

| | |
|---|---------|
| Job or Customer : | |
| Location : | |
| Engineer : | |
| <input type="checkbox"/> Complies with Spec <input type="checkbox"/> Alternate | Notes : |
| Contractor : | |
| HeatLink Rep : | |
| Submitted By : | Date : |
| Approved By : | Date : |
| P.O. Number : | Date : |

Description

These Snow Melt Panels are operation centers for fully automatic snow melt systems. They are intended for snow melt systems with a dedicated heat source (e.g. a boiler or other non-DHW appliance), therefore no heat exchangers are required.

OPT-SMP-680 Snow Melt control uses 30090 Snow/Ice sensor and 30091 Snow/Ice socket (sold separately).

Required OPT-SMP-680 option selected below.

| Qty | Stk. # | Pump | Control Option (required) | Qty |
|-----|-------------------|-------------------------------|---------------------------|-----|
| | 4WMIX-SMCP-BAC | Ferrous, Grundfos UPS26-99FC | OPT-SMP-680 | |
| | 4WMIX-HH-SMCP-BAC | Ferrous, Grundfos UPS26-150FC | OPT-SMP-680 | |

Technical Data

Specifications

| | |
|----------------------------|--------------------------------|
| Max ambient temperature | 120°F (49°C) |
| Max operating temperature | 200°F (93°C) |
| Max operating pressure | 125 psi (862 kPa) |
| Temperature Control Method | 4-Way Mixing Valve w/DDC Motor |
| Temperature Control Range | 50-180°F (10-82°C) |
| Snow Melt Control option | OPT-SMP-680* |
| Power supply | 120V(ac) |
| Piping | 1" 304SS Tubing, 1" Brass |
| Piping connections | 1" FNPT |
| Material - backplate | 16 Gauge galvanized steel |
| Material - enclosure | 16 Gauge galvanized steel |

