

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**

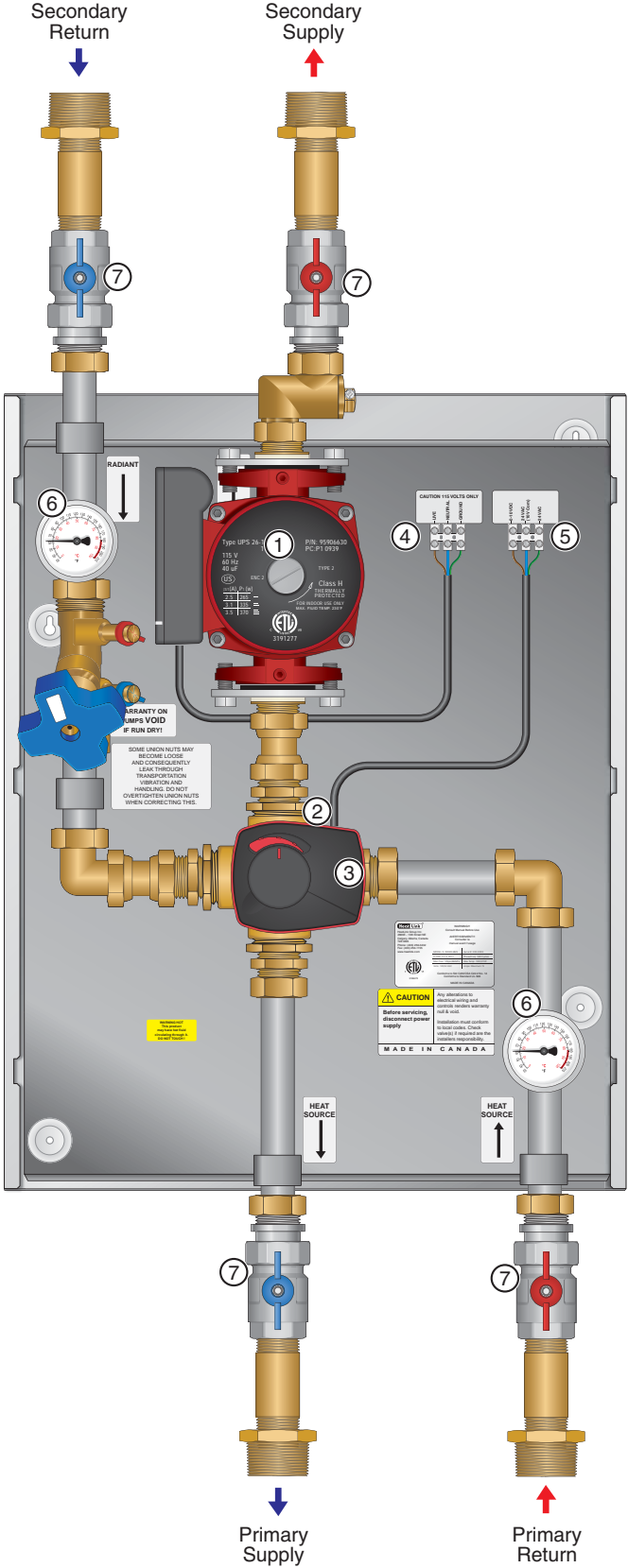
