (AN | ISI Z21.22/CSA 4 | 4.4) and ASME (Boi | ler Code Section IV | /) Ratings | | |
| Туре | Inlet Size (NPS) | CSA Rating | | ASME Rating at Pres | sure Setting Indicate | d | |
| туре | iniet Size (NPS) | (BTU/hr) | 75 psig (BTU/hr) | 100 psig (BTU/hr) | 125 psig (BTU/hr) | 150 psig (BTU/hr) | |
| FVMX-3C | 3/4" | 185,000 | 1,034,000 | 1,327,000 | 1,619,000 | 1,912,000 | |
| FVMX-5C | 3/4" | 205,000 | 1,034,000 | 1,327,000 | 1,619,000 | 1,912,000 | |
| FVMX-8C | 3/4" | 205,000 | 1,034,000 | 1,327,000 | 1,619,000 | 1,912,000 | |
| FVMX-1LS | 3/4" | 185,000 | 1,034,000 | 1,327,000 | 1,619,000 | 1,912,000 | |
| FVMX-5LS | 3/4" | 205,000 | 1,034,000 | 1,327,000 | 1,619,000 | 1,912,000 | |
| FVMX-3C | 1" | 500,000 | 1,165,000 | 1,495,000 | 1,825,000 | 2,155,000 | |
| FVMX-5C | 1" | 500,000 | 1,165,000 | 1,495,000 | 1,825,000 | 2,155,000 | |
| FVMX-3LS | 1" | 500,000 | 1,165,000 | 1,495,000 | 1,825,000 | 2,155,000 | |
| FVMX-4LS | 1" | 500,000 | 1,165,000 | 1,495,000 | 1,825,000 | 2,155,000 | |
| FVMX-6LS | 1" | 500,000 | 1,165,000 | 1,495,000 | 1,825,000 | 2,155,000 | |
| FVMX-4L | 1-1/4" | 750,000 | 1,960,000 | 2,515,000 | 3,070,000 | 3,625,000 | |
| FVMX-3 | 2" | 1,200,000 | 3,273,000 | 4,199,000 | 5,125,000 | 6,050,000 | |



FVX/FVMX CONT.

APPLICATIONS: Commercial and domestic hot water heating applications.

AVAILABLE CONNECTIONS:

Threaded (NPT)

Male or female inlet and female outlet

APPROVALS AND LISTINGS:

CSA Listed to ANSI Z21.22/CSA 4.4; NB Listed to ASME Boiler Code Section IV.





| FVX Series (Female Inlet) | | | | | | |
|---------------------------|---------------------|----------------------|--------|-------------|--------|--------|
| Туре | Inlet Size (NPS) | Outlet Size (NPS) | | NS (inches) | | |
| 51 | Female | Female | Α | В | С | D |
| FVX-3C | 3/4 | 3/4 | 1–1/2 | 3–15/32 | 5-7/32 | 3 |
| FVX-5C | 3/4 | 3/4 | 1–1/2 | 3–15/32 | 6-7/8 | 4-5/8 |
| FVX-8C | 3/4 | 3/4 | 1–1/2 | 3–15/32 | 10–1/8 | 7–7/8 |
| FVX-3C | 1 | 1 | 1-9/16 | 3–15/32 | 5-7/32 | 3-3/32 |
| FVX-5C | 1 | 1 | 1-9/16 | 3–15/32 | 6-7/8 | 4-3/4 |
| FVX-5L | 1 | 1 | 1–3/4 | 4-3/8 | 5–7/8 | 4-3/4 |
| FVX-8L | 1 | 1 | 1–3/4 | 4-3/8 | 9–1/4 | 8-5/32 |
| FVX-4 | 1–1/2 | 1–1/2 | 2-1/2 | 5–7/8 | 5–7/8 | 4-3/16 |

| FVMX Series (Male Inlet) | | | | | | | |
|--------------------------|---------------------|----------------------|---------|----------|-----------------|---------|--|
| Туре | Inlet Size (NPS) | Outlet Size (NPS) | | DIMENSIO | NSIONS (inches) | | |
| -31 | Male | Female | Α | В | С | D | |
| FVMX-3C | 3/4 | 3/4 | 1–1/2 | 3-15/32 | 5-7/32 | 2-25/32 | |
| FVMX-5C | 3/4 | 3/4 | 1–1/2 | 3-15/32 | 6-7/8 | 4-7/16 | |
| FVMX-8C | 3/4 | 3/4 | 1–1/2 | 3-15/32 | 10–1/8 | 7–11/16 | |
| FVMX-1LS | 3/4 | 3/4 | 1–17/32 | 3-15/32 | 5-7/32 | 1-15/32 | |
| FVMX-5LS | 3/4 | 3/4 | 1–17/32 | 3-15/32 | 9-3/32 | 5-3/8 | |
| FVMX-3C | 1 | 1 | 1-9/16 | 3-15/32 | 5-7/32 | 3–1/8 | |
| FVMX-5C | 1 | 1 | 1-9/16 | 3-15/32 | 6-7/8 | 4-25/32 | |
| FVMX-3LS | 1 | 1 | 1-19/32 | 3-15/32 | 6–7/8 | 3 | |
| FVMX-4LS | 1 | 1 | 1-19/32 | 3-15/32 | 6-7/8 | 4-1/16 | |
| FVMX-6LS | 1 | 1 | 1-19/32 | 3-15/32 | 10-1/8 | 6-1/4 | |
| FVMX-4L | 1–1/4 | 1 | 1-3/4 | 4-11/32 | 5-7/8 | 3-29/32 | |
| FVMX-3 | 2 | 1–1/2 | 2-15/32 | 5-27/32 | 5-27/32 | 3-5/16 | |







COMMERCIAL, RESIDENTIAL

The FWL-2 is a pressure only relief valve designed specifically for the protection of hot water supply systems where overpressure conditions are likely to occur as a result of thermal expansion.

Completely automatic, the FWL-2 reseats after pressure relief. The valve may be installed directly on the tank or in a tee and is appropriate for either side (hot or cold) of the water heater.

The FWL-2 is fitted with a bronze body, brass and stainless steel internal parts, a silicone seat disc and a stainless steel pressure spring. The FWL-2 is compact and economical. The factory relief settings for 1/2" and 3/4" sizes are 75, 125 or 150 psi.

500,000

500,000

FEATURES AND BENEFITS:

- Specifically for the protection of hot water supply systems
- Offers protection from over-pressure conditions that are likely to occur as a result of thermal expansion
- Compact and economical
- Every valve is tested for performance prior to shipping

PERFORMANCE:

FWL-2

| Available Set pressures | 150 psi (75 and 125 psi available) |
|-------------------------|------------------------------------|
| Service | Water |

| CS | CSA (ANSI Z21.22/CSA 4.4) and ASME (Boiler Code Section IV) Ratings | | | | | | | |
|-------|---|------------------------|---------------------|----------------------|----------------------|--|--|--|
| | Size | ASME | E Rating at Press | ure Setting Indi | cated | | | |
| Туре | (NPS) | CSA Rating (BTU/hr) | 75 psig (BTU/hr) | 125 psig (BTU/hr) | 150 psig (BTU/hr) | | | |
| FWL-2 | 1/2" | 15,000 (1) | N/R (1) | N/R | N/R | | | |

N/R (1)

200,000 (1) (1) The 1/2" and 3/4" FWL-2 at 75 psig are not CSA or ASME rated.

