AM-1 Series Thermostatic Mixing Valve



The Honeywell AM-1 series accurately adjusts, maintains and limits the hot water temperature to a desired setting selected by the user. In domestic water applications it offers scalding protection and bacteria growth control. By installing a Honeywell AM-1 mixing valve and raising water heater storage temperature setting and limiting mixed outlet water temperature to safe temperature more usable hot water is available. In heating applications it provides comfort and protects the equipment.

- Dual purpose mixing or diverting valves
- Constant water temperature under changing operating conditions
- Reliable performance at minimum flow of 0.5 gpm
- Proportional valve (simultaneous control of hot and cold water)
- Temperature limit at any point
- Flow reduction in seconds if cold water supply is interrupted
- Nickel-plated brass construction, EPDM O-rings
- High performance thermoplastic proportioning shuttle
- Straight through design (hot and cold at the same level) Max. pressure 150 psi (1034 kPa)
- ٠
- Max temperature 212 F (100 C)
- Designed for easy maintenance and element replacement. Teflon® coating of internal valve components to prevent mineral build-up and extend life.
- Tamper resistant design
- Valve trapping not required



- AM-1 Union STD & C and AM1070 Models include check valves on both hot and cold ports
- ASSE, CSA and IAPMO listed
- U.S. Patent No. 6,079,625

Application: Domestic water, Nursing homes, Public facilities,

Automatic faucets, Radiant floor heating, Space heating, Combo systems, Solar hot water, Greenhouses, Industrial applications, Photo processing

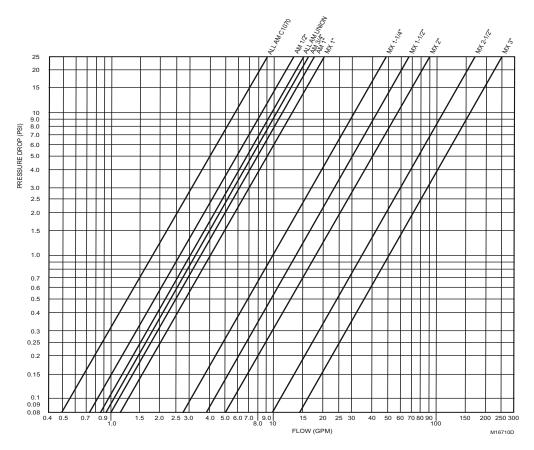
Replacement Parts:

- AMCU100 Replacement Check Valve for all AM-1 Series union model valves
- AMU200-RP Gasket kit for 1/2 inch, 3/4 inch and 1 inch AM and AM-1 Series valves; 3 gaskets per kit
- AM-1-020RP Rebuild kit for AM-1 Series B (60 100F; 16-38C) or Series C (80 - 120F; 27 - 49C) range valves. Includes thermal element, spring, diffuser, spool and O-rings
- AM-1-025RP Thermal element, spring, and plug assembly. Rebuild kit for AM-1 "Standard" series and AMX300 series valves
- AM-1-030RP Rebuild kit for AM-1 Series 1070 valves; (70 120F; 21 - 49C). Includes thermal element, spring, diffuser, spool and Orings