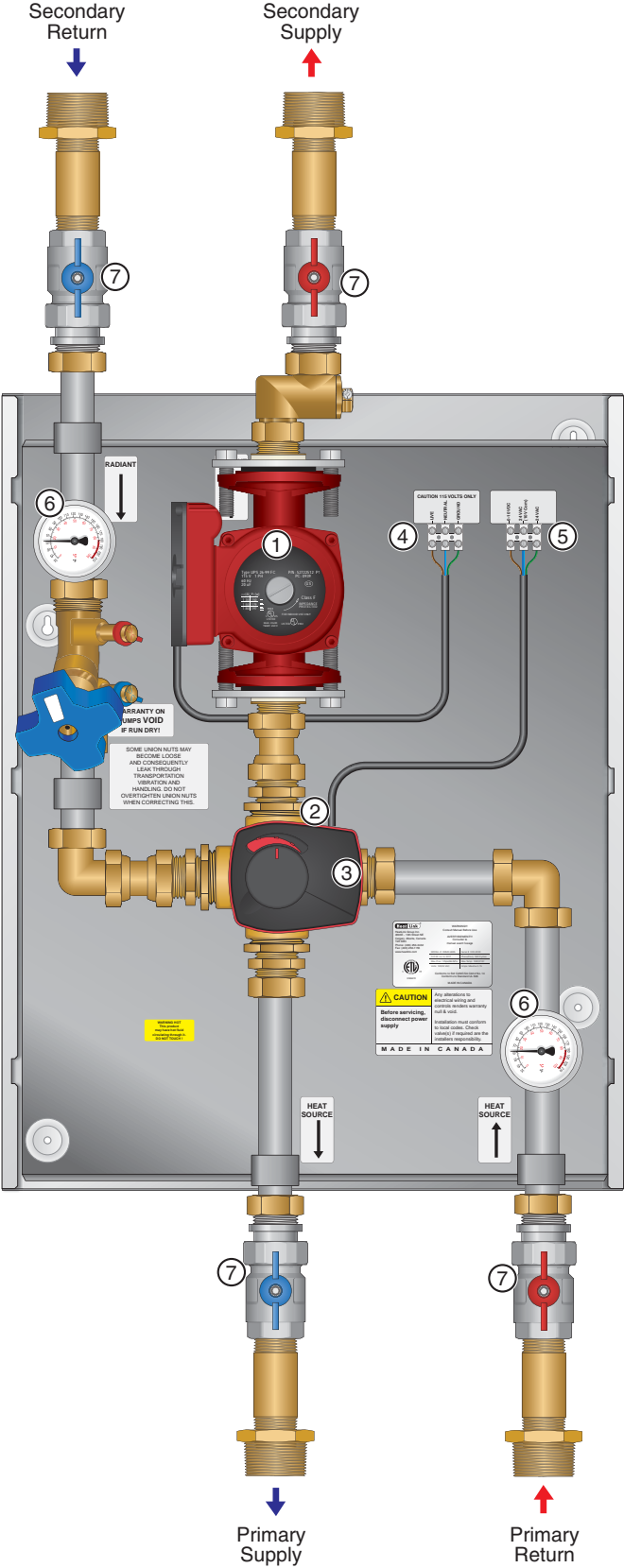
These panels provide a secondary pump, 4-way rotary mixing valve, and DDC Mixing Valve Motor.