(2) N/R indicates Type is available but Not ASME Rated at the indicated pressure set.

APPLICATIONS: Commercial and domestic hot water heating applications.

AVAILABLE CONNECTIONS:

3/4"

Threaded (NPT) Male inlet and female outlet

APPROVALS AND LISTINGS:

CSA Listed to ANSI Z21.22/CSA 4.4; NB listed to ASME Boiler Code Section IV (FWOL are not Listed; 1/2" sizes are CSA Listed only).

| Туре | Size | ſ | DIMENSIONS (inc | hes) |
|-------|-------|--------|-----------------|---------|
| | (NPS) | А | В | C |
| FWL-2 | 1/2 | 1-3/32 | 1–9/16 | 1–25/32 |
| FWL-2 | 3/4 | 1-5/32 | 1-9/16 | 1-25/32 |







F-30

COMMERCIAL

The F-30 is a compact and economical ASME Safety Relief Valve for use on hot water space heating boilers, water supply heaters, and storage tanks. It features an all brass body, brass internal parts, a silicone seat disc and a stainless steel pressure spring.

The F-30 Relief Valve is designed for use on hot water service only and is not to be used on steam.

The F-30 is available in 3/4" size only. The standard factory pressure relief setting is 30 psi.

FEATURES AND BENEFITS:

- Compact and economical
- Every valve is tested for performance prior to shipping

PERFORMANCE:

| Set pressure | 30 psi |
|--------------|--------|
| Service | Water |

APPLICATIONS: Commercial hot water space heating boilers, water supply heaters, and storage tanks.

AVAILABLE CONNECTIONS:

Threaded 3/4" male or female inlet and female outlet

APPROVALS AND LISTINGS:

NB Listed to ASME Boiler Code Section IV with a relief capacity of 510,000 BTU/hr.

| Туре | Size | DI | es) | |
|----------------|-------|--------|--------|---------|
| •• | (NPS) | Α | В | С |
| F-30 | 3/4 | 1–5/32 | 1-9/16 | 1–25/32 |
| F-30 FIP X FIP | 3/4 | 1-5/32 | 1-9/16 | 1-25/32 |











COMMERCIAL

The F-82 is a pressure-only ASME relief valve designed for use on hot water space heating boilers, water supply heaters and storage tanks.

The F-82 Safety Relief Valves are designed for use on hot water service only and are not to be used on steam.

The F-82 has a female inlet and outlet. The F-82 ASME Safety Relief Valve has a factory pressure relief setting from 30 to 150 psi. These high capacity pressure-only relief valves feature bronze bodies, silicone seat discs and stainless steel pressure springs.

FEATURES AND BENEFITS:

- Compact and economical
- The valves reseat automatically after pressure relief
- Ideal for most domestic water heater applications
- Rated for emergency steam discharge by the National Board of Boiler and Pressure Vessel Inspectors
- Every valve is tested for performance prior to shipping

30–150 psi Water

PERFORMANCE:

| Available Set pressures | |
|-------------------------|--|
| Service | |

| ASI | ASME RELIEF CAPACITIES AT STANDARD SETTINGS – BTU/HR STEAM RELIEF | | | | | | |
|-------------------|---|-----------------|-------------------------|-------------------------|-----------------|--|--|
| RELIEF SETTING | F-82 3/4" x 3/4" | F-82 1" x 1" | F-82 1-1/4" x 1-1/4" | F-82 1-1/2" x 1-1/2" | F-82 2" x 2" | | |
| 30 psi | 717,000 | 1,025,000 | 1,704,000 | 2,085,000 | 3,902,000 | | |
| 50 psi | 1,048,000 | 1,498,000 | 2,490,000 | 3,047,000 | 5,701,000 | | |
| 75 psi | 1,462,000 | 2,090,000 | 3,472,000 | 4,249,000 | 7,951,000 | | |
| 100 psi | 1,875,000 | 2,680,000 | 4,454,000 | 5,451,000 | 10,200,000 | | |
| 125 psi | 2,289,000 | 3,271,000 | 5,437,000 | 6,653,000 | 12,450,000 | | |
| 150 psi | 2,703,000 | 3,862,000 | 6,419,000 | 7,855,000 | 14,699,000 | | |



APPLICATIONS: Commercial hot water space heating boilers, water supply heaters, and storage tanks.

AVAILABLE CONNECTIONS:

Threaded (NPT)

Female inlet and female outlet (Male inlet also available on 3/4" size)

APPROVALS AND LISTINGS:

NB Listed to ASME Boiler Code Section IV.

| Inlet Size | Outlet Size | DIMENSIONS (inches) | | |
|--------------|--------------|---------------------|---------|---------|
| (NPS) Female | (NPS) Female | А | В | С |
| 3/4 | 3/4 | 1–1/2 | 3–1/2 | 1-11/16 |
| 1 | 1 | 1–3/4 | 4-11/32 | 1–7/64 |
| 1–1/4 | 1–1/4 | 2–1/16 | 5-9/16 | 1–1/2 |
| 1-1/2 | 1-1/2 | 2–15/32 | 5-7/8 | 1-21/32 |
| 2 | 2 | 3 | 7–1/2 | 2–5/32 |

| Inlet Size (NPS) Male | Outlet Size (NPS) Female | DIMENSIONS (inches) | | | |
|--------------------------|-----------------------------|---------------------|-------|---------|--|
| | | A | В | С | |
| 3/4 | 3/4 | 1–1/2 | 3–1/2 | 1–17/32 | |




TEMPERATURE & PRESSURE RELIEF VALVES



F-95

COMMERCIAL

The F-95 Expanded Outlet Pressure Relief Valve offers a complete package of expanded boiler ASME safety relief valves in sizes ranging from 3/4" x 1" through 2" x 2–1/2". The F-95 features an iron body construction, brass seat, silicone seat disc and EP diaphragms for high temperature applications. It also incorporates a pop-type action. The F-95 Valves are available with relief settings from 30 to 75 psi.

FEATURES AND BENEFITS:

- Offers a complete package of expanded boiler safety relief valves in a range of sizes
- Provides pressure protection for nearly all commercial/industrial OEM boilers and hot water heating system applications
- Higher Capacity: Handles more volume with just one relief valve
- Every valve is tested for performance prior to shipping

PERFORMANCE:

| Available Set pressures | 30-75 psi |
|-------------------------|-----------|
| Service | Water |

| ASME RATED HOT WATER SAFETY RELIEF VALVE (BTU/HR) | | | | | |
|---|-----------|-------------|--------------------|-------------|-------------|
| Set Pressure (psi) | 3/4" x 1" | 1" x 1-1/4" | 1-1/4" x 1-1/2" | 1-1/2" x 2" | 2" x 2-1/2" |
| 30 | 952,000 | 1,337,000 | 2,090,000 | 3,010,000 | 5,351,000 |
| 45 | 1,281,000 | 1,800,000 | 2,813,000 | 4,051,000 | 7,202,000 |
| 60 | 1,611,000 | 2,262,000 | 3,536,000 | 5,092,000 | 9,053,000 |
| 75 | 1,940,000 | 2,725,000 | 4,259,000 | 6,133,000 | 10,904,000 |



APPLICATIONS: Provides pressure protection for nearly all types of commercial and industrial OEM boilers and water heating system applications.