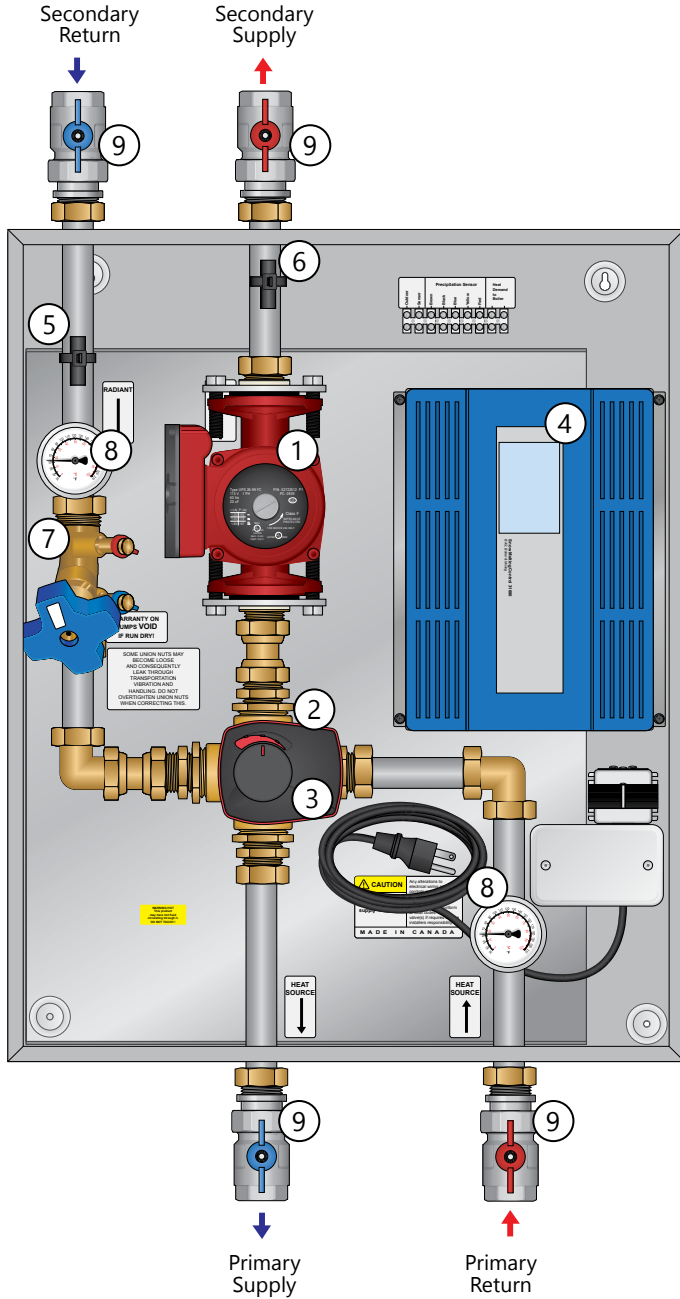
Standards / Listings

CAN/CSA-C22 No.14, UL508
 cETLus

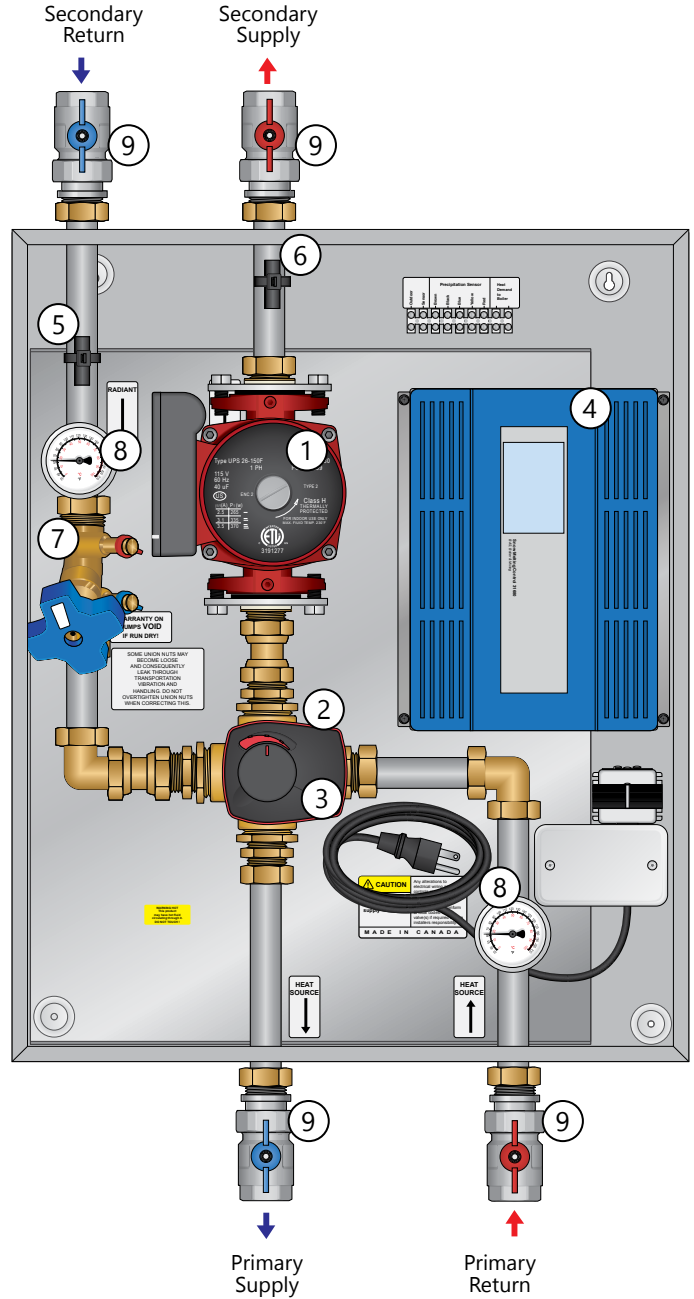
*See [SUB31680](#) for details.

Panel Diagrams

4WMIX-SMCP-BAC *Shown with OPT-SMP-680 installed*



4WMIX-HH-SMCP-BAC *Shown with OPT-SMP-680 installed*



Panel Dimensions

| Stk. # | Enclosure Dimensions | | | Cover Dimensions | |
|-------------------|----------------------|---------|---------|------------------|---------|
| | Width | Height | Depth | Width | Height |
| 4WMIX-SMCP-BAC | 22.0" | 27.0" | 8.00" | 22.25" | 27.25" |
| 4WMIX-HH-SMCP-BAC | (559mm) | (686mm) | (203mm) | (565mm) | (692mm) |