Qty	Stk. #	Secondary Circulator
	4WMIX-BMS	Ferrous, Grundfos UPS26-99FC
	4WMIXHH-BMS	Ferrous, Grundfos UPS26-150FC

Technical Data	Specifications	Model Number	
		4WMIX-BMS	4WMIXHH-BMS
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)	•	•
Power supply	120/24 V(ac)	•	•
Primary Pump	Grundfos UPS 26-99	•	
Primary Pump	Grundfos UPS 26-150		•
Piping	1" 304SS Tubing, 1" Brass	•	•
Piping connections	1½" MNPT	•	•
Material - backplate	16 Gauge galvanized steel	•	•
Material - enclosure	Powder coated steel	•	•

**Standards / Listings**  
 CAN/CSA-C22 No.14, UL508  
 cETLus

**Panel Configurations**

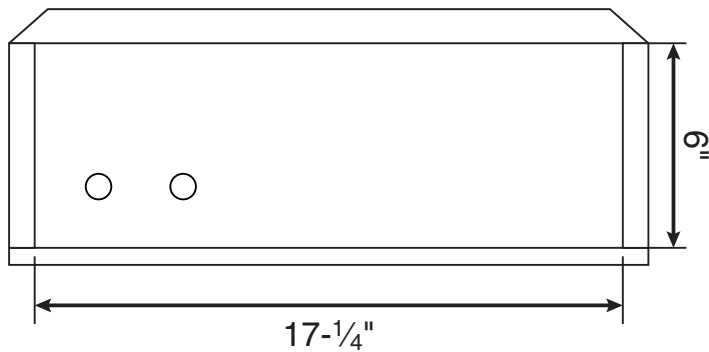
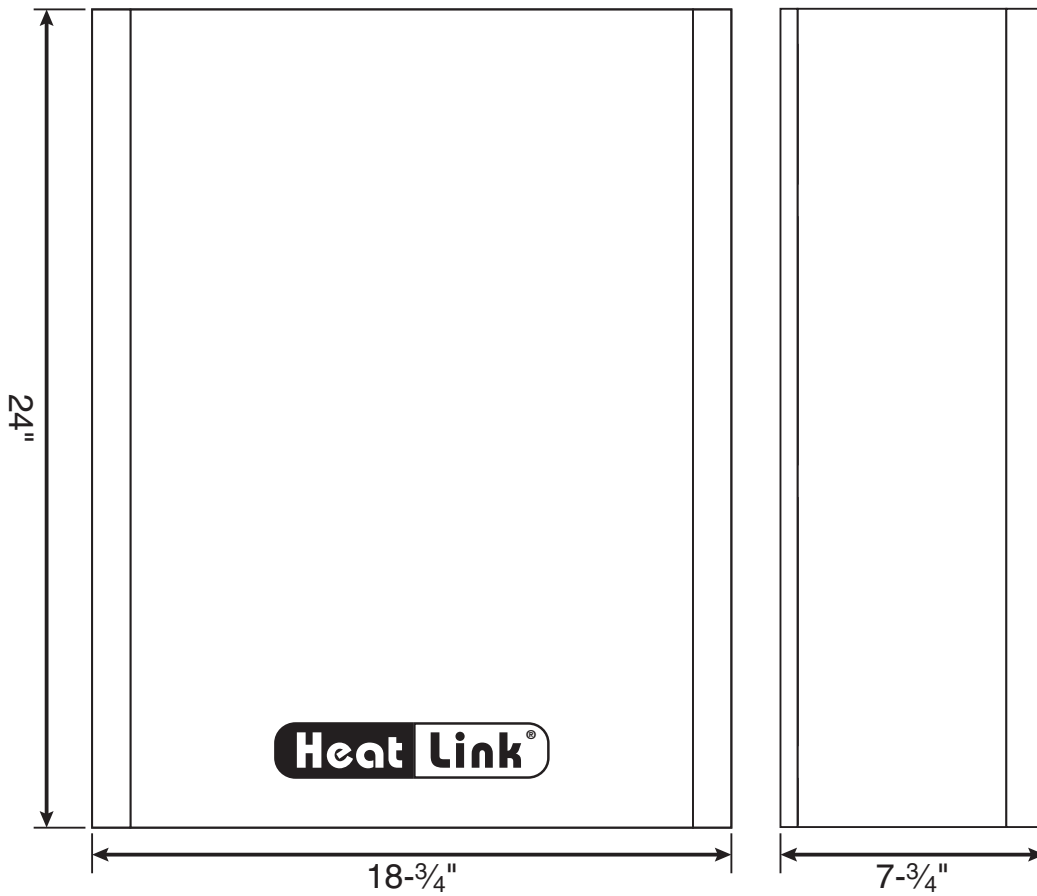
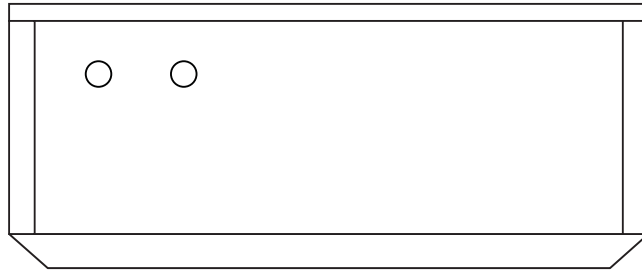


Panel Components

#	Components	Component Description	Part Number	
			4WMIX-BMS	4WMIXHH-BMS
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.		64031
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.		58132
4	120V(ac) terminal block for pump	Wiring input for 120V(ac) panel power supply.		n/a
5	24V(ac) terminal block for mixing valve motor	Wiring input for 24V(ac) panel power supply.		n/a
6	Thermometer	Shows the system temperature.		n/a
7	Isolation valve assemblies*	Zone valve used to isolate the panel from the system during fill & purge, and maintenance.		n/a

\*Packaged in accessory box for shipping.