AVAILABLE CONNECTIONS:

Threaded (NPT) Female inlet and female outlet

APPROVALS AND LISTINGS:

NB Listed to ASME Boiler Code Section IV.

| Inlet Size | Outlet Size (NPS) Female | DIMENSIONS (inches) | | |
|--------------|-----------------------------|---------------------|---------|----------|
| (NPS) Female | | А | В | С |
| 3/4 | 1 | 1–13/16 | 2–13/32 | 5–1/2 |
| 1 | 1–1/4 | 2–1/16 | 2-3/8 | 6-13/32 |
| 1–1/4 | 1–1/2 | 2-3/8 | 3-3/32 | 9-9/16 |
| 1-1/2 | 2 | 2–5/8 | 3-7/8 | 10-3/32 |
| 2 | 2–1/2 | 3-7/16 | 3-1/2 | 12–13/16 |





TEMPERATURE & PRESSURE RELIEF VALVES

F, FW & FWC

COMMERCIAL, INDUSTRIAL

The FW and FWC Valves are small, low-cost relief valves suitable for static over-pressure protection. Type FWC incorporates a calibrated adjusting screw for occasional changes in pressure setting without the use of a pressure gauge. Bronze bodies with male inlet and female outlet, silicone seats and stainless steel spring.

FEATURES AND BENEFITS:

- Offers protection against problematic and over-pressure conditions:
 - thermal expansion protection
 - static pressure and over-pressure relief
 - · very low capacity pump relief
 - other uses of similar nature where tight shut-off is required
- · Designed to meet the needs of a wide variety of water systems in Commercial and industrial applications
- Every valve is tested for performance prior to shipping

PERFORMANCE:

| Set pressure range | 15 - 200 psi (Type FW) and |
|---------------------|--|
| | 25 – 175 psi (Type FWC) factory set at 125 psi |
| Maximum temperature | 210°F |
| Service | Water |

APPLICATIONS: For commercial and industrial applications including thermal expansion protection, static pressure and overpressure relief, low capacity pump relief and other uses of similar nature where tight shut-off is required. Valves are non-code.

AVAILABLE CONNECTIONS:

| Threaded (| (NPT) | |
|------------|-------|--|
|------------|-------|--|

Male inlet and female outlet

| DIMENSIONS (inches) | А | В | с |
|------------------------|--------|---------|-------|
| FW – 1/2 | 1-3/16 | 1–11/32 | 1–1/2 |
| FW – 3/4 | 1–3/16 | 1–11/32 | 1–1/2 |
| FWC – 1/2 | 1-3/16 | 2–5/8 | 1–1/2 |
| FWC – 3/4 | 1–1/4 | 2–5/8 | 1–1/2 |







TEMPERATURE & PRESSURE RELIEF VALVES



VR-801

COMMERCIAL

The VR-801 Vacuum Relief Valve is designed to protect hot water supply systems and pressure vessels against negative pressure. It is especially well suited for many domestic and commercial systems.

It works by preventing internal vacuum conditions that could result in burned out heaters and/or collapsed storage tanks. Installed on the cold water supply line, the Cash Acme VR-801 closes tightly under pressure and opens at a 1" mercury vacuum. Atmosphere admitted to the system breaks the vacuum, preventing collapse of the storage tank.

FEATURES AND BENEFITS:

- Prevents internal vacuum conditions
- · Guards against siphonage, burnt-out heaters and collapsing of storage tanks and negative pressure
- Opens quickly in emergency situations on a one inch mercury vacuum
- Every valve is tested for performance prior to shipping

PERFORMANCE:

| Relief pressure (open) | 1" Hg vacuum |
|------------------------|-------------------|
| Capacity | 13 SCFM (@ 2" Hg) |
| Maximum temperature | 210°F |
| Maximum inlet pressure | 200 psi |
| Service | Water |

APPLICATIONS: For protection of commercial hot water supply systems and pressure vessels against negative pressure.

AVAILABLE CONNECTIONS:

Threaded (NPT) 1/2" and 3/4"

APPROVALS AND LISTINGS:

ANSI Z21.22/CSA 4.4. Listed by CSA.





BACKFLON PREVENTERS

Cash Acme Backflow Preventers provide the protection you need to ensure your water supply is safe in case of negative or decreased water pressure. In the event of backpressure or backsiphonage, our backflow prevention devices help halt the reversal of water and the decrease the chances of contamination.

Our backflow preventer selection includes hose connection vacuum breakers, atmospheric vacuum breakers, testable backflow preventers, dual check valves and vented dual check valves. Each backflow preventer is tested for efficiency and performance before leaving our Cullman, Alabama factory. This commitment to quality has made us one of the most trusted names in the industry.

Local or state government typically enforces backflow prevention. Consult your local jurisdiction on backflow prevention requirement and devices.



V-3 VACUUM BREAKER

COMMERCIAL, RESIDENTIAL

Prevents dangerous back-siphonage and backflow into a potable water supply. All-brass construction with threaded connections, neoprene seat disc, rubber washer, and steel set screw. The V-3 is equipped with a protruding tip device for manual draining of faucet (after hose removal) which prevents freezing. Maximum pressure is 125 psi; maximum temperature is 180°F (82°C). The V-3 is available chrome-plated (V-3C) on special order.

Note: These units are not intended for use where water contamination could occur as a result of draining or for permanent continuous pressure installation. For continuous pressure systems, install the BFP Backflow Preventer Valve.

FEATURES AND BENEFITS:

- Designed for any place involving moveable hoses attached to threaded faucets
- The V-3 is equipped with a protruding "tip" device for manual draining of faucet (after hose removal) which prevents freezing
- Polished chrome plating designs are also available

PERFORMANCE:

| Maximum temperature | 180° F |
|---------------------|---------|
| Maximum pressure | 125 psi |
| Service | Water |

APPLICATIONS: For use around homes, schools, commercial buildings, laboratories, or any place involving removable hoses attached to threaded faucets, indoors or out.

AVAILABLE CONNECTIONS:

3/4" Threaded (NPT)

APPROVALS AND LISTINGS:

ASSE 1011 and CSA B64. Listed by ASSE, CSA and IAPMO.

| DIMENSIONS (inches) | А | В |
|------------------------|--------|--------|
| 3/4 | 1-6/16 | 1-6/16 |







BACKFLOW PREVENTERS

VB-222 VACUUM BREAKER

COMMERCIAL, RESIDENTIAL

The VB-222 vacuum breaker valve is designed to prevent dangerous back-siphonage and backflow into a potable water supply system. It automatically self-drains when all attachments are removed completely from the valve's outlet which protects the valve and faucet from freezing and rupturing in cold weather. Constructed with brass body and adapter, Buna O-ring and seat disc, steel set screw, stainless steel springs and the highest quality molded parts.