*See page 6 for diagram

Panel Components

| # | Components | Component Description | Part Number | |
|---|-----------------------------|---|----------------------|-------------------|
| | | | 4WMIX-SMCP-BAC | 4WMIX-HH-SMCP-BAC |
| 1 | Secondary pump | Moves the heated fluid through the system when there is a call for heat from the system controller. | UPS26-99 | UPS26-150 |
| 2 | 1¼" Mixing valve (hidden) | 4-way brass mixing valve regulates the temperature in the hydronic system with the help of the electric motor actuator and system controller. | | |
| 3 | DDC Mixing Valve Motor | Mounted to the control valve and moves the valve appropriately to allow the heated fluid to enter. Works in conjunction with the system controller. | | |
| 4 | Snow Melt control | The system controller regulates the panel operation. | OPT-SMP-680 (option) | |
| 5 | Return sensor | Temperature sensor on the system return piping. | | |
| 6 | Supply sensor | Temperature sensor on the system supply piping. | | |
| 7 | Balancing valve | Adjusts flow. | | |
| 8 | Thermometer | Shows system temperature. | | |
| 9 | Isolation valve assemblies* | Zone valve used to isolate the panel from the system during fill & purge, and maintenance. | | |

*Packaged in accessory box for shipping.

Pump Technical Data

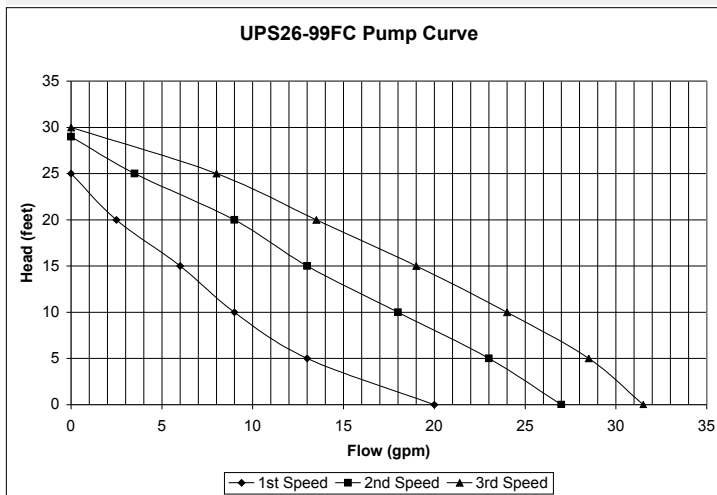
Model Number

UPS 26-99FC

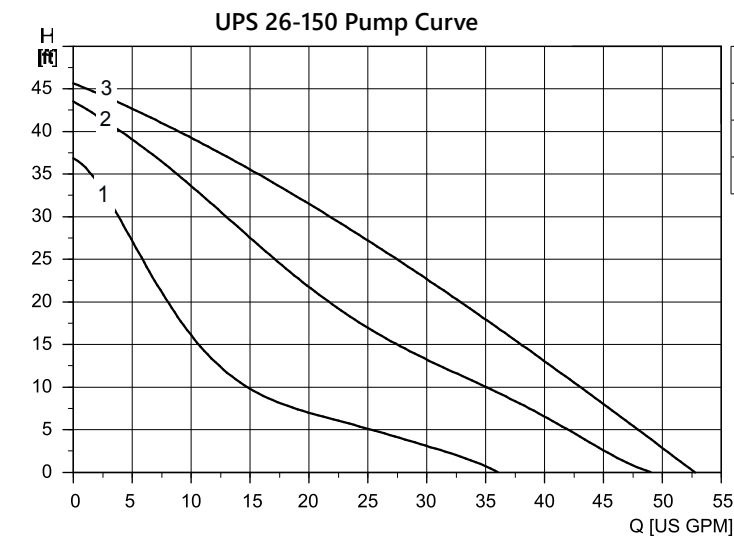
UPS 26-150 FC

Material

| | | |
|---|---|--------------------------------------|
| Inlet cone, bearing plate, bearing retainers, rotor can, rotor cladding, shaft retainer | Stainless steel | |
| Stator housing | Aluminum | |
| Shaft, upper and lower radial bearings | Aluminum oxide ceramic | |
| Thrust bearing | Carbon bearing and EPDM retainer | |
| Check valve | ACETA with 302 SS spring and nitrile rubber seats | |
| Pump housing (volute) | Cast iron | |
| O-ring and gaskets | EPDM | |
| Impeller | PES composite (30% glass filled) | |
| Terminal box | Noryl® with EPDM gasket | |
| Flow range | 0-33 US gpm (0-7.5 m ³ /h) | 0-53 US gpm (0-12 m ³ /h) |
| Head range | 0-29 ft(0-8.8 m) | 0-46 ft (0-14 m) |
| Motors | 2-pole, single phase | |
| Max. liquid temperature | 230°F (110°C) | |
| Min. liquid temperature | 36°F (2°C) | |
| Max. system temperature | 145 psi (10 bar) | |