	Pipe Size			Capacity	Operating Tem	perature Range		
Product Number	(inch)	(DN)	Connection Type	(Cv)	(F)	(C)	ASSE	Comments
AM100-1	1/2 in.	DN15	NPT	3.2 Cv	70 F to 145 F	21 C to 63 C	1017	—
AM100-UCPVC-1	1/2 in.	DN15	Union CPVC	3.9 Cv	70 F to 145 F	21 C to 63 C	1017	—
AM100-UPEX-1	1/2 in.	DN15	Union PEX	3.9 Cv	70 F to 145 F	21 C to 63 C	1017	—
AM100-US-1	1/2 in.	DN15	Union Sweat	3.9 Cv	70 F to 145 F	21 C to 63 C	1017	—
AM100-UT-1	1/2 in.	DN15	Union NPT	3.9 Cv	70 F to 145 F	21 C to 49 C	1017	—
AM100C-1	1/2 in.	DN15	NPT	3.2 Cv	70 F to 120 F	21 C to 49 C	1017	—
AM100C-UCPVC-1	1/2 in.	DN15	Union CPVC	3.9 Cv	70 F to 120 F	21 C to 49 C	1017	—
AM100C-UPEX-1	1/2 in.	DN15	Union PEX	3.9 Cv	70 F to 120 F	21 C to 49 C	1017	—
AM100C-US-1	1/2 in.	DN15	Union Sweat	3.9 Cv	70 F to 120 F	21 C to 49 C	1017	—
AM100C-UT-1	1/2 in.	DN15	Union NPT	3.9 Cv	70 F to 120 F	21 C to 49 C	1017	—
AM100C1070-UCPVC-1	1/2 in.	DN15	Union CPVC	1.8 Cv	70 F to 120 F	21 C to 49 C	1070	—
AM100C1070-UPEX-1	1/2 in.	DN15	Union PEX	1.8 Cv	70 F to 120 F	21 C to 49 C	1070	—
AM100C1070-US-1	1/2 in.	DN15	Union Sweat	1.8 Cv	70 F to 120 F	21 C to 49 C	1070	—
AM100C1070-UT-1	1/2 in.	DN15	Union NPT	1.8 Cv	70 F to 120 F	21 C to 49 C	1070	—
AM100R-UPEX-1	1/2 in.	DN15	Union PEX	3.9 Cv	70 F to 180 F	21 C to 82 C	No Approval	Heating Only
AM100R-US-1	1/2 in.	DN15	Union Sweat	3.9 Cv	70 F to 180 F	21 C to 82 C	No Approval	Heating Only
AM100R-UT-1	1/2 in.	DN15	Union NPT	3.9 Cv	70 F to 180 F	21 C to 82 C	No Approval	Heating Only
AM101-1	3/4 in.	DN20	NPT	3.8 Cv	70 F to 145 F	21 C to 63 C	1017	—
AM101-UCPVC-1	3/4 in.	DN20	Union CPVC	3.9 Cv	70 F to 145 F	21 C to 63 C	1017	—
AM101-UPEX-1	3/4 in.	DN20	Union PEX	3.9 Cv	70 F to 145 F	21 C to 63 C	1017	—
AM101-US-1	3/4 in.	DN20	Union Sweat	3.9 Cv	70 F to 145 F	21 C to 63 C	1017	—
AM101-UT-1	3/4 in.	DN20	Union NPT	3.9 Cv	70 F to 145 F	21 C to 63 C	1017	—