Note: These units are not intended for use where water contamination could occur as a result of draining or for permanent continuous pressure installation. For continuous pressure systems, install the BFP Backflow Preventer Valve.

FEATURES AND BENEFITS:

- Prevents dangerous back-siphonage
- Automatically drains when attachments are removed from the valve's outlet
- Freeze proof self-draining hose protects the valve and faucet from freezing and rupturing in cold weather

PERFORMANCE:

Service

Water

APPLICATIONS: For use around homes, schools, commercial buildings, laboratories or any application involving a removable hose attached to threaded faucets.

AVAILABLE CONNECTIONS:

Threaded (NH)

APPROVALS AND LISTINGS:

ASSE 1011 and CSA 64. Listed by ASSE, CSA and IAPMO.

| DIMENSIONS (inches) | А | В |
|---------------------|--------|---|
| 3/4 | 1–5/16 | 2 |

3/4"





V-101 ANTI-SIPHON VACUUM BREAKER

COMMERCIAL, RESIDENTIAL

The V-101 anti-siphon vacuum breaker is constructed with female connections, a bronze body, and a silicone seat. It is designed for maximum intermittent water pressure of 125 psi, and is suitable for temperatures up to 212°F (100°C). A polished chrome model is also available (up to 1" size only).

Note: Not for continuous pressure use.

FEATURES AND BENEFITS:

- · Prevents polluted water from being siphoned into the potable water supply
- · Required for open tanks, basins, sprinkler systems and dishwashers
- Equipped with a lighter than water poppet assembly providing maximum buoyancy, prevents sticking and keeps spillage to an absolute minimum
- Available in lead free and non-potable applications

PERFORMANCE:

| Maximum temperature | 212°F (100°C) |
|------------------------|------------------------|
| Maximum inlet pressure | 125 psi (Intermittent) |
| Service | Potable water |

 $\begin{array}{c} & & \\ & &$

APPLICATIONS: Recommended applications include: open tanks or basins filled by a hose below the water line; in appliances where water enters below the overflow rim; or in lawn sprinkling systems, or medical, surgical and therapeutic facilities.

AVAILABLE CONNECTIONS:

Threaded (NPT)

1/2", 3/4" and 1"

APPROVALS AND LISTINGS:

ASSE 1001 and CSA B64. Listed by ASSE, CSA and IAPMO.

| DIMENSIONS (inches) | А | В | С |
|----------------------------|---------|---------|---------|
| V–101 & V–101C – 1/2 | 2–1/8 | 1–5/16 | 1-5/16 |
| V–101 & V–101C – 3/4 | 2-9/16 | 1–1/2 | 1–1/2 |
| V–101 & V–101C – 1 | 2–15/16 | 1–11/16 | 1–11/16 |





BF DUAL CHECK VALVE

COMMERCIAL, RESIDENTIAL

The Cash Acme BF series dual check valve prevents polluted water from entering the potable water supply system by preventing the reverse flow of water into supply lines, and is constructed of a cast bronze body and brass union inlet connection. The Cash Acme BF-1 is available in 3/4" and 1" sizes and incorporates a female threaded union inlet and a female threaded outlet. The Cash Acme BF-5 is available as a 1" meter threaded (swivel) inlet and 3/4" FNPT (union).

FEATURES AND BENEFITS:

- · Prevents polluted water from entering the potable water supply system
- Prevents the reverse flow of water into supply lines
- Straight through design to minimize pressure drop
- May be installed horizontally or vertically
- Available in lead free applications

PERFORMANCE:

| Maximum temperature | 140 °F (60 °C) |
|---------------------|----------------|
| Maximum pressure | 175 psi |
| Service | Water |

APPLICATIONS: Intended for use with continuous or intermittent applications on water supply lines.

AVAILABLE CONNECTIONS:

| Brass union inlet connection | 3/4" and 1" FNPT |
|------------------------------|------------------|
| Swivel connections | 1" meter NPSH |

APPROVALS AND LISTINGS:

ASSE 1024 and CSA B64. Listed by ASSE and CSA.

| BF-1 | |
|---------------------|-------|
| DIMENSIONS (inches) | Α |
| 3/4 FNPT | 4-3/8 |
| 1 FNPT | 4-3/8 |

| BF-5 | |
|-------------------------------|--------|
| DIMENSIONS (inches) | А |
| 1" Meter x 3/4" FNPT Union | 5-3/16 |

| BF Series Typical Flow Loss | | | | | | |
|------------------------------------|------------|------------------------|--|--|--|--|
| Size | Flow (gpm) | Pressure Loss (psi) | | | | |
| | 3 | 4.3 | | | | |
| | 6 | 5.0 | | | | |
| All Sizes | 9 | 5.8 | | | | |
| 51205 | 12 | 6.7 | | | | |
| | 18 | 8.0 | | | | |









BACKFLOW PREVENTERS

BFP DUAL CHECK VALVE

RESIDENTIAL, COMMERCIAL

The BFP series dual check valve prevents backflow of contaminated water into potable water supply lines. Constructed of a brass body with two spring loaded poppet-type valve modules and threaded female union inlet and outlet connections. Internal strainer screen, and stainless steel springs. Suitable for hot (up to 180°F [82°C]) or cold water under continuous pressure.

FEATURES AND BENEFITS:

- · Prevents polluted water from entering the potable water supply system
- Prevents the reverse flow of water into supply lines
- · Internal plastic parts and high temperature elastomer seals resist corrosion
- Designed for use at cross-connections
- Perfect for boiler feed lines, dairy processing, chlorinators, livestock drinking fountains and numerous other similar applications
- Lead free for domestic water supply

PERFORMANCE:

| Maximum temperature | 180° F |
|------------------------|---------|
| Maximum inlet pressure | 170 psi |
| Service | Water |

APPLICATIONS: Intended for use with boiler feed lines, dairy processing systems, livestock water sources, chlorinators, trap primers and similar installations.

AVAILABLE CONNECTIONS:

Threaded (NPT) 1/2" and 3/4"

APPROVALS AND LISTINGS:

ASSE 1012 and CSA B.64. Listed by ASSE and CSA.

| DIMENSIONS (inches) | Α | В | С | D |
|----------------------------|--------|---------|---------|---------|
| 1/2 | 5-3/32 | 2-7/16 | 1-25/32 | 2-63/64 |
| 3/4 | 5-5/32 | 2–17/32 | 1-25/32 | 2-63/64 |







DC500 DOUBLE CHECK

RESIDENTIAL, COMMERCIAL

The DC500 double check backflow preventer valve features a top entry, single access cover and a plastic body, with four vertical test-cocks and two quarter-turn ball valves provide for easy and fast servicing of the valve. Resistant to scaling, fertilizers, herbicides, insecticides and is corrosion resistant. Used for applications deemed low hazard.