| Speed | Volts | Amps | Watts | Hp | Capacitor |
|-------|-------|------|-------|-----|------------|
| 3 | 115 | 1.8 | 197 | 1/6 | 20 µF/180V |
| 2 | | 1.5 | 179 | 1/6 | |
| 1 | | 1.3 | 150 | 1/6 | |

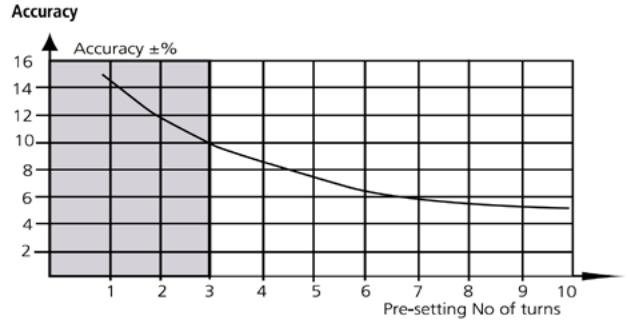


| Speed | Volts | Amps | Watts | Hp | Capacitor |
|-------|-------|------|-------|-----|------------|
| 3 | 115 | 3.5 | 370 | 1/6 | 40 µF/180V |
| 2 | | 3.1 | 335 | 1/6 | |
| 1 | | 2.5 | 265 | 1/6 | |

Balancing Valve Technical Data

Technical Data - Balancing Valve

Pressure Class:.....PN 20
 Max. Temperature:.....248°F (120°C)
 Min. Temperature:.....-4°F (-20°C)
 Max. Closing Pressure:.....10 bar
 Min Pressure Drop:.....2 kPa
 Body Material:.....Dezincification resistant brass
 Gasket Material:.....EPDM

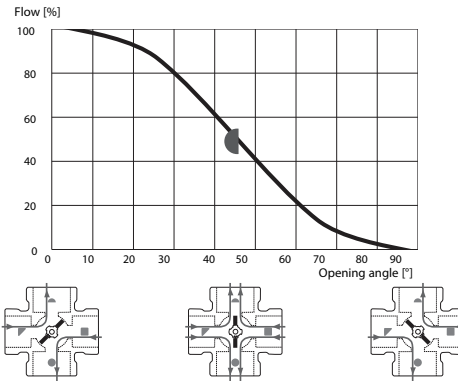


Mixing Valve Technical Data

Technical Data - 4 Way Mixing Valve

Mixing Valve Nominal Size:.....1-¼"
 Mixing Valve Cv:.....18.7
 Material - Valve Body & Slide:.....Brass DZR
 Material - Shaft & Bushing:.....PPS composite
 Material - O-ring:.....EPDM
 Max. Operating Temperature:.....230°F (110°C)
 Min. Operating Temperature:.....-15°F (-10°C)
 Max. Operating Pressure:.....145 psi (10 bar)
 Max. Differential Pressure:.....14.5 psi (1 bar)
 Leaking in % of flow*:.....<1.0%
 Max. Torque:.....<44lbf*in (<5Nm)

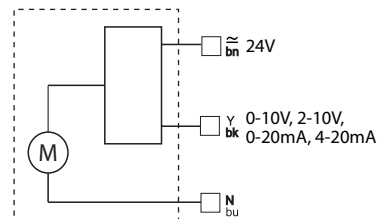
*based on diff. pressure of 14.5 psi (1 bar)



