POWERS™

Product Specification

LEAD FREE*

Features ■

- Configurable on location. Does not require factory pre-programming or special software and laptop
- Controls water temperature to +/- 2°F in accordance with ASSE 1017
- Control +/- 2°F during periods of low/zero demand
- 3.5" full-color, user-selectable touch screen display
- User programmable high-temperature sanitization mode
- In case of power or cold water failure, valve flows full cold for safety with manual override feature to set mixed outlet temperature
- Settings can be adjusted/monitored at the controller or remotely through BAS (Building Automation System)
- Displays pressure, temperature and flow/BTU data
- Pass code protected for security
- User programmable high temperature alarm

Specifications ■

Maximum Operating Pressure	125psi (861kPa)
Maximum Hot Water Temperature	200°F (93°C)
Minimum Hot Water Supply Temperature**	2°F (1°C) above set point
Hot Water Inlet Temperature Range	120-180°F (49-82°C)
Cold Water Inlet Range	39-80°F (4-27°C)
Minimum Flow ***	0.5gpm (1.89lpm)
Temperature Adjustment Range****	80-180°F (27-82°C)
Listing /Compliance	ASSE 1017^ , cUPC^, NSF^, CSA 24/UL873, Bacnet Testing Laboratories (BTL)

Certified to NSF/ANSI 372

LISTED E365015
Temp. Ind. and Reg. Equip.

> **⚠ WARNING**
>
> **User is responsible for determining safe and appropriate temperatures and pressures for system users, guests and facility.**

> **NOTICE**
>
> ** The wetted surface of this product contacted by consumable water contains less than one quarter of one percent (0.25%) of lead by weight.*
> *** With equal pressure*
> ****Minimum flow when IntelliStation is installed at or near hot water source recirculating tempered water with a properly sized continuously operating recirculating pump.*
> ***** low limit cannot be less than the cold water temperature. For best operation, hot water should be at least 2°F above desired set point.*
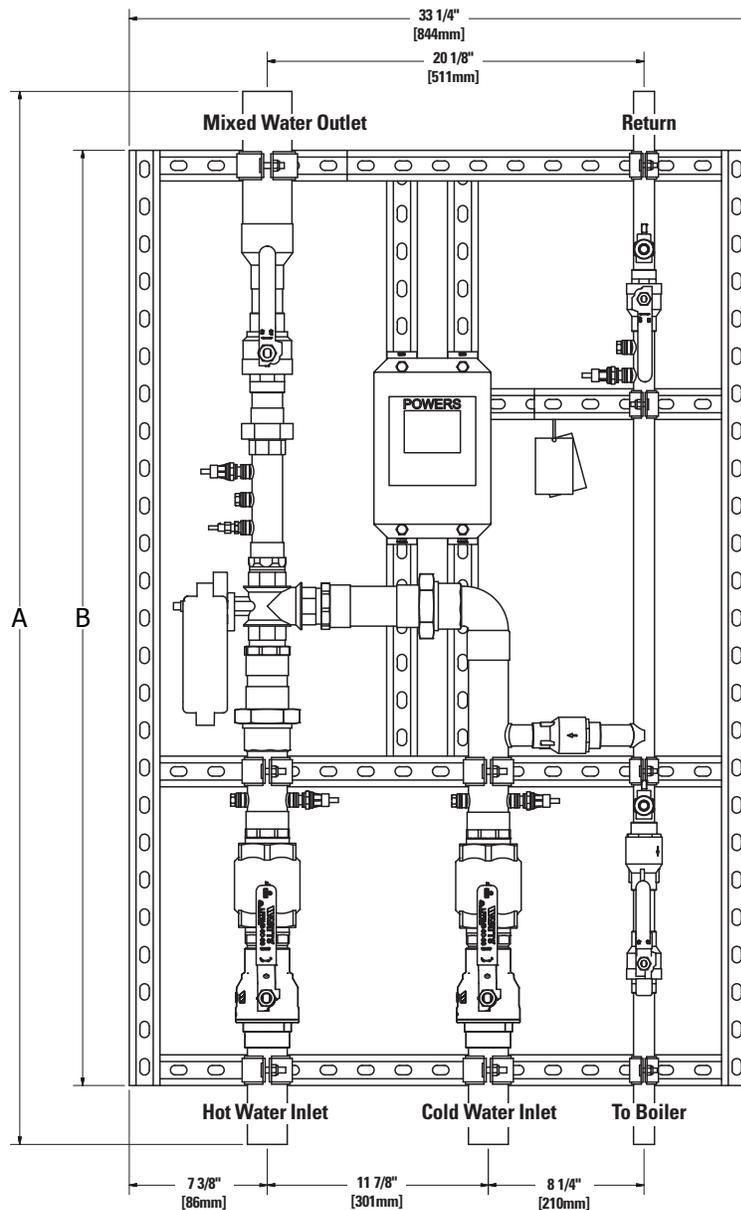> *^ Listed without pump*

