



Lead-Free Point of Use Mixing Valves

Hot water temperature control valves are specifically designed for mixing cold and hot water on hot water supply systems. Can be used to reduce the temperature of hot water from the system, and are ideal for radiant heat and under-the-sink applications. All models are certified for use in potable water applications.

Inlet/Outlet Size	Inlet/Outlet Type	Body Material*	Flow Rate	Temp. Range	Max. Pressure	Brand	Item No.
1/2 in	NPT	BR	—	117° to 185°F	145 psi	Cash Acme	20RH71
1/2 in	NPT	BR	—	95° to 118°F	230 psi	Cash Acme	20RH70
Mini Thermostatic Mixing Valve							
3/4 in	Comp.	BZ	—	95° to 118°F	230 psi	Cash Acme	20RH70
Mixing Valve							
3/4 in	Comp.	BR	0.5 to 2.5 gpm	80° to 120°F	150 psi	Watts	20G110
3/4 in	Comp.	BZ	0.25 to 5 gpm	90° to 140°F	125 psi	Leonard Valve	15Z013
3/4 in	Comp.	BZ	0.5 to 10 gpm	95° to 115°F	145 psi	Zurn Wilkins	45K867
3/4 in	Comp.	GFP	0.35 to 5.5 gpm	95° to 125°F	125 psi	Bradley	40D643
3/4 in	Comp.	GFP	0.35 to 5.5 gpm	95° to 125°F	125 psi	Bradley	40D645
3/4 in	FNPT	BZ	0.5 to 3.10 gpm	95° to 115°F	145 psi	Zurn Wilkins	45K864
1/2 in	FNPT	BR	0.5 to 23 gpm	90° to 160°F	150 psi	Watts	5DMF2
1/2 in	FNPT	BZ	0.5 to 10 gpm	95° to 115°F	145 psi	Zurn Wilkins	45K865
1/2 in	FNPT	BZ	0.5 to 10 gpm	95° to 115°F	145 psi	Zurn Wilkins	45K866
1/2 in	MNPT	BZ	0.25 to 12 gpm	90° to 140°F	125 psi	Leonard Valve	15Z014
1/2 in	MNPT	GFP	0.35 to 5.5 gpm	95° to 125°F	125 psi	Bradley	40D642
1/2 in	MNPT/Sweat	GFP	0.5 to 15 gpm	59° to 140°F	125 psi	Bradley	40D644
1/2 in	PEX	BR	20 gpm at 125 psi	80° to 120°F	150 psi	Watts	5DMF7
1/2 in	PEX	GFP	0.5 to 11 gpm	59° to 140°F	125 psi	Bradley	40D648
1/2 in	Press	CSA	0.5 to 12 gpm	80° to 120°F	150 psi	Watts Regulator	429J22
1/2 in	Press	CSA	0.5 to 23 gpm	90° to 160°F	150 psi	Watts Regulator	429J19
1/2 in	Solder	BR	0.5 to 23 gpm	80° to 120°F	150 psi	Watts	5DMF0
1/2 in	Solder	BR	0.5 to 23 gpm	90° to 160°F	150 psi	Watts	5DMF4
3/4 in	FNPT	BR	0.5 to 23 gpm	90° to 160°F	150 psi	Watts	5DMF3
3/4 in	MNPT	BZ	0.5 to 13 gpm	90° to 140°F	125 psi	Leonard Valve	15Z015
3/4 in	MNPT	GFP	0.5 to 15 gpm	59° to 140°F	125 psi	Bradley	40D646
3/4 in	PEX	BR	0.5 to 23 gpm	90° to 160°F	150 psi	Watts	5DMF6
3/4 in	PEX	BR	20 gpm at 125 psi	80° to 120°F	150 psi	Watts	5DMF8
3/4 in	PEX	GFP	0.5 to 11 gpm	59° to 140°F	125 psi	Bradley	40D649
3/4 in	Press	CSA	0.5 to 12 gpm	80° to 120°F	150 psi	Watts Regulator	429J23
3/4 in	Press	CSA	0.5 to 23 gpm	90° to 160°F	150 psi	Watts Regulator	429J20
3/4 in	Solder	BR	0.5 to 20 gpm	80° to 120°F	150 psi	Watts	5DMF1
3/4 in	Solder	BR	0.5 to 23 gpm	90° to 160°F	150 psi	Watts	5DMF5
3/4 in	Sweat	GFP	0.5 to 15 gpm	59° to 140°F	125 psi	Bradley	40D647
Thermostatic Mixing Valves w/ Locking Mechanism							
3/4 in	Comp.	BZ	0.5 to 3.10 gpm	95° to 115°F	145 psi	Zurn Wilkins	45K863
1/2 in	NPT	BZ	—	85° to 130°F	230 psi	Cash Acme	20RH67
1/2 in	Push Fit	BZ	—	85° to 130°F	200 psi	Cash Acme	20RH65
3/4 in	NPT	BZ	—	85° to 130°F	230 psi	Cash Acme	20RH68
3/4 in	NPT	DZRR	—	90° to 130°F	150 psi	Cash Acme	20RH69
3/4 in	Push Fit	BZ	—	85° to 130°F	200 psi	Cash Acme	20RH66