FEATURES AND BENEFITS:

- · Includes two full-port, quarter-turn ball valves allowing for quick isolation of main chamber for servicing
- · Top-entry, single access cover provides easy access and servicing for valve internals
- · Body, test cocks, and shut-off valves are "lead free"
- Check valve seats composed of high quality NoryI[™] material, lasting longer and holding up to extreme conditions
- All internals are composed of dimensionally stable, corrosion-resistant materials providing for longer valve life and less
 servicing

PERFORMANCE:

Maximum working pressure150 psiMaximum working temp110°F (43°C)Hydrostatic Test Pressure350 psi

APPLICATIONS: Intended for the prevention of back pressure or back-siphonage into the potable water supply system when low hazard systems are connected.

AVAILABLE CONNECTIONS:

3/4", 1", 1-1/2", and 2"

APPROVALS AND LISTINGS: ASSE 1015, NSF 61, AWWA C510, USC.

| DIMENSIONS | | | | | | | | |
|------------|--------|--------|--------|---------|--------|-------------|-------------|--|
| Size | А | В | С | D | Width | Wgt with GV | Wgt less GV | |
| Inches | Inches | Inches | Inches | Inches | Inches | lbs | lbs | |
| 3/4 | 11-5/8 | 7–5/8 | 3-3/4 | 2–11/16 | 4 | 1.61 | 3.12 | |
| 1 | 13 | 7–5/8 | 3-3/4 | 2–11/16 | 4 | 4.33 | 1.71 | |
| 1–1/2 | 19–7/8 | 13 | 6 | 3–7/8 | 6–1/4 | 10.81 | 5.75 | |
| 2 | 20-3/4 | 13 | 6 | 3-7/8 | 6–1/4 | 14.39 | 5.82 | |





BACKFLOW PREVENTERS

RP500 REDUCED PRESSURE ZONE

USED IN HIGH HEALTH HAZARD APPLICATIONS

COMMERCIAL, RESIDENTIAL

The RP500 reduced pressure zone valve features a short lay length, a single top access cover for easy servicing. It contains no lead or heavy metals and is lead-free compliant. The valve is not susceptible to corrosion in aggressive water conditions and acts as a dielectric coupler in the water system.

FEATURES AND BENEFITS:

- Top-entry, single access cover provides easy access and servicing for valve internals
- Ideal for installation in small spaces
- Distinct, unique check assemblies eliminates installing checks in wrong positions
- Internals composed of corrosion resistant materials
- Body, test cocks, and shut-off valves are "lead free"
- Check valve seats composed of high quality Noryl[™] material, lasting longer and holding up to extreme conditions

PERFORMANCE:

| Max. working pressure | 150 psi |
|---------------------------|--------------|
| Max. working temperature | 110°F (43°C) |
| Hydrostatic Test Pressure | 350 psi |

APPLICATIONS: Protects against high hazard backflow or back siphonage into the potable water system.

AVAILABLE CONNECTIONS:

1/2", 3/4", 1", 1-1/4", 1-1/2" and 2"

APPROVALS AND LISTINGS:

ASSE 1013, NSF 61, AWWA C511, USC, ASSE 1013, NSF 61, AWWA C511.

| DIMENSIONS | | | | | | | | |
|------------|--------|--------|--------|--------|--------|-------------|-------------|--|
| Size | Α | В | С | D | Width | Wgt with GV | Wgt less GV | |
| Inches | Inches | Inches | Inches | Inches | Inches | lbs | lbs | |
| 1/2 | 11 | 7–3/4 | 4-1/2 | 2–5/8 | 3-1/2 | 2.87 | 1.75 | |
| 3/4 | 11-3/4 | 7–3/4 | 4-1/2 | 2–5/8 | 3–1/2 | 3.385 | 1.75 | |
| 1 | 13 | 7–3/4 | 4-1/2 | 2-3/4 | 3–1/2 | 4.505 | 1.76 | |
| 1–1/4 | 18-3/4 | 13 | 6-1/2 | 3-7/8 | 6 | 9.10 | 5.76 | |
| 1-1/2 | 19–3/8 | 13 | 6–1/2 | 3–7/8 | 6 | 10.88 | 5.69 | |
| 2 | 20-5/8 | 13 | 6-1/2 | 3–7/8 | 6 | 14.29 | 5.67 | |



BACKFLOW PREVENTERS



PRESSURE VACUUM BREAKER

COMMERCIAL, RESIDENTIAL

The PVB pressure vacuum breaker is designed for installation on potable water lines to prevent contaminated water backsiphonage into the potable water supply. Assembly shall provide protection against back-siphonage where a potential health hazard exists.

FEATURES AND BENEFITS:

- Replaceable seat allows for easy repair
- Fewer internal parts Allows for easy maintenance
- Corrosion resistant parts Provide for longer life with less service
- Valve bonnet and seat rings composed of high quality Noryl[™] material, lasting longer and holding up to extreme conditions

PERFORMANCE:

| Maximum working pressure | 175 psi |
|---------------------------|--------------|
| Maximum working temp | 140°F (60°C) |
| Hydrostatic Test Pressure | 300 psi |

APPLICATIONS: Connection of a system where a potential health hazard exists to potable water supply or irrigation system water supply.

AVAILABLE CONNECTIONS:

3/4" and 1"

APPROVALS AND LISTINGS:

ASSE 1020 listed and all major national approvals are under the Danfoss Flomatic brand name. For sizes 1-1/4", 1-1/2" and 2" please refer to Conbraco's PVB 4V-500 technical documents.

| DIMENSIONS | | | | | | | | | | |
|------------|--------|--------|--------|--------|--------|--------|--------|-----------|-------------------------|--------------------------|
| Size | Part # | Α | В | с | D | E | E | Width | Wgt with ball valves | Wgt w/out ball valves |
| Inches | | Inches | Inches | Inches | Inches | Inches | Inches | lbs | lbs | |
| 3/4 | B9500 | 6 | - | 4-5/16 | 4-1/2 | 3 | 3-7/8 | 3–1/4 lbs | 1–1/2 lbs | |
| 1 | B9501 | 6–1/2 | 7–1/8 | 5-1/16 | 5-1/16 | 3 | 4 | 4–1/4 lbs | 1–1/2 lbs | |







BACKFLOW REPAIR KITS

Backflow Preventer Complete Repair Kits contain internal components to repair Cash Acme backflow preventers. Available in both complete rubber valve kits that include all rubber internals, and complete relief valve kits. Applicable kit configuration(s) match up with existing Cash Acme backflow preventer model numbers.

APPLICATIONS: Used for the maintenance and repair of the internal components of existing backflow prevention devices.

Engineered for both small residential settings and large-capacity commercial systems, Cash Acme General Heating Products can safeguard the plumbing infrastructure of homes and facilities across the board. From water hammer arrestors that protect pipe systems against pressure shock waves to washing machine shut-off valves that safeguard appliance hose connections and working parts, we have the general plumbing solutions you need to maintain your home, office or large facility.

Our wide range of specialty products sync with the larger Cash Acme water control product range, and provide integral plumbing solutions for a variety of heating and plumbing applications.