Relay Specification ■

Pump relay	16A @ 250 VAC
Alert relay	5A @ 250 VAC, 5A @ 30 VDC

Capacity ■

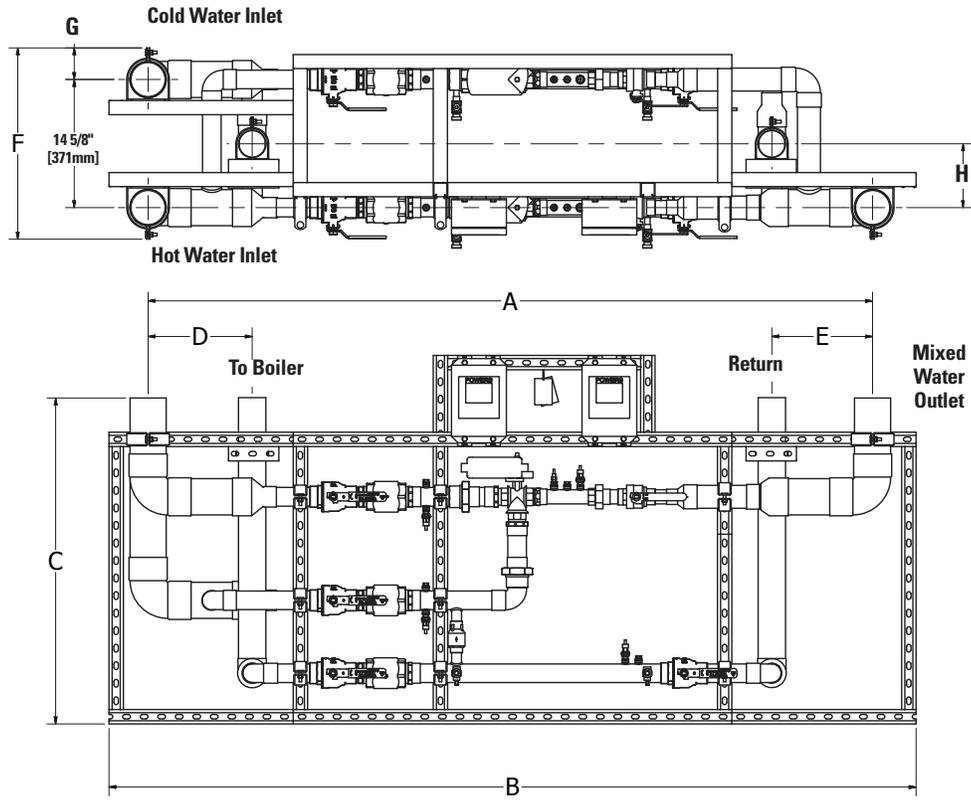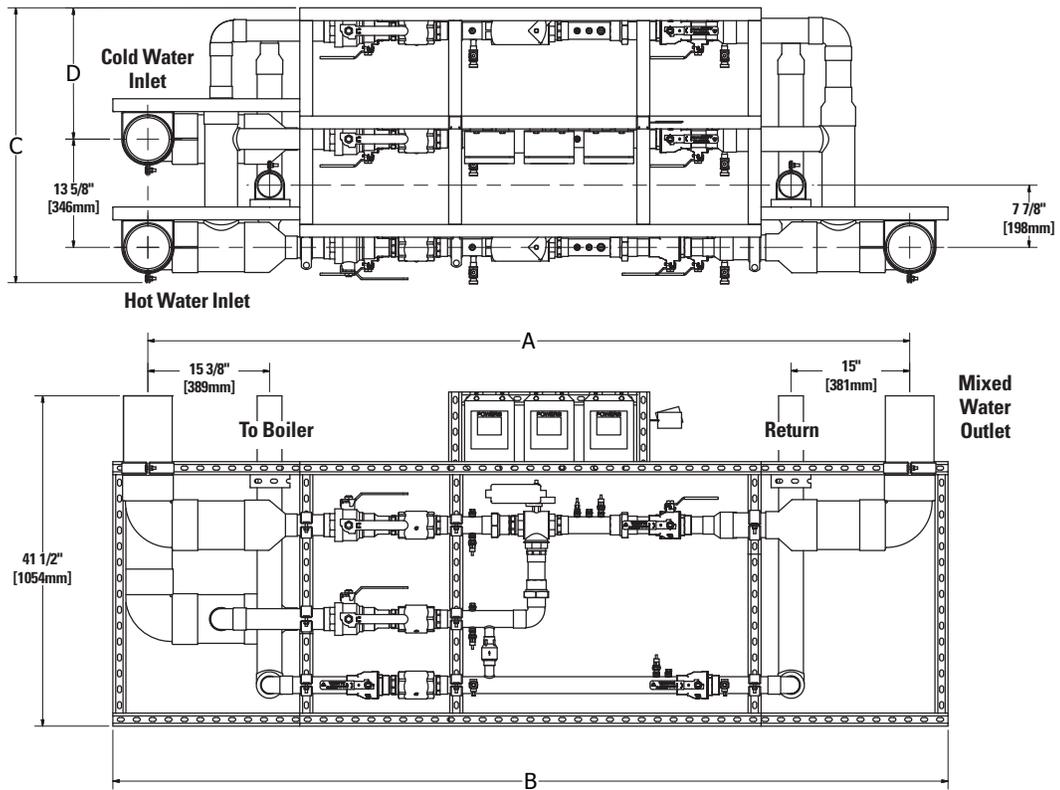|			Flow Capacity at 50-50 Mixed Ratio					
			Pressure Drop Across Valve					
Model	Min. System Draw+	C_v	5psi (34 kPa)	10psi (69 kPa)	20psi (138 kPa)	30psi (207 kPa)	45psi (310 kPa)	50psi (345 kPa)
LFIS150	0.5	26.88	60 gpm 227 lpm	85 gpm 322 lpm	120 gpm 454 lpm	147 gpm 556 lpm	180 gpm 681 lpm	190 gpm 719 lpm
LFIS200	0.5	42.70	96 gpm 363 lpm	135 gpm 511 lpm	191 gpm 723 lpm	234 gpm 886 lpm	286 gpm 1083 lpm	302 gpm 1143 lpm
LFIS150DV	0.5	53.57	120 gpm 454 lpm	170 gpm 644 lpm	240 gpm 908 lpm	294 gpm 1113 lpm	360 gpm 1363 lpm	380 gpm 1439 lpm
LFIS200DV	0.5	85.27	192 gpm 727 lpm	270 gpm 1022 lpm	382 gpm 1446 lpm	468 gpm 1772 lpm	572 gpm 2165 lpm	604 gpm 2286 lpm
LFIS200TV	0.5	127.90	288 gpm 1090 lpm	405 gpm 1533 lpm	573 gpm 2169 lpm	702 gpm 2657 lpm	858 gpm 3248 lpm	906 gpm 3430 lpm

