

**Rostra**  
 Vernatherm .LLC  
 Precision Thermal Controls

# SOLAR HOT WATER FREEZE PROTECTION

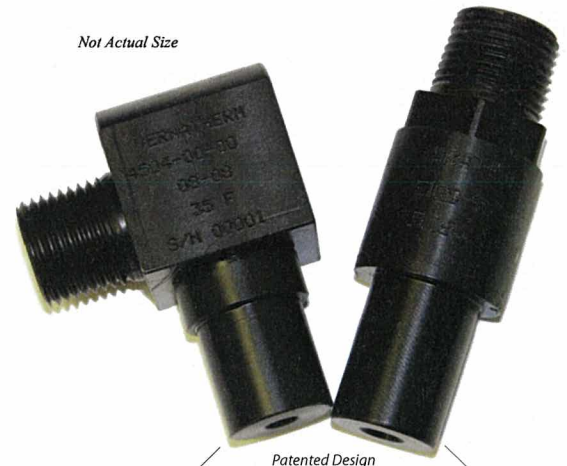
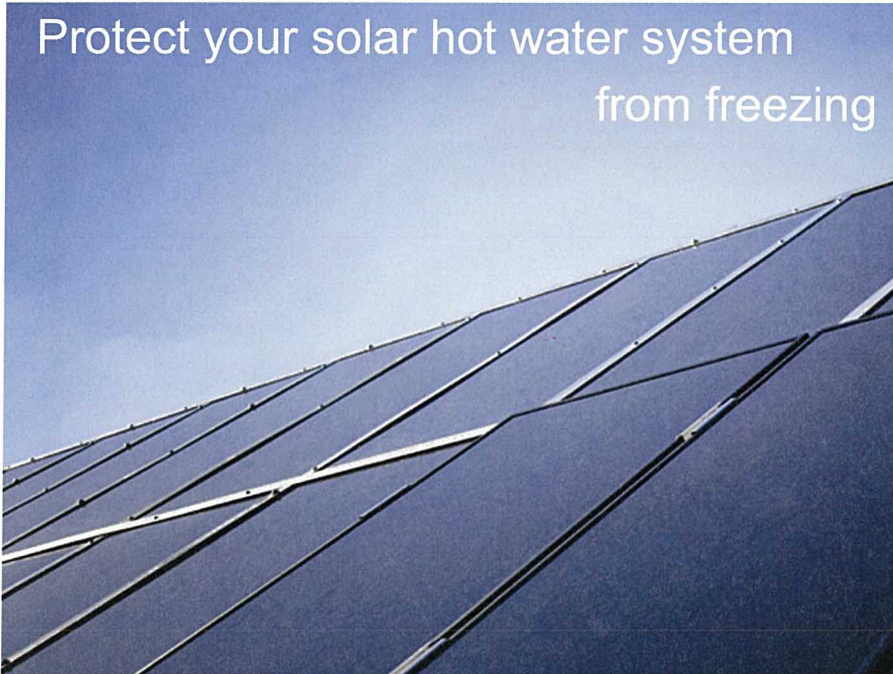
SOLAR COLLECTOR AND EXPOSED PIPING ANTI-FREEZE SOLUTION

## Vernatherm Freeze Protection Valve

Keep your solar collectors and exposed pipes from freezing with the Vernatherm solar freeze protection valve.

This Vernatherm product contains a thermal actuator that opens the valve when the temperature approaches freezing and re-closes it upon warm up. This is a continuous process of modulation; cold water is discharged and replaced by warmer water preventing panel and piping freeze up.

Our valve has a patented feature which prevents the seizing of the thermal actuator; a common problem among other freeze protection valves offered by our competition.