Thermostatic Mixing Valves

	Pipe Size		Capacity		Operating Temperature Range			
Product Number	(inch)	(DN)	Connection Type	(Cv)	(F)	(C)	ASSE	Comments
AM101C-1	3/4 in.	DN20	NPT	3.8 Cv	70 F to 120 F	21 C to 49 C	1017	—
AM101C-UCPVC-1	3/4 in.	DN20	Union CPVC	3.9 Cv	70 F to 120 F	21 C to 49 C	1017	—
AM101C-UPEX-1	3/4 in.	DN20	Union PEX	3.9 Cv	70 F to 120 F	21 C to 49 C	1017	—
AM101C-US-1	3/4 in.	DN20	Union Sweat	3.9 Cv	70 F to 120 F	21 C to 49 C	1017	—
AM101C-UT-1	3/4 in.	DN20	Union NPT	3.9 Cv	70 F to 120 F	21 C to 49 C	1017	—
AM101C1070-UCPVC-1	3/4 in.	DN20	Union CPVC	1.8 Cv	70 F to 120 F	21 C to 49 C	1070	—
AM101C1070-UPEX-1	3/4 in.	DN20	Union PEX	1.8 Cv	70 F to 120 F	21 C to 49 C	1070	—
AM101C1070-US-1	3/4 in.	DN20	Union Sweat	1.8 Cv	70 F to 120 F	21 C to 49 C	1070	—
AM101C1070-UT-1	3/4 in.	DN20	Union NPT	1.8 Cv	70 F to 120 F	21 C to 49 C	1070	—
AM101R-UPEX-1	3/4 in.	DN20	Union PEX	3.9 Cv	70 F to 180 F	21 C to 82 C	No Approval	Heating Only
AM101R-US-1	3/4 in.	DN20	Union Sweat	3.9 Cv	70 F to 180 F	21 C to 82 C	No Approval	Heating Only
AM101R-UT-1	3/4 in.	DN20	Union NPT	3.9 Cv	70 F to 180 F	21 C to 82 C	No Approval	Heating Only
AM102-1	1 in.	DN25	NPT	4.3 Cv	70 F to 145 F	21 C to 63 C	1017	—
AM102-US-1	1 in.	DN25	Union Sweat	3.9 Cv	70 F to 145 F	21 C to 63 C	1017	—
AM102-UT-1	1 in.	DN25	Union NPT	3.9 Cv	70 F to 145 F	21 C to 63 C	1017	—
AM102C-1	1 in.	DN25	NPT	4.3 Cv	70 F to 120 F	21 C to 49 C	1017	—
AM102C-US-1	1 in.	DN25	Union Sweat	3.9 Cv	70 F to 120 F	21 C to 49 C	1017	—
AM102C-UT-1	1 in.	DN25	Union NPT	3.9 Cv	70 F to 120 F	21 C to 49 C	1017	—
AM102C1070-US-1	1 in.	DN25	Union Sweat	1.8 Cv	70 F to 120 F	21 C to 49 C	1070	—
AM102C1070-UT-1	1 in.	DN25	Union NPT	1.8 Cv	70 F to 120 F	21 C to 49 C	1070	—
AM102R-US-1	1 in.	DN25	Union Sweat	3.9 Cv	70 F to 180 F	21 C to 82 C	No Approval	Heating Only
AM102R-UT-1	1 in.	DN25	Union NPT	3.9 Cv	70 F to 180 F	21 C to 82 C	No Approval	Heating Only



New Style AM-1 Series Valves Replacement Parts

Product Number	Description				
AM-1-020RP	RP Rebuild kit for AM-1 Series B (60 - 100F; 16-38C) or Series C (80 - 120F; 27 - 49C) range valves. Includes thermal element, spring, diffuser, spool and O-rings				
AM-1-025RP	Thermal element, spring, and plug assembly. Rebuild kit for AM-1 "Standard" series and AMX300 series valves				
AM-1-030RP	Rebuild kit for AM-1 Series 1070 valves; (70 - 120F; 21 - 49C). Includes thermal element, spring, diffuser, spool and O-rings				
AMCU100	Replacement Check Valve for all AM-1 Series union model valves				
AMU200-RP	Gasket kit for 1/2 inch, 3/4 inch and 1 inch AM and AM-1 Series valves; 3 gaskets per kit				

Old Style AM Series Valves (manufactured before 2001) Replacement Parts

Product Number	Description				
AM100-001RP	00-001RP Rebuild kit for AM C Series valves, 90-120 F (32 - 49C) range. Does not fit AM-1 Series				
AM100-002RP Rebuild kit for AM Standard Series valves, 110-145 F (43 - 63C) range. Does not fit AM-1 Series					
AM100-010RP	Rebuild kit for AM R Series valves, 70 - 100F (21 - 38C) range. Does not fit AM-1 Series				
AMU200-RP	Gasket kit for 1/2 inch, 3/4 inch and 1 inch AM and AM-1 Series valves; 3 gaskets per kit				

