

Instrument Enclosure Temperature Valve

For heating instrument and analyzer enclosures up to 200 psi (13.8 bar) (1379 kpa)



IETV
Instrument Enclosure
Temperature Valve

Applications

The Armstrong IETV is a compact self-contained control valve which provides a safe, reliable, and economical alternative to potentially hazardous electrical resistance heating. The IETV valve senses enclosure temperature and automatically modulates steam flow to maintain desired temperature within 2 °F of set-point.

Operation

The IETV thermostatic element extends through the instrument enclosure wall and senses enclosure temperature. In response to slight enclosure temperature changes, the IETV modulates steam flow to a steam coil heater in order to maintain constant temperature. If the temperature rises above set-point, the IETV will close tightly to prevent overheating. Interchangeable thermal elements provide set-points from 40 °F (4.4 °C) to 210 °F (99 °C). The IETV comes complete with a weather tight bulkhead fitting for mounting through the enclosure wall. Two optional bulkhead fittings for 3/8" tubing connections are available.

Advantages

The IETV will maintain enclosure temperature constant over a wide range of ambient temperatures and with steam pressure from 15 psi (1 bar) to 200 psi (13.8 bar) eliminating the probability of overheating. No special NEMA 7/9 housings are required in hazardous locations. Enclosure temperature is maintained within 2 °F for only a few cents per day in steam cost.

Design Features

- All stainless steel body, fittings, spring, and plug
- Corrosion resistant for long life
- Maintains enclosure temperature within 2 °F
- No danger of overheating
- Interchangeable actuators for quick, easy temperature changes
- 100% factory tested
- Direct acting (No pilot)
- No explosion hazard
- Unaffected by steam pressure changes
- Easy installation in any orientation with simple wrenches
- Operating temperatures are not affected by pressure
- Wide choice of set-points



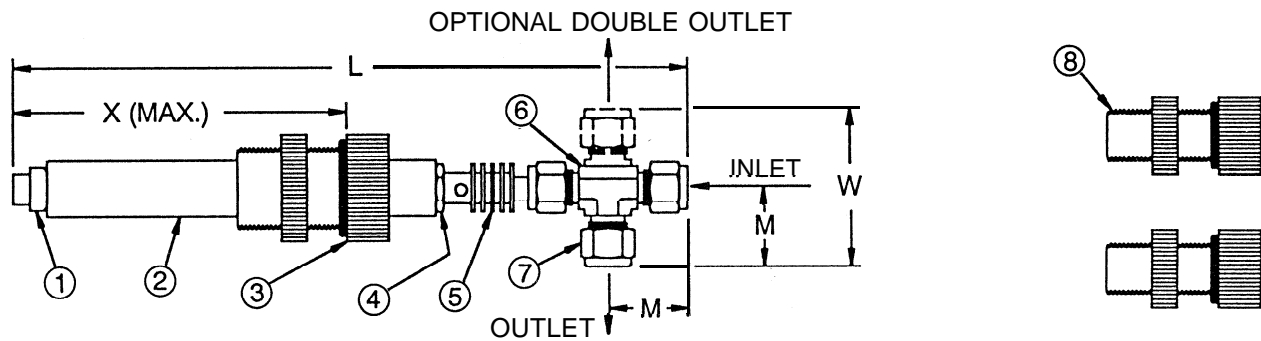
Armstrong

Instrument Enclosure Temperature Valve - IETV

Specifications	
Maximum Operating Pressure	200 psi (13.8 bar)
Available Control Point ** Temps. °F	40 to 210
Flow Coefficient C _v at Set Point	0.50

** Actual valve set point is 10 °F above control point.

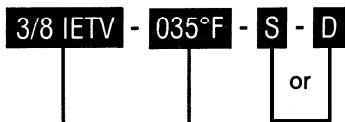
List of Materials		
Item	Name of Part	Material
1	Interchangeable Thermal Actuator	303 Stainless Steel
2	Isolation Extension	Acetal Copolymer
3	Valve Mounting Bulkhead Fitting	Acetal Copolymer
4	Calibration Lock Nut	303 Stainless Steel
5	Yoke	303 Stainless Steel
6	Body	316 Stainless Steel
7	Tubing Compression Nut	316 Stainless Steel
8	3/8" Tubing Bulkhead Fitting (Optional)	Acetal Copolymer



Dimensions and Weights						
Outlets	Size Tube OD (in)	L* in (mm)	M in (mm)	X in (mm)	W in (mm)	Weight lb (kg)
Single	3/8	10 (254)	1 3/16 (30)	5 1/4 (133)	—	3/4 (0.33)
Double	3/8	10 (254)	1 3/16 (30)	5 1/4 (133)	2 3/8 (60)	3/4 (0.36)

*Short Configuration is 7 3/8" (187 mm) overall. Supplied without bulkhead fitting.

How To Order



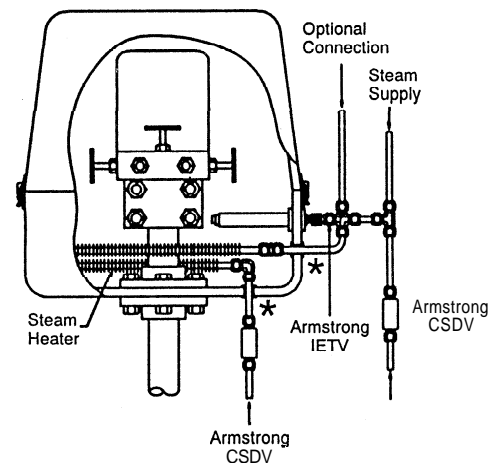
Note: Optional Bulkhead fittings must be ordered separately



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Steam Traps\ Humidifiers\ Steam Coils\ Valves



* Optional 3/8" Tube Bulkhead fittings
Protect instruments in rigid or flexible
enclosures