## Honeywell

# AMX Series DirectConnect™

#### **SPECIFICATION DATA**



- Designed to be installed directly on the water heater hot port.
- Dual purpose mixing or diverting valve.
- 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 in. Allen<sup>®</sup> wrench (included).
- Union coupled tailpiece connections included.
- Heat trapping not required.
- Recirculation connection for fast response.
- Integral check valve on cold water port.
- Bronze/stainless construction.
- Teflon<sup>®</sup> coated wear surfaces to prevent lime deposits.
- Maximum pressure differential between hot and cold ports is 7 psi (48 kPa).
- ASSE 1017 certified. CSA and IAPMO approved.
- Patent Pending.

## **OPERATION**

Automatic operation is provided by thermostatic element. Element will control hot and cold supply based on valve setting. If cold water is shut off, valve reduces mixed flow rate in seconds.

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**Exceeding mix temperature can cause burns.** For domestic water applications the AMX Series DirectConnect Mixing Valve temperature should not exceed 120° F (49° C).

### Service

To remove dirt, flush valve. To remove calcium deposits, soak valve in vinegar for 24 hours and flush, or contact factory.









## **APPLICATION**

Any application requiring accurate control of water temperature based on mixing of hot and cold water, such as:

- Domestic water for residents designed to be mounted directly on the water heater.
- · Hotels, schools, hospitals, or nursing homes.
- · Space heating.
- Radiant floor heating.
- Central distribution systems.
- Combo systems.
- Heat pump systems.
- Industrial applications.

### Benefits

AMX Series DirectConnect<sup>™</sup> Mixing Valve provides energy savings, increased comfort and safety for the user.

## **SPECIFICATIONS**

			Max Flow	_	_	Dimensions in inches (mm)			
Product Number	Connection Size (in.)	Union Connection	in gpm (lpm)	Temperature Range	Cv (in.)	Α	В	С	D
AMX100-US-1	1/2	Sweat <sup>a</sup>	8.0 (30.3)	90° to 130° F -(32° to 54° C)	4.0	3.5 (89)	8.2 (208)	2.5 (64)	1.5 (38)
AMX101-US-1	3/4	Sweat <sup>a</sup>	14.0 (53.0)			4.2 (107)	9.0 (229)	2.5 (64)	1.5 (38)
AMX102-US-1	1	Sweat <sup>a</sup>	20.0 (75.7)			4.5 (114)	10.0 (254)	3.5 (89)	1.5 (38)
AMX100-UT-1	1/2	Threaded	8.0 (30.3)			3.5 (89)	8.2 (208)	2.7 (69)	1.5 (38)
AMX101-UT-1	3/4	Threaded	14.0 (53.0)			4.2 (107)	9.7 (246)	3.5 (89)	1.5 (38)
AMX102-UT-1	1	Threaded	20.0 (75.7)			4.5 (114)	10.0 (254)	3.7 (94)	1.5 (38)
AMX100-UCPVC-1	1/2	CPVC <sup>a</sup>	8.0 (30.3)			3.5 (89)	8.6 (218)	2.7 (69)	1.5 (38)
AMX101-UCPVC-1	3/4	CPVC <sup>a</sup>	14.0 (53.0)			4.2 (107)	9.2 (234)	2.7 (69)	1.5 (38)
AMX100-UC-1	1/2	Compression	8.0 (30.3)			3.5 (89)	9.5 (241)	3.7 (94)	1.5 (38)
AMX101-UC-1	3/4	Compression	14.0 (53.0)			4.2 (107)	10.0 (254)	3.7 (94)	1.5 (38)
AMX100-UPEX-1	1/2	PEX	8.0 (30.3)			3.5 (89)	9.2 (234)	2.6 (66)	1.5 (38)
AMX100-UMTPEX-1	1/2	PEX	8.0 (30.3)			3.5 (89)	9.2 (234)	3.4 (86)	1.5 (38)
AMX101-UMTPEX	3/4	PEX	14.0 (53.0)			4.2 (107)	9.2 (234)	3.4 (66)	1.5 (38)
AMX101-UPEX-1	3/4	PEX	14.0 (53.0)			4.2 (107)	9.2 (234)	2.6 (86)	1.5 (38)
AMX101-USMT-1	3/4	Sweat <sup>a</sup>	14.0 (53.0)			4.2 (107)	9.2 (234)	3.4 (86)	1.5 (38)
AMX-001RP		Repair Kit	—	—	—	—	—	—	—

Table 1. Models and Specifications.

<sup>a</sup> Sweat or CPVC connections on mix and cold ports, threaded on the hot port.



## Fig. 1. Thermostatic Mixing or Diverting Valve dimensions.

Maximum Temperature: 200° F (93° C), except for CPVC mixing valves (maximum of 180° F [82° C]).

Minimum Temperature Difference between hot and mix:  $10^\circ~F^\circ$  (-12 $^\circ$  C).

Factory Temperature Setting: 120° F (49° C).

Minimum Flow: 0.5 gpm (1.9 lpm).

Recirculation Port: 1/2 in. NPT.

### **Temperature Selection**

The AMX Series DirectConnect is made with a temperature range of 90° to 130° F (32° to 54° C). The factory mix output setting is at 120° F (49° C), using the following normal conditions: 140° F (60° C) hot water input and 60° F (16° C) cold water input. Conditions different than the normal setting may require readjustment to achieve the 120° F (49° C) mix output temperature.

To change the output mix temperature it requires a 3/16 in. Allen wrench, which is included.

- **1.** Punch through the center of the temperature range label.
- 2. Adjust temperature mix output by turning the screw clockwise to decrease the mix temperature and counterclockwise to increase the mix output temperature.
- 3. Use a thermometer to verify mix output temperature.

#### IMPORTANT

Do not operate the valve at temperatures outside of its calibrated range.