Mixing Valve Accessories

Product Number	Description	
AM08-038	1/2 inch Sweat union kit. Includes tailpiece, union nut and gasket	
AM08-039	3/4 inch Sweat union kit. Includes tailpiece, union nut and gasket	
AM08-040	1 inch Sweat union kit. Includes tailpiece, union nut, gasket and retaining ring	
AM08-041	1/2 inch NPT union kit. Includes tailpiece, union nut and gasket	
AM08-042	3/4 inch NPT union kit. Includes tailpiece, union nut and gasket	
AM08-043	1 inch NPT union kit. Includes tailpiece, union nut, gasket and retaining ring	
AM206-040	3/4 inch CPVC union kit. Includes tailpiece, union nut and gasket	
AM206-041	1/2 inch PEX union kit. Includes tailpiece, union nut and gasket	
AM206-042	3/4 inch PEX union kit. Includes tailpiece, union nut and gasket	
CVT-050	1/2 in. FNPT x 1/2 in. MNPT Check Adapter for use with AM-1 NPT valves	
CVT-075	3/4 in. FNPT x 3/4 in. MNPT Check Adapter for use with AM-1 NPT valves	
MX050-RP	1/2 inch Recirculation adapter kit. Includes 1/2 inch MNPT union nut and gasket	
TS205-064	Thermostrip temperature indicator for potable mixing valves, 110-140F (43 - 60C) range Strip	Honeywell 100 File 5 File 5
TS206-080	Thermostrip temperature indicator for R Series radiant mixing valves, 105 - 180F (41 - 82C) range	Honeywe [®] 6 Thermostrip 6 Thermostrip 6 15 8 15 8 15 8 15 8 15 8 15 8 15 8 15 8

Replacement Parts SM Series (Old Style)

Product Number	Description			
SM100-004RP SM Series Element, spring and shuttle assembly				

Thermostatic Mixing Valves

AMX Series DirectConnect[™] Thermostatic Mixing Valves





Patented DirectConnect[™] design reduces installation time. Orientation of cold and hot ports eliminates need for elbows and tees on typical water heater installations. Added safety designed to prevent scalding. Increased user comfort for more available hot water. Designed to be directly installed on water heater hot outlet port.

- Designed to be directly installed on water heater hot outlet port.
- Constant water temperature under different operating conditions Proportional valve (control of hot and cold water) •
- •
- Flow reduction in seconds if cold water supply is interrupted
- Temperature adjustable using 3/16 allen wrench (supplied)
- Union nuts/tail pieces included
- Heat trapping not required
- Recirculation port option for fast response
- Integral check valve on cold port Brass/stainless construction
- Teflon coated wear surfaces for extended service ASSE 1017 certified, CSA & IAPMO listed •
- U.S. Patent pending

Application: Heat Pump Systems, Domestic water, Nursing homes, Public facilities, Automatic faucets, Radiant floor heating, Space heating, Combo systems, Solar hot water, Greenhouses, Industrial applications, Photo processing

Operating Temperature Range: 90 F to 130 F (32 C to 54 C) Capacity: 4 Cv

ASSE: 1017

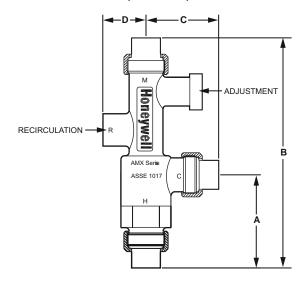
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Replacement Parts:

AMX-001RP AMX element, spring, plug assembly. For AMX100 -AMX102 series valves only