Dimensions ■

Single Valve IntelliStation

Dimensions ■

Dual Valve IntelliStation

Cold Water Inlet

G

F

14 5/8"
[371mm]

H

Hot Water Inlet

A

D

To Boiler

Return

E

Mixed
Water
Outlet

C

B

Triple Valve IntelliStation

Cold Water
Inlet

D

C

13 5/8"
[346mm]

7 7/8"
[198mm]

Hot Water Inlet

A

15 3/8"
[389mm]

15"
[381mm]

Mixed
Water
Outlet

To Boiler

Return

41 1/2"
[1054mm]

B

Dimensions are shown ±1/2''

Single Valve

Model	Inlets	Outlet	Return	A	B
LFIS150C00LP	2" (50mm)	2 1/2" (63mm)	1" (25mm)	56 3/8" (1431mm)	50" (1270mm)
LFIS150C0SLP+	2" (50mm)	2 1/2" (63mm)	1" (25mm)	56 3/8" (1431mm)	50" (1270mm)
LFIS150CF0LP	2" (50mm)	2 1/2" (63mm)	1" (25mm)	78 1/4" (1988mm)	72" (1829mm)
LFIS150CFSLP+	2" (50mm)	2 1/2" (63mm)	1" (25mm)	78 1/4" (1988mm)	72" (1829mm)
LFIS150F00LP	2" (50mm)	2 1/2" (63mm)	2" (50mm)	56 3/8" (1431mm)	50" (1270mm)
LFIS150F0SLP+	2" (50mm)	2 1/2" (63mm)	2" (50mm)	56 3/8" (1431mm)	50" (1270mm)
LFIS150FF0LP	2" (50mm)	2 1/2" (63mm)	2" (50mm)	78 1/4" (1988mm)	72" (1829mm)
LFIS150FFSLP+	2" (50mm)	2 1/2" (63mm)	2" (50mm)	78 1/4" (1988mm)	72" (1829mm)
LFIS200C00LP	2 1/2" (63mm)	3" (75mm)	1" (25mm)	63 5/8" (1615mm)	57" (1448mm)
LFIS200C0SLP+	2 1/2" (63mm)	3" (75mm)	1" (25mm)	63 5/8" (1615mm)	57" (1448mm)
LFIS200CF0LP	2 1/2" (63mm)	3" (75mm)	1" (25mm)	80 3/4" (2038mm)	74" (1880mm)
LFIS200CFSLP+	2 1/2" (63mm)	3" (75mm)	1" (25mm)	80 3/4" (2038mm)	74" (1880mm)
LFIS200F00LP	2 1/2" (63mm)	3" (75mm)	2" (50mm)	63 5/8" (1615mm)	57" (1448mm)
LFIS200F0SLP+	2 1/2" (63mm)	3" (75mm)	2" (50mm)	63 5/8" (1615mm)	57" (1448mm)
LFIS200FF0LP	2 1/2" (63mm)	3" (75mm)	2" (50mm)	80 3/4" (2038mm)	74" (1880mm)
LFIS200FFSLP+	2 1/2" (63mm)	3" (75mm)	2" (50mm)	80 3/4" (2038mm)	74" (1880mm)