* BR = brass, BZ = bronze, CSA = copper silicone alloy, DZRR = DZR brass, GFP = glass-filled polysulfone.



Automatic Air Vent Valves, Air Separators, and Boiler Feed Valves

Automatic Air Vent Valves, Brass—Provide automatic air venting for cold or hot water distribution systems. Valve can be disassembled for maintenance.

Automatic Vents for Hot Water, Brass—Allows easy replacement cartridge installation without system shut down. Suitable for automatic or manual air release on

baseboards, convectors, radiators, and high points in piping systems.

Air Separators, Iron—Designed to separate air from water in hydronic heating systems. Separators have tapings that allow installation of an air vent and expansion tank.

Boiler Feed Valves with Backflow Preventer, Cast-Iron—Combination backflow preventer and feed water pressure regulator in 1 pre-assembled unit.

Inlet Pressure (psi)	Max. Working Pressure (psi)	Max. Temp. (°F)	W (in.)	H (in.)	Item No.
Automatic Air Vent Valves, Brass					
1/2 in	150 psi	240 °F	1 1/4	3 3/4	46A962
3/4 in	150 psi	240 °F	1 1/4	3 3/4	46A963
1 in	150 psi	240 °F	1 3/4	3 1/2	46A964
Automatic Vent For Hot Water, Brass					
1/2 in	125 psi	240 °F	1	1 1/2	46A965
3/4 in	125 psi	240 °F	1	1 1/2	46A966
Air Separator, Iron					
1 in	80 psi	275 °F	3	4	46A969
1 1/4 in	80 psi	275 °F	3	4	46A970
1 1/2 in	80 psi	275 °F	3	5 1/4	46A971
Boiler Feed Valve w/ Backflow Preventer, Bronze					
1/2 in	100 psi	212 °F	8 1/2	5 1/4	46A967
1 1/2 in	100 psi	212 °F	8 1/2	5 1/4	46A968



Pressure-Reducing Control Valves

- Operating temp.: 180°F
- Adjustment range: 30 to 300 psi

Ductile iron body and cover. Stem, spring, and nut are stainless steel; trim is 316 stainless steel. Buna N elastomer. Meet ASTM A536. NSF Listed.

Full Port—Throttles to reduce higher upstream pressure to constant lower stream pressure. Adjustable closing speed and reducing setpoint.

Single Chamber—Fixed orifice with nonadjustable closing speed and set point.

Pipe Size	Connec. Type	Operating Pressure	Max. Continuous Flow Rate	Max. Intermittent Flow Rate	Port Size	Item No.
Full Port						
2 in	Threaded	400 psi	210 gpm	265 gpm	1/2 in x 1/2 in x 1/4 in	6AKW2
2 in	Flanged	250 psi	210 gpm	265 gpm	1/2 in x 1/2 in x 1/4 in	6AKW3
2 1/2 in	Threaded	400 psi	300 gpm	390 gpm	1/2 in x 1/2 in x 1/4 in	6AKW4
3 in	Flanged	250 psi	485 gpm	590 gpm	1/2 in x 1/2 in x 3/8 in	6AKW5
4 in	Flanged	250 psi	800 gpm	1,000 gpm	1/2 in x 1/2 in x 3/8 in	6AKW6
6 in	Flanged	250 psi	1,850 gpm	2,300 gpm	1/2 in x 1/2 in x 1/2 in	6AKW7
8 in	Flanged	250 psi	3,100 gpm	4,000 gpm	1/2 in x 1 in x 1/2 in	6AKW8
Single Chamber						
1 1/4 in	Threaded	400 psi	93 gpm	115 gpm	1/4 in x 1/2 in x 1/8 in	6CJN9
1 1/2 in	Threaded	400 psi	125 gpm	158 gpm	1/4 in x 1/2 in x 1/8 in	6CJP0
2 in	Threaded	400 psi	208 gpm	250 gpm	1/2 in x 1/2 in x 1/4 in	6CJP1
2 1/2 in	Threaded	400 psi	300 gpm	370 gpm	1/2 in x 1/2 in x 3/8 in	6CJP2
3 in	Threaded	400 psi	460 gpm	570 gpm	1/2 in x 1/2 in x 3/8 in	6CJP3
3 in	Flanged	250 psi	460 gpm	570 gpm	1/2 in x 1/2 in x 3/8 in	6CJP4
4 in	Flanged	250 psi	800 gpm	1,000 gpm	1/2 in x 1/2 in x 3/8 in	6CJP5
6 in	Flanged	250 psi	1,800 gpm	2,300 gpm	1/2 in x 1/2 in x 1/2 in	6CJP6