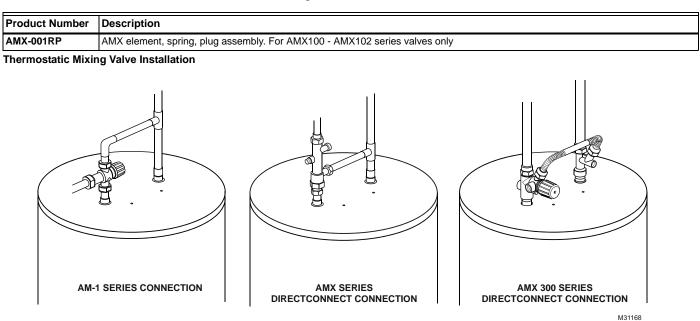
	Pipe Size						
Product Number	lumber (inch) DN		Connection Type	Comments			
AMX100-UCPVC-1	1/2 in. DN15 Union CPVC, 3/		Union CPVC, 3/4 in. Bottom	AMX100 and AMX101 Series valves include 3/4 in. NPT bottom connection			
AMX100-UPEX-1	1/2 in.	DN15	Union PEX, 3/4 in. Bottom	AMX100 and AMX101 Series valves include 3/4 in. NPT bottom connection			
AMX100-US-1	1/2 in.	DN15	Union Sweat, 3/4 in. Bottom	AMX100 and AMX101 Series valves include 3/4 in. NPT bottom connection			
AMX100-UT-1	1/2 in.	DN15	Union NPT, 3/4 in. Bottom	AMX100 and AMX101 Series valves include 3/4 in. NPT bottom connection			
AMX101-UCPVC-1	3/4 in.	DN20	Union CPVC, 3/4 in. Bottom	AMX100 and AMX101 Series valves include 3/4 in. NPT bottom connection			
AMX101-UPEX-1	3/4 in.	DN20	Union PEX, 3/4 in. Bottom	AMX100 and AMX101 Series valves include 3/4 in. NPT bottom connection			
AMX101-US-1	3/4 in.	DN20	Union Sweat, 3/4 in. Bottom	AMX100 and AMX101 Series valves include 3/4 in. NPT bottom connection			
AMX101-USMT-1	3/4 in.	DN20	—	AMX100 and AMX101 Series valves include 3/4 in. NPT bottom connection			
AMX101-UT-1	3/4 in.	DN20	Union NPT, 3/4 in. Bottom	AMX100 and AMX101 Series valves include 3/4 in. NPT bottom connection			
AMX102-US-1	1 in.	DN25	Union Sweat, 1 in. Bottom	AMX102 Series valves include 1 in. NPT bottom connection			
AMX102-UT-1	1 in. DN25		Union NPT, 1 in. Bottom	AMX102 Series valves include 1 in. NPT bottom connection			

Dimensions in inches (millimeters)



PRODUCT	DI	MENSION	IS (INCHE	S)
NUMBER	Α	A B		D
AMX100-UCPVC-1	3-1/2	8-7/16	2-11/16	1-1/2
AMX100-UPEX-1	3-1/2	8-5/8	2-15/16	1-1/2
AMX100-US-1	3-1/2	8-3/16	2-1/2	1-1/2
AMX100-UT-1	3-1/2	8-1/2	2-13/16	1-1/2
AMX101-UCPVC-1	4-3/16	9	2-1/2	1-1/2
AMX101-UPEX-1	4-3/16	9-3/16	2-11/16	1-1/2
AMX101-US-1	4-3/16	9	2-1/2	1-1/2
AMX101-UT-1	4-3/16	9-11/16	3-1/2	1-1/2
AMX102-US-1	4-1/2	10	3-1/2	1-1/2
AMX102-UT-1	4-1/2	10.3	3-13/16	1-1/2
				M27478A

AMX Series DirectConnect Replacement Part



Water Controls

AMX300 Series DirectConnect[™] Thermostatic Mixing Valve and Kits



AMX300T and AMX302T Kits

New AMX300 kits reduce installation time to an minimum while still providing Honeywell's industry leading mixing valve technology • Excellent temperature stability and control

Effectively minimizes scalding risk to building occupants

Application: Domestic Hot Water Valve Capacity: 2.1 Cv

Mixed Water Supply Temperature Range: 100 F to 145 F (38 C to 63 C)

Operating Temperature Range:

100 F to 212 F (hot water inlet) 33 F to 80 F (cold water inlet) ((38 C to 100 C) (hot water inlet) (0.5 C to 27 C (cold water inlet))

