



Winning® Scald Protection

Operation

Under normal operating conditions, water passes through a virtually unobstructed DN25 or larger tee pipe, allowing this valve to be used in higher flow lines. The DN15 SPV will screw into any DN15 threaded opening with adequate internal clearance. When the water temperature rises above safe limits, and a danger of scalding exists, the thermal actuator located in the fluid stream modulates the valve open. When the 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 is open at 41°C and will remain open until water temperature is 35°C.

Application

Solar radiation or overheating caused by steam or electric tracing can cause extremely high temperatures at the point of use, resulting in a safety hazard for plant personnel. When installed in safety showers, eyewash stations, and other locations exposed to the same source of overheating as the system, the SPV will be heated just as the pipe system. The valve will open to establish flow until the overtemperature water is eliminated and it will then modulate closed.



Design Features:

- * Stainless body and thermal element
- * Narrow temperature band
- * Compact, low mass - Fast response
- * 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 keep water temperature within safe limits

Specifications

Product Name	Model	Port Size	Body Material	Close/Open Temp (°C)	Maximum Temp (°C)	Maximum Pressure (MPa)	Flow Rate (Cv)	Dimensions (mm)	Net Weight (g)
Scald Protection Valve	SP68 - 95	1/2" Female	Stainless	29~35	+95	1.0	0.6	Φ 32*107	460
Scald Protection Valve	SP68 - 100	1/2" Female	Stainless	32~38	+95	1.0	0.6	Φ 32*107	460
Scald Protection Valve	SP68 - 105	1/2" Female	Stainless	35~41	+95	1.0	0.6	Φ 32*107	460

Notes:

- * Seal material: EPDM, Viton available
- * Valve body material: SS304/SS316 available.



INSTALLATION INSTRUCTION

FPV FREEZE PROTECTION VALVES SPV SCALD PROTECTION VALVES

If installed and maintained as recommended, the **WINNING® THERMO CONTROL EQUIPMENT CO., LTD.** SP valves and FP valves will yield reliable and trouble free service.

The FP valve is full open at its stated temperature and full closed approximately 5°C higher. The SP valve is reverse acting, and is also full open at its stated temperature, but is full closed at approximately 5°C below its stated temperature.

The valves' flow rate please see the product specification sheets. Never undersize installations.

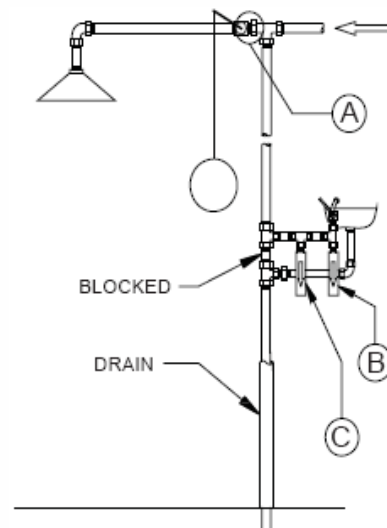
FP VALVES MAY SERVE AS PRIMARY PROTECTION ON UNTRACED SYSTEMS, OR AS A FAIL-SAFE BACKUP FOR TRACED WATER SYSTEMS:

Always place freeze valves at low points or where water will tend to be static or prone to accumulate or dead leg. Keep outlet piping short and discharge to a large diameter drain or ditch. Never create an "ice patch" hazard by discharging to a slab or walkway. A preferred method of installation is to place the valve close to the point of discharge and connect with a run of piping from the line to be protected to the inlet side of the FP valve. Source and inlet piping may be insulated and/or traced, but never insulate or trace the valve body.

ON SAFETY SHOWERS AND EYEWASH STATIONS:

Always keep pipe length short (with close nipple) between inflow piping and operating valve (see A) and place FP valve close to the operating valve (see B).

REMBER: It is the flow of water that keeps the pipe from freezing (even short dead legs will freeze in severe conditions). SP valves are used to purge over-temperature water from the inlet pipe system. This keeps the shower piping filled with cooler water. Solar heating is the most common source of heating in remote installations. **ALWAYS** place the valve in the system as close to the point of use as possible. (see C). **NEVER** place the valve in the shade or in a cool place by comparison to the piping system, etc. Keep in mind that the valve itself has to heat up to open.



CAUTIONS

Use only standard and proper connections • Do not over-tighten connections • Always test after installation and before use • Always test before winter and summer seasons • Test at regular intervals.

TO TEST FOR OPERATION WHILE IN LINE

FP VALVE: Cool with freon, CO2 or ice and water slurry. Valve will start to run or drip until warm water reaches actuator.

SP SCLAD PROTECTION VALVE: Heat inlet line and valve with electric heat gun or torch (if explosion hazard permits). Heat until valve flows to purge hot liquid.

TO TEST FOR PROPER SET POINT

FP VALVE: Remove from system and place entire valve in an ice and water slurry at 1°C. The valve should open fully within 5 minutes. Move the valve to an ice and water slurry at 6°C. The valve should close bubble tight.

SP OVERTEMPERATURE VALVE: Remove from system and place entire valve in water bath at upper limit of valve temperature range. Valve should open fully. Place in water bath at low end of range. Valve should close to bubble tight.

NOTE

It should be understood that the use of these valves is not a substitute for regular and routine scrutiny of safe conditions. Installation and use of this product is outside the control of our company and is the sole responsibility of the end user. **WINNING THERMO CONTROL EQUIPMENT CO., LTD.** makes no guaranties, either expressed or implied, in connection with its installation or use.