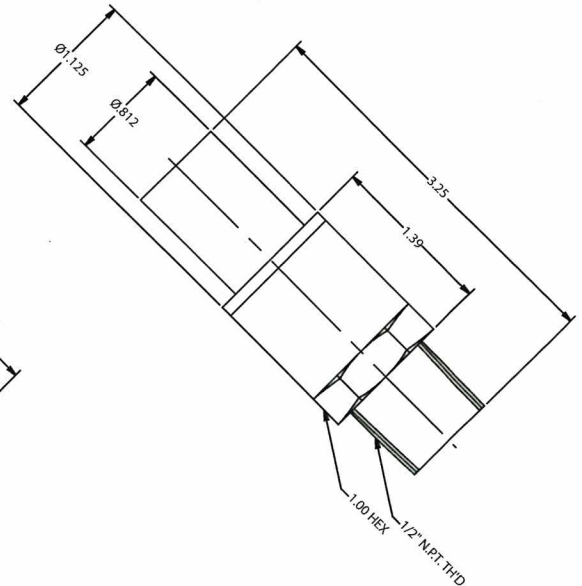
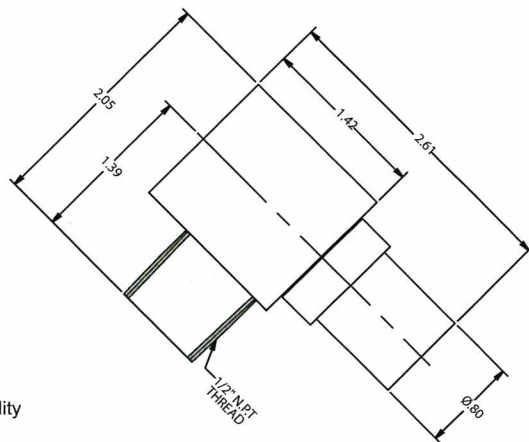


PART# 4500-00-00 - 35F Discharge  
 PART# 4500-01-00 - 45F Discharge

PART# 4505-00-00 - 35F Discharge  
 PART# 4505-01-00 - 45F Discharge

### Product Features

- Discharge temperature set to 35F and 45F
- Internal filter screen
- UV stabilized body material
- FDA and NSF listed materials
- 100 psi maximum operating pressure
- Complete mechanical operation
- Small size for easy install
- Tamper resistant design
- Corrosion resistant materials
- Non-electric function
- Screen protected anti-insect discharge port
- Anti-seize feature ensuring longevity and durability



Rostra Vernatherm

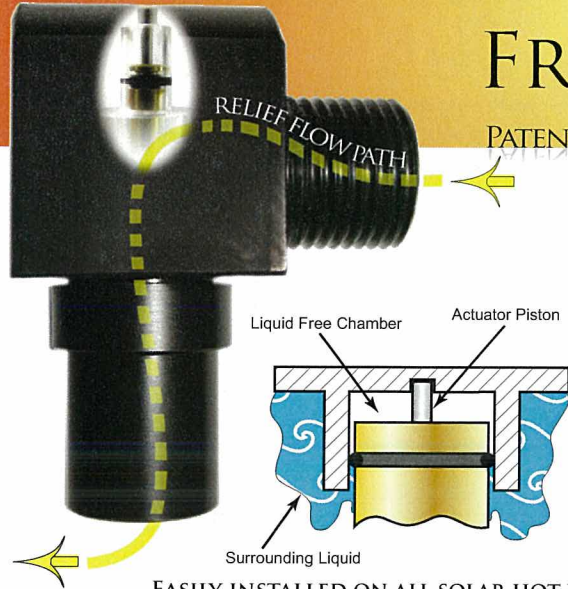
106 Enterprise Drive, Bristol CT 06010-3060

P:860-582-6776 F:860-582-0298 W:www.Vernatherm.com



# SOLAR HOT WATER

## FREEZE PROTECTION



PATENTED DESIGN FEATURES UNLIKE ANY OTHER SOLUTION

Introducing the world's first and only non-electric freeze protection valve designed specifically for solar hot water systems that will not seize over time due to corrosion.

A patented liquid tight piston chamber inside of the valve prevents any liquid from coming into contact with the piston responsible for opening and closing the valve eliminating a common problem among our competitors.

- Patented anti seize feature
- Small size for easy install
- Tamper resistant design
- Corrosion resistant materials
- Non-electric function
- Anti-insect body design
- Discharge temperature set to 35F and 45F
- Internal filter screen
- UV stabilized body material
- FDA and NSF listed materials
- 100 psi maximum operating pressure
- Complete mechanical operation

EASILY INSTALLED ON ALL SOLAR HOT WATER SYSTEMS.