- Kit includes ASSE 1017 mixing valve, cold water tee fitting and flexible stainless steel connector
- For performance specifications of the kits, please refer to data provided for the AMX300 valve
- Mixing valve and cold water tee both connect directly to water heater; flexible stainless steel connector joins the cold water tee directly to the cold inlet port of the mixing valve
- Fits virtually all water heaters up to 1 in. (all necessary adapters included)
- Increased user comfort for more available hot water.
- Constant water temperature under different operating conditions
- Proportional valve (control of hot and cold water)
- Flow reduction in seconds if cold water supply is interrupted
 Temperature adjustable with easy "Push-Twist-Release" locking
- Temperature adjustable with easy "Push-Twist-Release" locking hand wheel design
- Union nuts/tail pieces/adapters (for certain models) included
- Recirculation port option for fast delivery of heated water to furthest fixtures
- Alternate hot port for bypass of hot water directly from tank to nonmixed temperature applications (dishwashers, clothes washers, etc.)
- Integral check valve on cold port
- Brass/stainless construction
- · Teflon coated wear surfaces for extended service
- ASSE 1017 certified, IAPMO listed (cUPCus)

Minimum Flow Rate: 0.25 gpm; Recirculation Port: 1/2 in. NPT; Alternate Hot Port: 1/2 in. NPT (0.95 lpm; Recirculation Port: 1/2 in. NPT; Alternate Hot Port: 1/2 in. NPT) Maximum Working Pressure: 150 psi ASSE: 1017 (AMX300 valve)

Replacement Parts:

AM-1-025RP Thermal element, spring, and plug assembly. Rebuild kit for AM-1 "Standard" series and AMX300 series valves

	Pipe Size					
Product Number	roduct Number (inch) (DN)		Connection Type	Description		
AMX300	3/4 in.	DN20	Cold Inlet - 7/8 in14 SAE J513, 45 degree flare fitting; Mixed Outlet - Male NPT; Hot Inlet - Female NPT	3/4 in. ASSE 1017 mixing valve (Replacement valve tor AMX300T and AMX302T DirectConnect mixing valve kits.)		
АМХ300Т			Mixed Outlet - Male NPT; Hot Inlet - Female NPT	DirectConnect water heater kit with 3/4 in. ASSE 1017 mixing valve, 3/4 in. cold water tee, and 8-in. SS flex connector		
AMX302T	1 in.	DN25	Mixed Outlet - Male NPT; Hot Inlet - Female NPT	DirectConnect water heater kit with 3/4-in. ASSE 1017 mixing valve, 3/4-in. cold water tee, and 11-in. SS flex connector		

AMX Series DirectConnect Replacement Part

Product Number	Description
AM-1-025RP	Thermal element, spring, and plug assembly. Rebuild kit for AM-1 "Standard" series and AMX300 series valves

UMV Series Undersink Mixing Valves



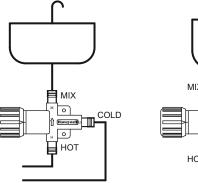


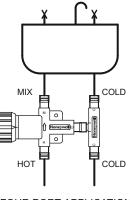


Universal 3 or 4 Port connection for 3/8 in. compression undersink applications. Includes internal check valves in hot and cold ports to prevent cross flow. Easy installation kit includes 3/8 compression nuts, ferrules and stand-offs for secure mounting. Forged brass body construction. Tamper resistant temperature control handwheel locks into desired temperature position.

- Universal adapter for 3 Port connection ٠
- 3/8 compression connections for easy installation • •
- Includes internal check valves in hot and cold ports to prevent cross flow. • Tamper resistant hand wheel locks into desired temperature position
- Temperature adjustment range 80-120F Controls temperature with flow as low as 0.5 gpm
- Forged brass body with pilot holes for secure mounting
- ASSE 1016 and ASSE 1070 listed

Typical Installation





THREE PORT APPLICATION

FOUR PORT APPLICATION M25022

Application: UMV Series 3/8 in. Compression Connection Type: Compression ASSE: 1016, 1070

Ī		Pipe Size		Capacity	Operating Temperature Range		
	Product Number	(inch)	DN	(Cv)	(F)	(C)	Description
	UMV-304U	3/8 in.	DN20	0.55 Cv	70 F to 120 F	21 C to 49 C	3/8 in. compression Universal 3 or 4 Port Connection