# ThermOmegaTech<sup>®</sup>

# IC/SP

### **INTERCHANGEABLE CARTRIDGE SCALD PROTECTION VALVE**

# **BENEFITS**

- Temperatures up to 105°F meet ANSI Z358.1 standards
- Protects safety showers from over-temperature conditions, keeping personnel safe
- Primary protection or fail-safe backup
- Self operating, no power or signal required
- Long service life
- Fast response
- Discharges the minimum amount of water required
- Stainless steel version is NSF/ANSI/CAN 61 & 372 Certified

# **DESIGN FEATURES**

- Exclusive Thermoloid® thermal actuator
- Brass or stainless steel body, fittings, and plugs
- Compact and low-mass
- Corrosion resistant
- Ram type plug for reliable and tight shutoff
- Operates in narrow temperature band
- Two wrench flats for easy installation

# **APPLICATIONS**

A safety hazard for plant personnel can occur when utilizing safety showers, facewash, or eyewash stations if overheating the pipes caused by solar radiation or steam/electric tracing results in extremely high temperatures at the point of use. The **IC/SP** valve prevents this safety hazard.

When installed in locations exposed to the same source of overheating as the system, the **IC/SP** will be heated just as the pipe system. The valve will open to establish flow until the over-temperature water is eliminated and it will then modulate closed.

# **OPERATION**

**IC/SP** valves are installed into a minimum 1" Tee with a 1" x 3/4" NPT reducer bushing or a 1-1/4" x  $\frac{3}{4}$ " x 1-1/4" NPT reducer Tee (no bushing) with adequate internal clearance. When the water temperature approaches the valve's set-point, the valve modulates open. Once the water temperature returns to the safe range, the valve then modulates closed, minimizing water loss.



# **TYPICAL INSTALLATION**



**Example:** A IC/SP-105 valve will initiate flow when the thermostatic actuator senses water temperature of 98°F (36.7°C) and will remain open as long as the discharge water temperature is above 95°F (35°C).

# IC/SP

#### INTERCHANGEABLE CARTRIDGE SCALD PROTECTION VALVE

# **PARTS & MATERIALS**



ITEM	DESCRIPTION	MATERIAL			
1	CARTRIDE BODY	Brass or 300 Series SS			
2	SEAL RETAINER	Brass or 300 Series SS			
3	ACTUATOR BUSHING	Brass or 300 Series SS			
4	PLUG	300 Series SS			
5	NUT	300 Series SS			
6	OPERATING SPRING	300 Series SS			
7	THERMAL ACTUATOR	Brass or 300 Series SS			
8	SEAT SEAL	PTFE			
9	PISTON	Brass or 300 Series SS			

## **DIMENSIONS & CAPACITIES**

Connection	А		В		С		Weight		Z	~	Maximum	Maximum
	in	mm	in	mm	in	mm	Lb	Kg	(Drain)		Operating Pressure	Temperature
3/4" NPT	2.3	58.7	1.3	33	1.4	35.6	0.5	0.2	3/4″ NPT	1.3	100 PSIG (6.9 BAR)	Range 150°F (83.3°C) over set- point with a limit of 300°F (149°C)

## ORDERING

Part Number	Description				
195 - 000000 - XXX	3/4" IC/SP Brass Cartridge				
195 - 220000 - XXX	3/4" IC/SP 300 Serier SS Cartridge				

#### NOTES

- 1. Standard full open temperature, "XXX", is 105°F. Optional open temperatures, "XXX": 95°F, 100°F, 110°F, and 115°F. *a. Note: Closing temperature is typically 10°F below opening temperature.*
- 2. This valve is NSF/ANSI/CAN 61 & 372 Certified.
- 3. A #20 mesh strainer is recommended.
- 4. Warranty information disclosed at www.thermomegatech.com/terms-conditions/

