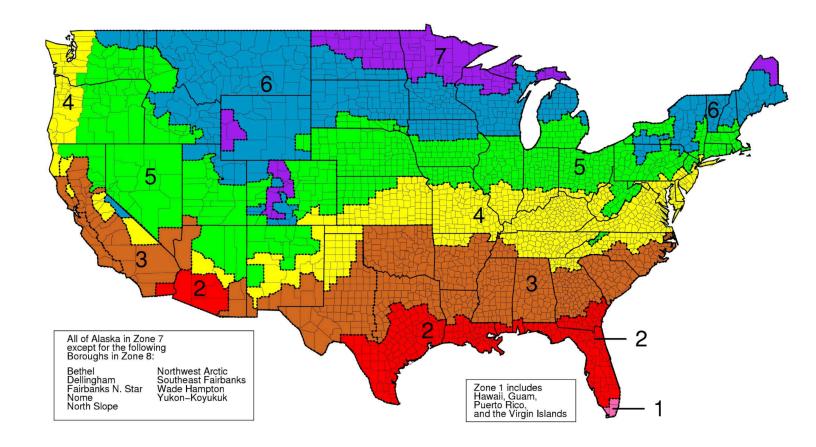


User Instructions

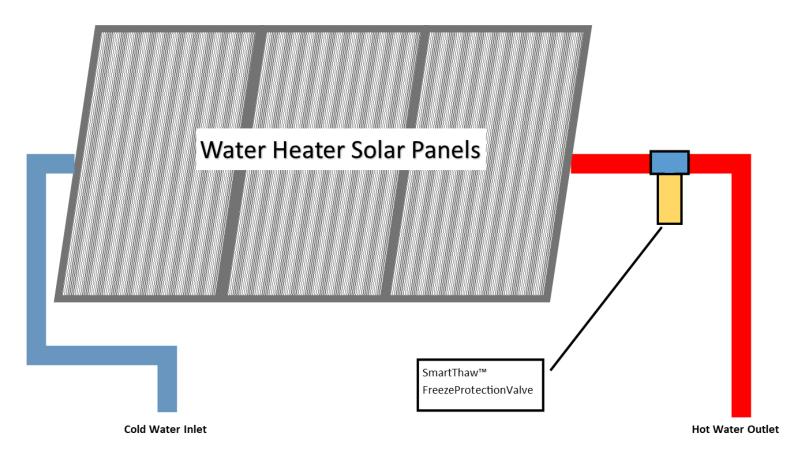
- Read and understand all instructions before use.
- NOTE: Use a pressure regulator if water pressure is higher than 145 PSI.
- Check for leaks.
- Use SmartThaw[™] FPV in zones 1-4 only as indicated on this zone map.











Keep your solar collectors and exposed pipes from freezing with a SmartTech Solar SmartThaw[™] FPV. The SmartThaw[™] FPV operates without any electrical power or air pressure. Install the SmartThaw[™] FPV on the hot water side of the solar collector. Make sure there is no restriction to the outlet.

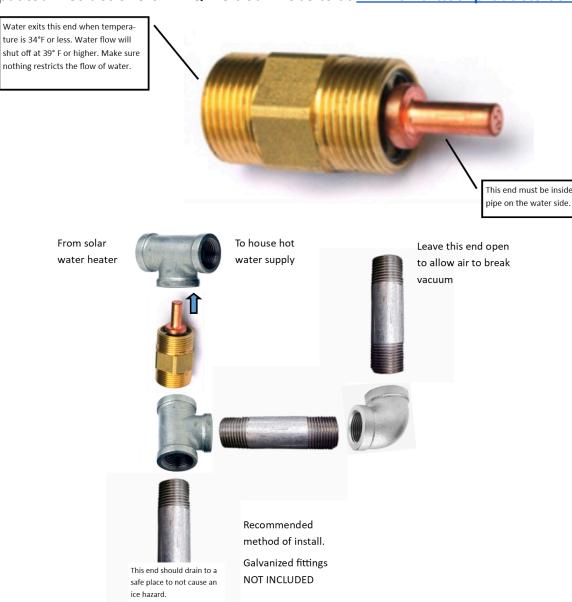
NOTE: When water exits the SmartThaw™ FPV make sure it does not drain onto a footpath where it could freeze and cause a hazard.





The SmartThaw[™] FPVcontains a thermal actuator. When the temperature approaches freezing, the SmartThaw[™] FPV opens (34° F) to discharge the cold water and recloses (39° F) upon warmer water replacement. This cycle continues preventing panel and piping freeze up.

NOTE: For updated instructions or FAQ visit our website at www.smarttechproducts.com.











Warnings and Safety Precautions

- SmartThaw[™] FPV is for outdoor use only.
- SmartThaw™ FPV will allow water to escape pipes being protected. If used in an incorrect zone lots of water could be wasted.
- SmartThaw™ FPV is recommended for pressures under 150 PSI. Use a water regulator for higher pressures.
- Do not allow water to spray or drip into or around areas used to walk on. Water escape could freeze causing a hazardous slippery situation.
- If using a long drain piping be sure to add an air break to prevent a vacuum water build up in the drain pipe.
- Make sure water is shut off before connecting or disconnecting the SmartThaw™ FPV.
- Inspect SmartThaw™ FPV before installation.
- Do not insulate or expose SmartThaw™ FPV to warm air when protection is needed. Doing so will not provide freeze protection.
- In high mineral water areas regular maintenance to clean deposits of build-up is required. Water treatment is recommended if pH level is > 8.0.

Port Size	Open~Close Temperature		Maximum Operating Temperature		Maximum Operating Pressure		Dimension		Net Weight		Flow Rate
	°F	°C	°F	°C	PSI	MPa	inch	mm	oz	g	(Cv)
3/4"NPT	33.8 ~ 39.2	1 ~ 4	194	90	145	1.0	1.18 x 1.18 x 2.71	Ф30х69	4.6	130	0.6

Components manufactured in China to STP specifications



Limited Warranty

Warranty

SmartTechProducts (STP) warrants to the end user that the SmartThaw™ FPV will be free from defects in material and workmanship for one(1) year from the original date of purchase. If you discover a defect in a product covered by this warranty, we will repair, or if repair is not possible, replace the item at STP's sole discretion. STP has no obligation to honor a warranty on a product until the customer returns the defective product to STP, at the purchaser's expense with proper Proof of Purchase. STP, nor any of its third party suppliers, makes any other warranty condition of any kind, whether express or implied. All warranties are handled through STP's location (see below).

Exclusions

This warranty covers defects in manufacturing discovered while using the product as recommended by STP. The warranty does not cover any problem that arises as a result of improper use or modification. The warranty does not cover loss or theft, nor does coverage extend to damage caused by misuse, abuse, unauthorized modification, improper storage conditions, lightning or natural disasters.

Limits of Liability

Should the product(s) fail, your sole recourse shall be repair, replacement, as described in the preceding paragraphs. We will not be held liable to you or any other party for any damages that result from the failure of the product. Damages excluded include, but are not limited to, the following: Lost profits, lost savings, lost data, damage to other equipment, and incidental or consequential damages arising from the use or inability to use this product. In no event will STP be liable for more than the amount of your purchase price, not to exceed the current list price of the product, and excluding tax, shipping and handling charges. By installing or using this product, the user accepts all terms described herein.

How to obtain service under this Warranty

Contact us using one of the following methods:

Send an email to info@SmartTechProducts.com

Website: www.smarttechproducts.com

Or write to us: Smart Tech Products 419 S Broad Street Klamath Falls, OR 97601

Requirements: Proof of purchase required. Return shipping costs to be paid by the end user.