WASHING MACHINE SHUT-OFF VALVE

COMMERCIAL, RESIDENTIAL

Single-lever control of both hot and cold water to protect a washing machine's hose and inner working parts. E-Z on/off ball-type design can also be used to throttle water flow and ease the water hammer shock caused by solenoid valves. Bronze construction. Equipped with fluoropolymer seats against brass thru-hole balls that provide quiet rotating action. The WM-1 is supplied with male adapters. The WM-2 is furnished with sweat copper elbow adapters (2-3/8" on centers), which may be installed either up or down.

FEATURES AND BENEFITS:

- · Convenient single lever control makes it easy to use and encourages shut-off of the water supply
- Economical and easy to install

PERFORMANCE:

| Maximum temperature | 180°F |
|---------------------|--------|
| Maximum pressure | 80 psi |
| Service | Water |

APPLICATIONS: Designed for control of both hot and cold water supply to a washing machine.

AVAILABLE CONNECTIONS:

Threaded (NPT)

1/2" NPT and 3/4" Hose

APPROVALS AND LISTINGS:

ASSE 1012 and CSA B.64. Listed by ASSE and CSA.

| DIMENSIONS (inches) | А | В | С |
|----------------------------|-------|-------|-------|
| WM-1 | | 1 7/0 | 1–3/8 |
| WM-2 | 2–3/8 | 1–7/8 | 1–1/8 |





A-41 AND AB-40

COMMERCIAL

The A-41 series pressure reducing boiler feed valve provides increased capacity for larger boilers. It has threaded female connections and an iron body with a polymer seat. The AB-40 series pressure reducing boiler feed valve features a brass body and a combo connection which allows either a threaded or sweat copper connection with the same union tail piece. The AB-40 also includes a check valve and provides an inbuilt bypass for rapid filling, high pressure testing and system purging. Both the AB-40 and A-41 have a heat resistant diaphragm and seat disc, and an inbuilt strainer screen. The reduced pressure setting is 14 psi. The maximum inlet working pressure is 200 psi.

Note: For backflow prevention of boiler water into the potable water supply line, install a BFP dual check valve.

FEATURES AND BENEFITS:

- Economical and easy to install
- Every valve is tested for performance prior to shipping
- Tri-purpose inbuilt by-pass for rapid filling of the boiler
- "Combo-Connection" union inlet provides convenience to the installer by permitting threaded or sweat copper connection with the same union tailpiece

A-41 PERFORMANCE:

Outlet Pressure Range Maximum inlet pressure Service 10-20 psi (factory set 14 psi) 200 psi Water

AB-40 PERFORMANCE:

Outlet Pressure Range Maximum Inlet Pressure Service 2-30 psi (factory set 14 psi) 200 psi Cold water

APPLICATIONS: Larger hot water space heating boilers that require faster filling.

AVAILABLE CONNECTIONS:

Threaded (NPT) A-41 Threaded (NPT) AB-40 3/4" Female threaded 1/2" Female

APPROVALS AND LISTINGS:

ASSE 1012 and CSA B.64. Listed by ASSE and CSA.







AB-40





RESIDENTIAL, COMMERCIAL

The A-89 series pressure reducing boiler feed valve is the only anti-scaling boiler feed valve in the industry and features rapid fill capability and also includes a balanced piston for closer outlet control regardless of variations in inlet pressure. Standard reduced pressure setting is 14 psi with an adjustment range to 30 psi. Maximum inlet working pressure is 200 psi. Available with threaded connection or sweat copper union inlet

FEATURES AND BENEFITS:

- · Contains a polymer seat to prevent scaling
- Economical and easy to install
- Every valve is tested for performance prior to shipping
- Modular cartridge design reduces the number of parts requiring service for quick and easy service/repair

PERFORMANCE:

| Outlet pressure range | 10-30 psi (Factory set 14 psi) |
|------------------------|--------------------------------|
| Maximum inlet pressure | 200 psi |
| Service | Water |

APPLICATIONS: Larger hot water space heating boilers that require faster filling.

AVAILABLE CONNECTIONS:

| Threaded (NPT) | 1/2" |
|-----------------------------|------|
| Threaded (NPT) Union | 1/2" |
| Sweat Copper Union | 1/2" |
| Threaded (NPT) Double Union | 1/2" |

| DIMENSIONS (inches) | А | В | С |
|----------------------------|--------|-------|--------|
| A-89 | 3-9/16 | 4-3/8 | 1–1/16 |
| A-89 Union | 4-5/16 | 4-3/8 | 1–1/16 |
| A-89 Double Union | 5–1/16 | 4-3/8 | 1–1/16 |
| A-89C | 4-5/16 | 4-3/8 | 1–1/16 |
| A-43CRF | 3–5/8 | 3–5/8 | 3/4 |







BFAC

RESIDENTIAL, COMMERCIAL

The BFAC pressure reducing backflow preventer combines the quality pressure reduction of the A-89 Pressure Reducing Boiler Feed Valve with the effective backflow prevention of the BFP Double-Check Backflow Preventer. The BFAC accurately reduces system pressure down to 14 psi while preventing the back-siphonage of contaminated water into the potable water supply. The BFAC features threaded (NPT) inlet and outlet connections.

FEATURES AND BENEFITS:

- · Pressure reduction and prevention of water backflow in one compact valve
- A-89 contains a polymer seat to prevent scaling
- Economical and easy to install
- Features a double-check vacuum breaker backflow system preventing the reverse flow of polluted water
- Rapid fill and balanced piston allows for closer outlet control

PERFORMANCE:

Outlet pressureA89 factory set at 14 psiMaximum temperature180°F (80°C)Maximum inlet pressure170 psiServiceWater

APPLICATIONS: Designed specifically for smaller boiler feed lines.

AVAILABLE CONNECTIONS:

| Sweat | 1/2" Inlet |
|-----------------------|-------------|
| Threaded (NPT female) | 1/2" Outlet |









COMMERCIAL

The CBL series hot water boiler dual control valve features an all bronze construction, inbuilt stainless steel strainer screen, neoprene and bronze diaphragms, brass and stainless steel seat, and renewable relief seat disc. Includes an inbuilt check valve to retard reverse flow and an inbuilt bypass for rapid filling, high pressure tests and system purging. Reduced pressure setting of 14 psi and relief setting of 30 psi for two-story buildings; slightly higher setting for 3-, 4- or 5-story buildings. Maximum inlet working pressure is 100 psi. Combines a pressure reducing and regulating valve, positive relief valve and bypass valve into one compact unit.

Note: For backflow prevention of boiler water into the potable water supply line, install a BFP dual check valve. The relief section of all Cash Acme Dual Controls is for thermal expansion ONLY. For proper pressure relief protection, the boiler must also be provided with a properly sized ASME rated relief valve.

FEATURES AND BENEFITS:

- · Allows rapid filling of system
- · Permits use of wide opening but small seated regulator eliminates noise, prevents "wire drawing" and premature seat wear
- · Passes first-filling dirty water around the seat assuring a clean, good seating surface
- Every valve is tested for performance prior to shipping

PERFORMANCE:

| Outlet pressure range | 2 to 30 psi |
|------------------------|----------------------------|
| | Relief valve: 30 to 40 psi |
| Maximum temperature | 180°F |
| Maximum inlet pressure | 100 psi |
| Service | Water |
| | |

APPLICATIONS: Boiler water supply line. To assure automatic filling, maintain boiler pressure between 14 and 30 psi.