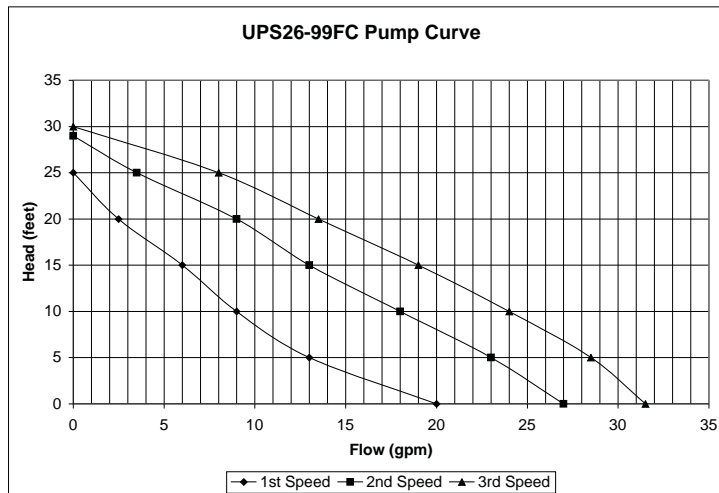
Enclosure and Panel Dimensions



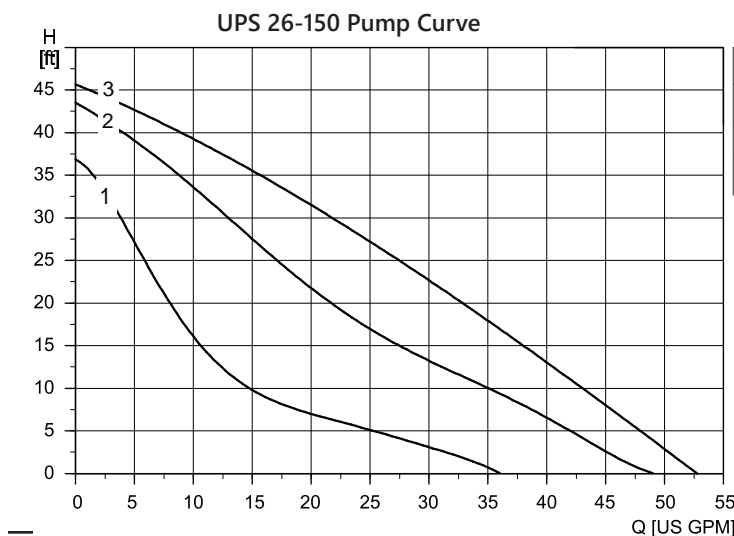
**Pump Technical Data**

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 m³/h)   0-53 US gpm (0-12 m³/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	

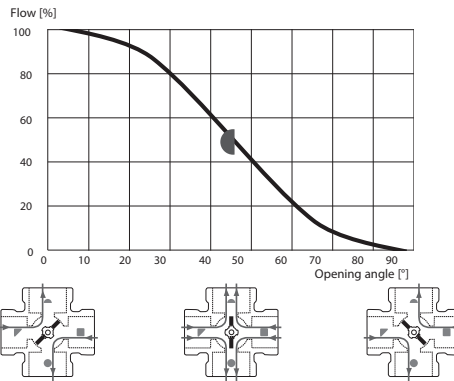


Speed	Volts	Amps	Watts	Hp	Capacitor
3	115	3.5	370	1/6	40 µF/180V
2		3.1	335	1/6	
1		2.5	265	1/6	

### Technical Data - 4 Way Mixing Valve

Mixing Valve Nominal Size:	1-1/4"
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:	< 44lb*in (< 5Nm)

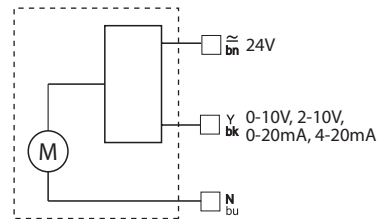
\*based on diff. pressure of 14.5 psi (1 bar)



### 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

### 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, Installation, and Maintenance Manual L6 4WMIX-BMS  
HeatLink Limited Heating Warranty