PROTECT YOUR INVESTMENT, AND ELIMINATE THE RISK OF FREEZE DAMAGE

WWW.VERNATHERM.COM  
 106 ENTERPRISE DR BRISTOL, CONNECTICUT 06010  
 P: 860-582-6776 F:860-582-0298  
 EMAIL: KLIONELLO@VERNATHERM.COM

Rostra  
 Vernatherm .LLC  
 Precision Thermal Controls

Rostra  
 Vernatherm .LLC  
 Precision Thermal Controls

## INSTALLATION INSTRUCTIONS

### Operating and Installation Criteria

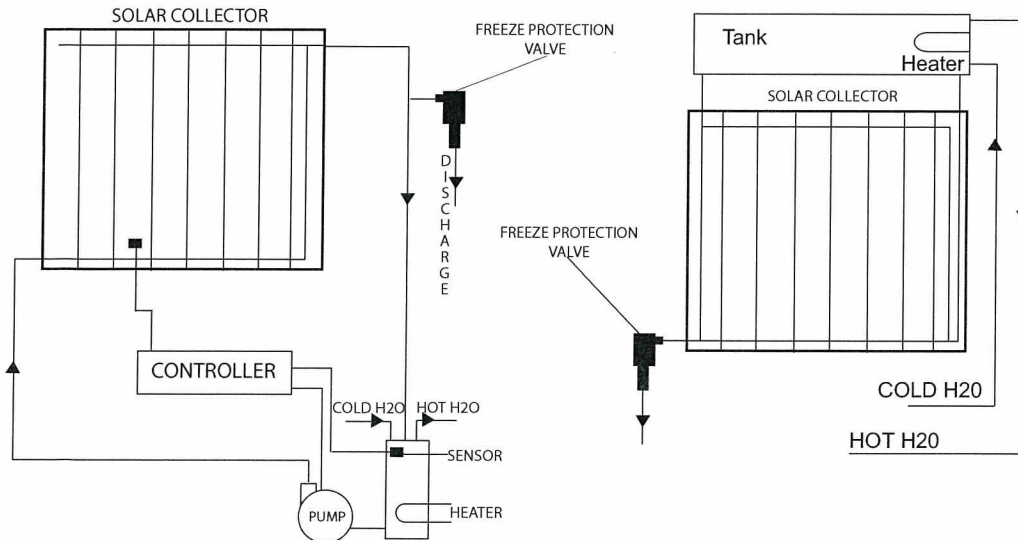
- Proper location of valve on solar system is crucial; fluid must pass through the collectors and piping before flowing through the valve.
- The valve must be installed in a location where it is exposed to the coldest ambient temperature; avoid any external heat sources such as vents and pumps. External heat sources will give the valve a false ambient temperature causing malfunction, and potential system freeze.
- Proper function of the valve requires system pressure of 10-100 psi
- The valve must be installed on exit side of the system to prevent freezing of the collectors.
- Do not insulate the valve, or any surrounding piping that has flowing liquid.
- When tightening threads do not exceed 50 in/lbs of torque, any rate higher may result in damage to the valve's threads and/or entire system.
- It is mandatory use thread sealing material on the valve threads prior to installation to prevent potential leaking.

### Rostra Limited Warrantee

Rostra Vernatherm Freeze Protection Valves are warranted by the manufacturer when installed properly, against all defects in material and workmanship, if installed properly and used in accordance with the installation instructions, for a period of one year from the date of purchase. Rostra Vernatherm, under this warrantee is limited to the replacement of the product, and does not include expenses of removing or installing the unit. To make claim on this warrantee the customer must return the freeze protection valve with proof of purchase to Rostra Vernatherm. Modifying or disassembling this valve voids all warrantees.

### Installation Instructions

1. Ensure the valve ports are free of debris before proceeding with installation.
2. Apply thread sealing material to valve threads.
3. Depressurize solar system, to prevent any potential scalding during installation.
4. Thread valve into system taking caution not to cross thread the valve, as this will permanently damage the valve.
5. Make sure not to over torque the valve during installation; do not exceed 50 in/lbs.
6. Pressurize solar system, evacuate any air within the system if necessary.



ROSTRA VERNATHERM  
 106 ENTERPRISE DRIVE, BRISTOL CT  
 06010

P:860-582-6776  
 F:860-582-0298  
 WWW.VERNATHERM.COM