Air Release and Air Vacuum Valves

- Max. temp.: 250°F
- Vacuum pressure: 29" Hg
- FNPT connection

Cast-iron construction. Float and internal components are 316 stainless steel.

Air Release Valves—Resilient seal for positive shutoff. Nonclogging design helps eliminate backwash. Releases pockets of accumulated air in a pressurized water system.



Description	For Use With	Item No.
Pilot Rebuild Kits		
Pilot Rebuild Kit	Mfr. 263AP	6AKW1
	6AKW9	6AKX1
	6AKX0	6AKX2
	6AKW2-8	6AKW9
	All M116 Model Numbers	6AKX0
Pressure Reducing Pilot		
Pressure Reducing Pilot	—	40F295
Valve Rebuild Kit		
	6CJP1	6CJP8
	6CJP2-4	6CJP9
	Mfr. 115-4 FL	6CJR0
	6CJP6	6AKV9
	6AKW2, 6AKW3	6AKX3
	6AKW4	6AKX4
	6AKW5	6AKX5
	6AKW6	6AKX6
	6AKW7	6AKX7
	6AKW8	6AKX8



Air Vacuum Valves—Have high/low pressure resilient seating. Full pipe size inlets and outlets help prevent clogging. For use in water distribution and transmission and vacuum protection.

Air Release/Air Vacuum Valves—Incorporate both an air release valve and an air vacuum valve into 1 compact unit. Suitable for all high points in a water distribution transmission system.

Application	Inlet Size	Outlet Size	Min. Pressure	Max. Pressure	Max. Vent Capacity	Item No.
Air Release Valves						
Clean Water	1/2 in	1/2 in	5 psi	175 psi	6 scfm at 150 psi	5LYL0
	3/4 in	1/2 in	5 psi	175 psi	6 scfm at 150 psi	5LYL1
	1 in	1/2 in	5 psi	150 psi	55 scfm at 150 psi	5LYL3
	1 1/2 in	1/2 in	5 psi	175 psi	6 scfm at 150 psi	5LYL2
Waste Water	2 in	1/2 in	5 psi	150 psi	55 scfm at 150 psi	5LYL4
	2 1/2 in	1/2 in	5 psi	150 psi	55 scfm at 150 psi	5LYL3
	3 in	1/2 in	5 psi	150 psi	55 scfm at 150 psi	5LYL4
	4 in	1/2 in	5 psi	150 psi	55 scfm at 150 psi	5LYL5
Air Vacuum Valves						
Clean Water	1/2 in	1/2 in	5 psi	300 psi	—	5WLX9
	1 in	1 in	5 psi	300 psi	—	5WLX0
	2 in	2 in	5 psi	300 psi	—	5WLX1
	3 in	3 in	5 psi	300 psi	—	5WLX2
Air Release/Air Vacuum Valves						
Clean Water	1 in	1 in	5 psi	300 psi	18 scfm at 300 psi	5LYL5
	2 in	2 in	5 psi	300 psi	25 scfm at 300 psi	5WLX6
	3 in	3 in	5 psi	300 psi	25 scfm at 300 psi	5WLX7
	4 in	4 in	5 psi	300 psi	25 scfm at 300 psi	5WLX8
Waste Water	2 in	1 in	5 psi	150 psi	25 scfm at 150 psi	5WLX6
	2 1/2 in	2 in	5 psi	150 psi	29 scfm at 150 psi	5WLX7
	3 in	3 in	5 psi	150 psi	45 scfm at 150 psi	5WLX8
	4 in	4 in	5 psi	150 psi	45 scfm at 150 psi	5WLX9