AVAILABLE CONNECTIONS:

Threaded (NPT) 1/2" Inlet, Outlet







CQ-M

COMMERCIAL

The CQ-M series Hot Water Boiler Dual Control valve is constructed of a bronze body and features large unrestricted waterways, special heat resistant composition diaphragms, silicone relief seat and an easy to clean inbuilt stainless steel strainer. All units have a test lever and an inbuilt check valve to prevent backflow. Provides pressure control and protection from thermal expansion.

Note: The relief section of all Cash Acme Dual Controls is for thermal expansion ONLY. For proper pressure relief protection, the boiler must also be provided with a properly sized ASME rated relief valve.

FEATURES AND BENEFITS:

- Poppet relief design provides over-pressure protection
- Every valve is tested for performance prior to shipping
- Economical and exclusive design features

PERFORMANCE:

| Outlet pressure range | 2 to 30 psi |
|------------------------|-------------|
| Maximum temperature | 180°F |
| Maximum inlet pressure | 100 psi |
| Service | Water |

APPLICATIONS: Designed for hot water space heating installations.

AVAILABLE CONNECTIONS:

| Threaded (NPT) | 1/2" |
|----------------|------|
| Sweat | 1/2" |









COMMERCIAL

The CR series dual control valve for hot water space heating boilers features a balanced piston for closer outlet pressure control regardless of variations in inlet pressure and a rapid fill feature with an improved larger seat for higher capacities and quicker fill. It has an iron body, brass internal parts on the regulator, special heat resistant composition diaphragm and O-rings, brass strainer screen, and stainless steel springs. Relief valve has bronze body, silicone seat disc and stainless steel spring.

Note: The relief section of all Cash Acme Dual Controls is for thermal expansion only. For proper pressure relief protection, the boiler must also be provided with a properly sized ASME rated relief valve.

FEATURES AND BENEFITS:

- Poppet relief design provides over-pressure protection
- Every valve is tested for performance prior to shipping
- Economical and exclusive design features

PERFORMANCE:

| Outlet pressure | Factory set at 14 psi |
|------------------------|-----------------------|
| Maximum temperature | 180°F |
| Maximum inlet pressure | 100 psi |
| Service | Water |

APPLICATIONS: Designed for hot water space heating installations, the CR Series valve is suitable for 1–, 2– or 3–story buildings without adjustment.

AVAILABLE CONNECTIONS:

Threaded (NPT) Sweat 1/2" Inlet, Outlet 1/2" Inlet







AIR SEPARATOR

COMMERCIAL

Air Separators are intended for use in non-potable, hydronic heating systems to remove entrapped air from the circulating water. The Cash Acme Air Separators incorporate a "Separating Cartridge" that traps air and allows it to be vented via the integral air vent at the top of the unit.

FEATURES AND BENEFITS:

- · High quality brass body with a nickel plated finish for durable construction and long lasting service
- Economical and easy to install
- · Wide range of sizes to fit a variety of heating systems

PERFORMANCE:

| Maximum temperature | 240°F |
|---------------------|---------------|
| Maximum pressure | 125 psi |
| Finish | Nickel plated |

APPLICATIONS: Intended for use in non-potable, hydronic heating systems to remove entrapped air from the circulating water.

AVAILABLE CONNECTIONS:

Note: Each Air Separator comes complete with an alternate bottom plug with 1/2" NPT tapping.

| DIMENSIONS (inches) | | | | | | |
|---------------------|---------|-------|---|--------|--------|---------|
| ITEM – SIZE | Α | В | С | D | E | F |
| 24077 - 1/2" | 2–5/8 | 1–7/8 | 1 | 4–1/2 | 6-1/2 | 1-1/2 |
| 24078 - 3/4" | 2–15/16 | 1–7/8 | 1 | 4-9/16 | 6-3/4 | 1-5/8 |
| 24079 – 1" | 3-1/2 | 1–7/8 | 1 | 4-5/8 | 7 | 1–7/8 |
| 24080 - 1-1/4" | 4 | 1–7/8 | 1 | 4–1/2 | 7–7/32 | 2-7/64 |
| 24081 - 1-1/2" | 4-3/8 | 1–7/8 | 1 | 4–1/2 | 7–3/4 | 2-11/32 |
| 24082 – 2" | 5–1/4 | 1–7/8 | 1 | 4-5/8 | 8–3/8 | 2–7/8 |







AIR PURGER

COMMERCIAL

Air Purgers are specially designed to eliminate potential air from systems by entraining air to the top of the unit and venting through an air vent. Constructed of a one-piece cast iron design with internal baffles, the Cash Acme Air Purger is economical, easy to install, and requires no maintenance once installed within a system. Available in a variety of sizes ranging from 1" through 4".

FEATURES AND BENEFITS:

- One piece cast iron construction for durable construction and long lasting service
- Economical and easy to install
- · Wide range of sizes to fit a variety of heating systems

APPLICATIONS: For use in heating systems to trap entrained air from the circulating water.

AVAILABLE CONNECTIONS:

Threaded (NPT) 1", 1–1/4", 1–1/2", 2", 2–1/2", 3" and 4"

Note: Each Air Separator comes complete with an alternate bottom plug with 1/2" NPT tapping.

| | DIMENSIONS (inches) Tapping – NPT (inches) | | | nches) | | |
|-------|---|---|-------|--------|-----|-----|
| Item | Α | В | С | А | F | E |
| 24083 | 1 | 6 | 3-3/4 | 1 | 1/8 | 1/2 |
| 24084 | 1–1/4 | 6 | 3-3/4 | 1–1/4 | 1/8 | 1/2 |



| | | DIMENSIONS (inches) | | Tapping – NPT (inches) | | |
|-------|-------|------------------------|---|------------------------|-----|-----|
| Item | Α | В | С | А | F | E |
| 24085 | 1–1/2 | 8 | 5 | 1–1/2 | 1/8 | 1/2 |
| 24086 | 2 | 8 | 5 | 2 | 1/2 | 1/2 |
| 24087 | 2–1/2 | 10 | 6 | 2–1/2 | 3/4 | 1/2 |
| 24088 | 3 | 10 | 6 | 3 | 3/4 | 1/2 |





| | | DIMENSIONS (inches) | | Tapping – NPT (inches) | | |
|-------|---|------------------------|-------|------------------------|-----|-----|
| Item | Α | В | С | А | F | E |
| 24089 | 4 | 10-1/2 | 9–1/4 | 4 | 3/4 | 1/2 |





AIR VENT

COMMERCIAL

Air vents are used in commercial heating systems to vent potential air that is trapped within the system's circulating water. Constructed of all brass material, the Cash Acme Air Vent is economical, easy to install, and requires no maintenance once installed within a system.

FEATURES AND BENEFITS:

• High quality brass body with a nickel plated finish for durable construction and long lasting service

• Economical and easy to install

PERFORMANCE:

Working Pressure Service 90 – 150 psi (or refer to chart) Water

APPLICATIONS: For use in heating systems to vent air trapped within the circulating water.

