



THERM-OMEGA-TECH

ISO 9001 CERTIFIED

3/4" IC/FP

INTERCHANGEABLE CARTRIDGE/FREEZE PROTECTION

**FREEZE PROBLEMS?
CALL THERM OMEGA TECH
TOLL-FREE 1-877-379-8258**

DESIGN FEATURES

- ◆ Brass body and thermal element
- ◆ Easily maintained
- ◆ Corrosion resistant - Long service life
- ◆ Most narrow temperature band available
- ◆ Ram-type plug for reliable tight shutoff
- ◆ Sensitive to fluid temperature only
- ◆ Unaffected by pressure variations
- ◆ Easy installation with pipe wrench
- ◆ Discharges the minimum amount of water required to prevent freeze damage



ADVANTAGES

Typically, freeze protection is effected by cracking open manual bleed valves. This method is at best risky. Human error or plugging of partially cracked valves annually accounts for millions of dollars in freeze damage. 3/4" **IC/FP** valves eliminate this type of problem by automating protection, reducing water consumption, and eliminating damage and down time. The unique ram-type plug and seat provide reliable, tight shutoff longer than any other design available. The easily replaceable precalibrated cartridges minimize downtime during maintenance. All 3/4" **IC/FP** valves are covered by an 18 month prorated warranty.

APPLICATIONS

The 3/4" **IC/FP** (Freeze Protection) valves are ideal for the protection of piping, safety showers, solar collectors & piping, condensate systems, fire lines, spray nozzles, or as backup protection on traced systems, where an unrestricted flow is required under normal operating conditions. Its sensitivity to water temperature makes this valve ideal for applications where water conservation or wastewater disposal are a prime concern.

OPERATION

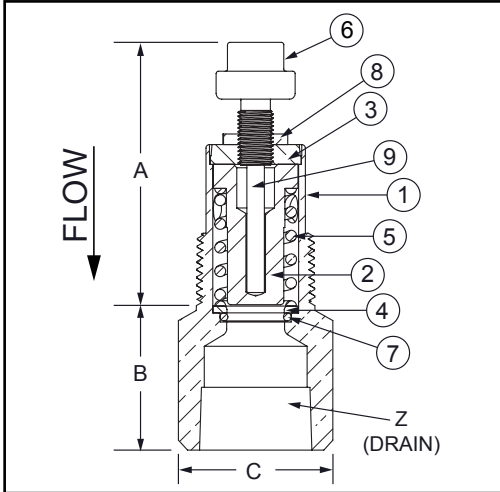
The 3/4" **IC/FP** will screw into any 3/4" NPT threaded opening with adequate internal clearance (see drawing at "Parts and Materials"). When the fluid temperature approaches freezing, and freeze damage is imminent, the thermal actuator modulates the valve open. When the makeup water temperature returns to the safe range, the valve then modulates closed, minimizing water loss. Due to the actuator's placement in the fluid stream, this valve is unaffected by ambient air temperature, and opens only when the water is in danger of freezing, being open at 35°F (1.7°C), and closed at 40°F (4.4°C)

3/4" IC/FP

INTERCHANGEABLE CARTRIDGE/FREEZE PROTECTION



PARTS AND MATERIALS



ITEM	DESCRIPTION	MATERIAL
1	CARTRIDGE BODY	BRASS
2	RAM TYPE PLUG	300 SERIES STAINLESS
3	ACTUATOR BUSHING	BRASS
4	BODY SEAL RETAINER	BRASS
5	OPERATING SPRING	300 SERIES STAINLESS
6	ACTUATOR	BRASS
7	SEAT SEAL	PTFE
8	CALIBRATION LOCKNUT	300 SERIES STAINLESS
9	PISTON	300 SERIES STAINLESS

SPECIFICATIONS

Connection	A		B		C		Z (Drain)	C _v	Weight		Maximum Pressure	Maximum Temperature
	in	mm	in	mm	in	mm			Lb	Kg		
3/4" NPT	2.15	54.6	1.33	33.8	1.38	35.1	3/4 NPTF	1.3	0.5	0.23	100 PSIG (6.9 BAR)	300°F (149°C)

TO ORDER SPECIFY:

Part Number	Description
185-000000-035	3/4" IC/FP-35 Cartridge

NOTES:

1. Open / Close temperatures: 35°F / 40°F.
2. A #20 mesh strainer is recommended.

Therm-Omega-Tech, Inc. reserves the right to change the design and specifications without notice



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