101-089

iSeries Mixing Valves

Effective: April 29, 2009

Supersedes: April 1, 2006

Job: _____ Engineer: _____ Contractor: _____ Rep: _____

ITEM NO.	MODEL NO.	

iSeries Features

- 2-way Injection, 3-way or 4-way Mixing
- Operates Off Constant Power or Relay End Switch
- Ball Valve Design, High Cv
- Manual Operation Button
- Solid State Microprocessor Design
- Compact Design
- Easy, One-handed Actuator Removal
- 125 PSI Shutoff Pressure
- Plug-in Low Voltage Connections
- Multi-Status LED Indicator Light
- Fail Safe Mode
- Sensors Included

Additional Outdoor Reset Features

- Selectable Maximum Supply Temperature (110°F, 130°F, 150°F, or Off)
- Selectable Minimum Supply Temperature (85°F, when max. supply temp. is set to 150°F or Off)
- Adjustable Minimum Boiler Return Temperature (120°F, 135°F, or Off)
- Warm Weather Shutdown (70°F or Off)
- Adjustable Heating Curve (0.2-2.2 Reset Ratio)

Additional Setpoint Features

- Adjustable Setpoint Dial (80°F to 180°F)
- Selectable 15°F Setback
- Optional Boiler Protection (Set at 135°F)

Specifications

Maximum Operating Pressure: 300 psi, (2,100 kPa)
Fluid Temperature Range: 20°F to 240°F (-7°C to 115°C) @ 135°F (57°C) ambient
Ambient Conditions: Indoor Use Only, -22°F to 185°F (-30°C to 85°C), < 90% Non-Condensing
Service: Closed Systems, Hot and Chilled Water, up to 50% Glycol
Seat Leakage: Drop-Tight Close Off
Power Supply: 24 VAC ±10% 50/60 HZ
Electrical Rating: 24 VAC, 60 HZ, 0.4 Amps.
Do not exceed number of valves per transformer rating.
Example: Do not use more than 4 valves per 40VA transformer
Sensors: NTC Thermistor, 10 kΩ @ 77°F (25°C ±0.2°C) β=3892

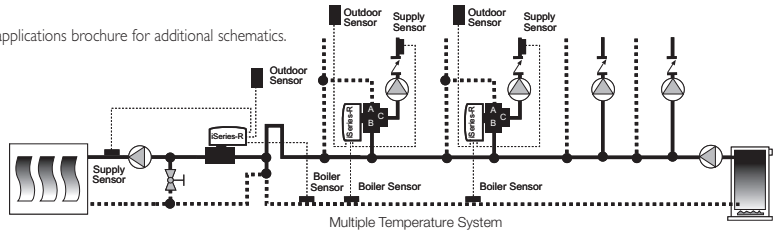
Outdoor Reset Application:

Use the Taco Outdoor Reset iSeries Mixing Valves instead of a conventional injection system. With a full featured outdoor reset control built right into the actuator there is no need for an externally mounted reset control or expensive control valve. The iSeries valves can also be set up to do zone-by-zone outdoor reset, providing optimal comfort control for every zone.

New 3-way iValve with union connections makes for an easy change-out of any thermostatic mixing valve. Instantly improve the comfort and energy efficiency of any job by dropping in an Outdoor Reset iValve in place of any fixed temperature mixing valve.

The direct drive actuator modulates a 2-way, 3-way or 4-way valve that injects different rates of hot water, supplying virtually any water temperature to the heating system. Working off an adjustable reset ratio, the valve's maximum and minimum system supply temperatures can be adjusted to support all types of jobs, including staple-up radiant floors that require a higher starting temperature. The iSeries valves include an adjustable boiler protection function which prevents low water temperatures from returning to the boiler. With a multi-status LED indicator light, plug-in wiring connections and an easy to remove actuator, the installation could not be easier.

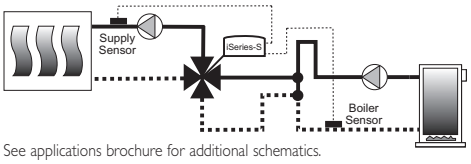
See applications brochure for additional schematics.



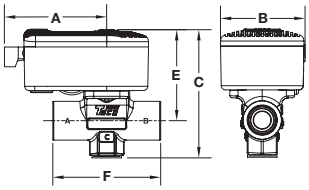
Multiple Temperature System

Setpoint Application:

Use the Taco Setpoint iSeries Mixing Valves instead of a thermostatic mixing valve for precise dial-in temperature control to a heating system. In combination with the optional boiler protection sensor, the iSeries valves provide the unique benefit of optimal temperature control with boiler protection. The setpoint temperature is adjustable from 80°F to 180°F using a dial located on top of the actuator. A 15°F setback of the supply water can be initiated for additional unoccupied or nighttime setback control. An external multi-status LED indicator light, plug-in wiring connections and an easy to remove actuator makes installation and diagnostics a snap.



See applications brochure for additional schematics.

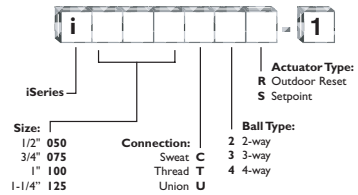


Dimensions

Valve Size	A	B	C				E			F		WEIGHT / Cv			
			2-way	3-way	*3-way, U	4-way	2&3-way	*3-way, U	4-way	*3-way, U	4-way	2-way	3-way	*3-way, U	4-way
1/2"	3"	2-3/8"	3-9/16"	4-9/16"	5-3/16"	---	2-9/16"	2-9/16"	---	4-1/4"	---	1.15 lbs/4.9	1.25 lbs/1.5	1.45 lbs/3.5	---
3/4"	3"	2-3/8"	3-3/4"	4-7/8"	5-3/8"	3-3/4"	2-5/8"	2-9-16"	3-1/16"	4-3/4"	3-3/16"	1.20 lbs/10.3	1.32 lbs/4.5	1.50 lbs/4.5	1.80 lbs/7.0
1"	3"	2-3/8"	3-11/16"	5"	6-5/8"	3-15/16"	2-5/8"	2-9-16"	3-1/16"	7-1/4"	3-3/4"	1.55 lbs/8.9	1.75 lbs/4.5	1.50 lbs/4.5	1.25 lbs/9.3
1-1/4"	3"	2-3/8"	---	---	---	4-5/16"	---	---	3-5/16"	---	3-3/8"	---	---	---	3.15 lbs/17.5

***3-way, U** (Union Connections)

iSeries Ordering



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