AVAILABLE CONNECTIONS:

Threaded (NPT)

1/8" and 1/4"

| DIMENSIONS (inches) | | | | |
|---------------------|---------|---------|-------|---------|
| ITEM | Α | В | С | D |
| 24090 | 1–15/16 | 1-21/32 | 1–7/8 | 1/8 NPT |
| 24091 | 1–15/16 | 1-21/32 | 1–7/8 | 1/4 NPT |





SHARKBITE CONNECTION SYSTEM

Cut. Push. Done.

The SharkBite connection system makes any plumbing project fast and easy with our unique push-fit technology. When you insert a pipe into the SharkBite quick connect fittings, the stainless steel teeth bite down and grip the pipe, while the specially formulated O-ring compresses to create the perfect watertight seal. No soldering, no clamps, unions or glue.

Our product works with your existing plumbing, is easy to disassemble for changing and reusing fittings, and can be rotated for easier installation in tight spaces. Perfect for joining copper, CPVC or PEX pipe, SharkBite is the no fuss way to fix small leaks or plumb a whole house.

Our proven system includes hundreds of products from dozens of different fittings, a wide range of push-fit valves and even our own SharkBite tubing PEX tubing to make completing a job even easier.

Compatible with many Cash Acme valves, try the SharkBite connection system for your next project and discover just how fast and easy fixing a leak or plumbing a house should be.

www.sharkbite.com

MADE IN THE USS A

It's our commitment to quality that has driven a century of success with water control valves that stand the test of time. Proudly built in America for more than 100 years, Cash Acme's ISO 9001-certified quality assurance processes ensure that every valve that leaves our facility is 100% tested and meets all standards.

From our 550,000 square feet. manufacturing and distribution campus in Cullman, Alabama, Cash Acme's 200+ employees streamline operational excellence with proprietary programs to drive continuous improvement through key metrics, spanning production targets, delivery performance, inventory and safety. We proudly own our manufacturing process from start to finish, so every Cash Acme valve that's installed is guaranteed from concept to delivery.

Cash Acme valves are an important part of the North American operations of Reliance Worldwide Corporation(RWC) and our expertise in water valves around the world forms a core part of RWC's total package of global water control solutions. RWC succeeds on a world platform utilising an integrated global operations strategy and regional centres of excellence across our international company portfolio.

LIMITED WARRANTY – SHARKBITE AND CASH ACME PRODUCTS

WHAT DOES THIS WARRANTY COVER?

Subject to conditions outlined in this statement, RWC (in the USA, Reliance Worldwide Corporation and in Canada, Reliance Worldwide Corporation (Canada) Inc.) warrants SharkBite[®] and Cash Acme[®] products, when used and installed in accordance with the requirements set forth below, to be free from defects in material and workmanship for the applicable warranty period.

HOW LONG DOES THE WARRANTY COVERAGE LAST?

| PRODUCT(S) | WARRANTY PERIOD (FROM THE DATE OF SALE) | | |
|-------------------------------------|---|--|--|
| SharkBite PEX Tubing | Twenty-Five (25) years | | |
| SharkBite Push-Fit Fittings | Twenty-Five (25) years | | |
| SharkBite Brass PEX Barbed-Fittings | Five (5) years | | |
| SharkBite Copper PEX Manifolds | Five (5) years | | |
| All other SharkBite products | Two (2) years | | |
| All Cash Acme products | One (1) year | | |

Proof of purchase is required to validate the warranty period. If proof of purchase is not available, the warranty period shall default to the date of manufacture for each product. **NOTE:** Warranty is applicable to product installed in the country it was purchased.

WHAT ARE THE CONDITIONS OF THIS WARRANTY?

- 1. All products must be installed in accordance with all applicable codes and in accordance with any local, state, provincial or federal requirements.
- 2. The installing contractor must use construction techniques compliant with applicable codes to install the range of products and use the product(s) within the design parameters specified in any installation guidelines and technical notes for the applicable system. This shall include field pressure testing prior to concealing with concrete or by other means.
- 3. Products must not be installed in a system that may operate at temperatures or at pressures that exceed the printed rating on the product, packaging or installation instructions.
- 4. Evidence of tampering, mishandling, neglect, accidental damage, freeze damage or unauthorized modifications or repairs that cause damage to RWC warranted products void any warranty coverage of those particular products. It is expressly understood that failure as a result of any freezing fluids within the pipes does not constitute a defect in material or workmanship and shall not be covered by this warranty.
- 5. Although RWC provides a plumbing system to facilitate a complete installation, other manufacturers tubing and/or fittings may be installed in any given installation provided manufacturing of the tubing and/or fittings demonstrates compliance with the applicable ASTM standards, and the product has been certified by a recognized third-party testing agency. The RWC product in the given installation will continue to be covered under this warranty. NOTE: RWC will be responsible only for proven defects in material or workmanship in RWC products. Problems in products manufactured by another company should be reported to that manufacturer.

HOW DO YOU GET SERVICE?

In order to be eligible for service under this warranty you must return the defective product (with shipping charges prepaid) to the original place of purchase. You also must include the model number of the product, the original date of purchase, proof of purchase and the nature of the problem. Products returned without shipping charges prepaid will be refused. For questions or inquires to the Manufacturer, in the U.S. call 1-877-700-4242 and in Canada 1-888-820-0120.

WHAT WILL RWC DO?

If, after inspection, we find that a product covered by this limited warranty has failed due to a defect in material or workmanship during the specified warranty period, we will repair or replace, at our sole option, free of charge, the defective product during normal working hours and through a place of business as determined by RWC. This shall constitute the sole and exclusive remedy for any defective product.

WHAT DOES THIS WARRANTY NOT COVER?

RWC shall not be responsible for any incidental, indirect, contingent, special or consequential damages, including without limitation, lost profits or the cost of repairing or replacing other property which is damaged if these warranted products do not work properly, other costs resulting from labor charges, delays, vandalism, negligence, fouling caused by foreign material, damage from adverse water conditions, adverse chemical environments, or any other circumstances over which has no control. This limitation applies even if RWC could have foreseen or has been advised of the possibility of these damages. This warranty shall be invalidated by any abuse, misuse, misapplication or improper installation of the product.

HOW DOES STATE/PROVINCIAL LAW APPLY?

Some States/Provinces do not allow limitations on how long an implied warranty lasts, and some States/Provinces do not allow the exclusion or limitation of incidental or consequential damages. Therefore, the above limitations may not apply to you. This Limited Warranty gives you the specific legal rights, and you may have other rights that vary from State/Province to State/Province. You should consult applicable State/Provincial laws to determine your rights.

SO FAR AS IS CONSISTENT WITH APPLICABLE STATE/PROVINCIAL/FEDERAL LAW, THE EXPRESS WARRANTY SET FORTH HEREIN IS THE ONLY WARRANTY GIVEN BY RWC WITH RESPECT TO THE SHARKBITE® AND CASH ACME® PRODUCTS AND RWC MAKES NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, AND HEREBY SPECIFICALLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

NOTES





Reliance Worldwide Corporation

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