Technical Data - DDC Mixing Valve Motor

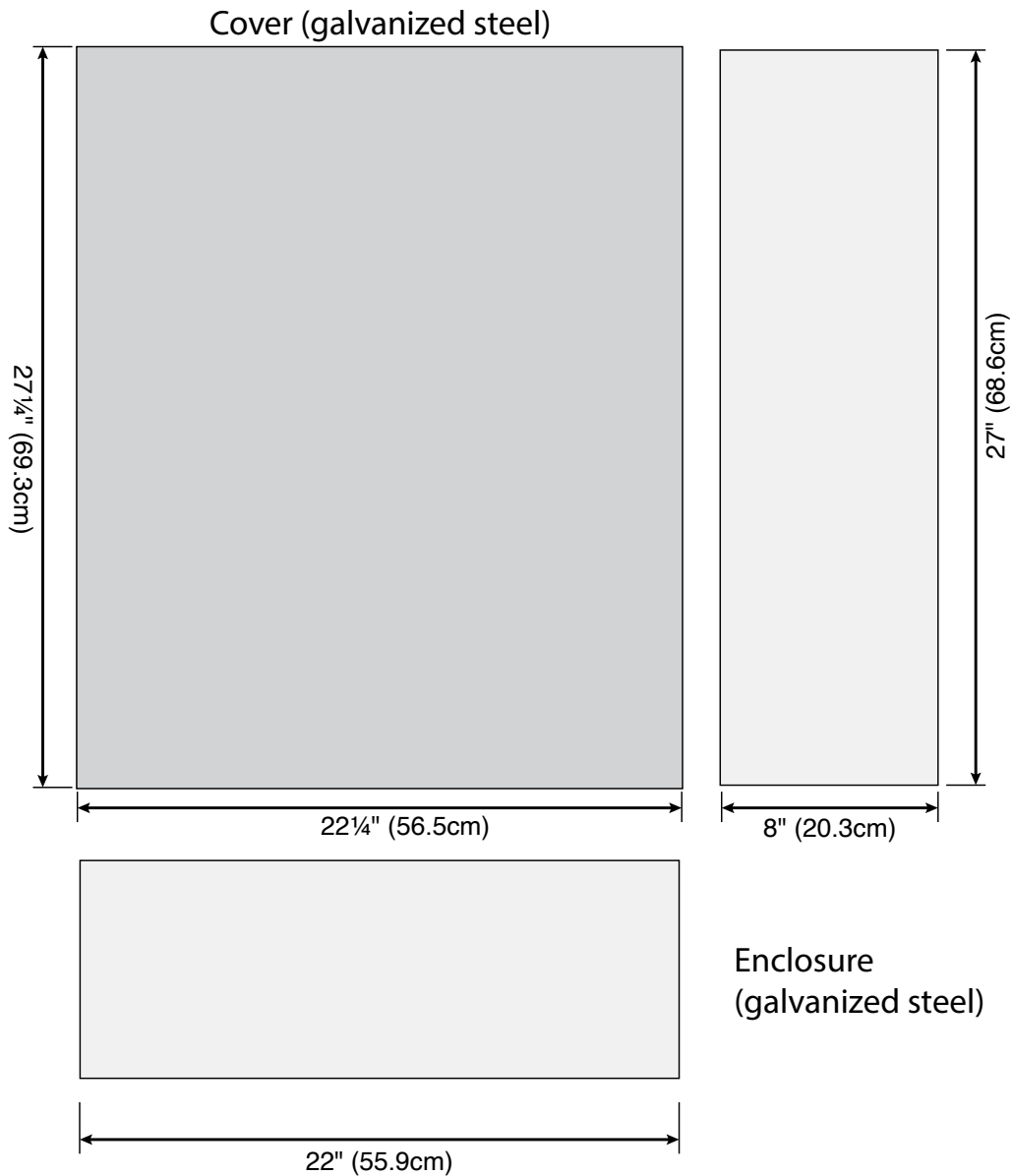
Ambient Temperature:.....max. 131°F (55°C)
 min. 23°F (-5°C)
 Power Supply:.....24±10% Vac/dc, 50/60 Hz
 Enclosure Rating:.....IP41
 Protection Class:.....II
 Torque:.....6 Nm
 Power Consumption - Operation:.....AC: 5W
 DC: 2.5W
 Power Consumption - Dimensioning:.....AC: 8 VA
 DC: 4 VA
 Rating Auxiliary Switch:.....6(3)A 250Vac
 Running Time 90°:.....45/120 sec
 Control Signal.....0-10V, 2-10V, 0-20mA, 4-20mA

The motor should be preceded by a multi-pole contact breaker in the fixed installation.



CE LVD 2006/95/EC
 EMC 2004/108/EC
 RoHS 2002/95/EC

Panel Dimensions



Installation

Installation must follow all of HeatLink's instructions and guidelines.

Maintenance

Maintenance must follow all of HeatLink's instructions and guidelines.

Related Documents

- Operation and Maintenance Manual (L6-4WMIX)
- HeatLink Limited Heating Warranty