+Strainers ship loose and must be installed by a plumber at the job site

Dual Valve

Model	Inlets	Outlet	Return	A	B	C	D	E	F	G	H
LFIS150DVH00LP	4" (100mm)	4" (100mm)	3" (75mm)	82 5/8" (2099mm)	92" (2337mm)	37 1/8" (943mm)	11 7/8" (301mm)	11 1/2" (292mm)	21 7/8" (555mm)	3 5/8" (92mm)	7 1/4" (184mm)
LFIS150DVH0SLP	4" (100mm)	4" (100mm)	3" (75mm)	90 5/8" (2302mm)	100" (2540mm)	37 1/8" (943mm)	11 7/8" (301mm)	11 1/2" (292mm)	21 7/8" (555mm)	3 5/8" (92mm)	7 1/4" (184mm)
LFIS150DVHF0LP	4" (100mm)	4" (100mm)	3" (75mm)	104 3/8" (2651mm)	113 3/4" (2889mm)	37 1/8" (943mm)	11 7/8" (301mm)	11 1/2" (292mm)	21 7/8" (555mm)	3 5/8" (92mm)	7 1/4" (184mm)
LFIS150DVHFSLP	4" (100mm)	4" (100mm)	3" (75mm)	112 3/8" (2854mm)	121 3/4" (3092mm)	37 1/8" (943mm)	11 7/8" (301mm)	11 1/2" (292mm)	21 7/8" (555mm)	3 5/8" (92mm)	7 1/4" (184mm)
LFIS200DVH00LP	6" (150mm)	6" (150mm)	3" (75mm)	91 3/4" (2330mm)	100" (2540mm)	41 3/4" (1060mm)	13" (330mm)	13 1/2" (344mm)	23 1/2" (597mm)	4 1/2" (114mm)	7 3/8" (187mm)
LFIS200DVH0SLP	6" (150mm)	6" (150mm)	3" (75mm)	103" (2616mm)	111 1/4" (2838mm)	41 3/4" (1060mm)	13" (330mm)	13 1/2" (344mm)	23 1/2" (597mm)	4 1/2" (114mm)	7 3/8" (187mm)
LFIS200DVHF0LP	6" (150mm)	6" (150mm)	3" (75mm)	107 3/4" (2737mm)	116" (2946mm)	41 3/4" (1060mm)	13" (330mm)	13 1/2" (344mm)	23 1/2" (597mm)	4 1/2" (114mm)	7 3/8" (187mm)
LFIS200DVHFSLP	6" (150mm)	6" (150mm)	3" (75mm)	121 3/8" (3083mm)	130" (3302mm)	41 3/4" (1060mm)	13" (330mm)	13 1/2" (344mm)	23 1/2" (597mm)	4 1/2" (114mm)	7 3/8" (187mm)

Triple Valve

Model	Inlets	Outlet	Return	A	B	C	D
LFIS200TVH00LP	6" (150mm)	6" (150mm)	3" (75mm)	95 3/4" (2432mm)	105" (2667mm)	34 5/8" (879mm)	16 1/2" (419mm)
LFIS200TVH0SLP	6" (150mm)	6" (150mm)	3" (75mm)	107" (22718mm)	116 1/4" (2953mm)	34 5/8" (879mm)	16 1/2" (419mm)
LFIS200TVHF0LP	6" (150mm)	6" (150mm)	3" (75mm)	111 3/4" (2838mm)	121" (3073mm)	36 1/4" (921mm)	18 1/8" (460mm)
LFIS200TVHFSLP	6" (150mm)	6" (150mm)	3" (75mm)	123 3/4" (2143mm)	133" (3143mm)	36 1/4" (921mm)	18 1/8" (460mm)

Ordering Information ■

Standard Capacity

☐☐☐☐☐☐☐☐☐☐☐

Valve	Inlets (in)	Outlet (in)	Order Code
LFIS150	2″ (50mm)	2 1/2″ (63mm)	LFIS150
LFIS200	2 1/2″ (63mm)	3″ (75mm)	LFIS200

Return Pipe Size
1″	C
2″	F

Flow/BTU Package
None	0
Flow/BTU Package	F

Strainers⁺
None	0
On inlets	S

Pump
Less Pump	LP
Pump Assigned by Factory	--
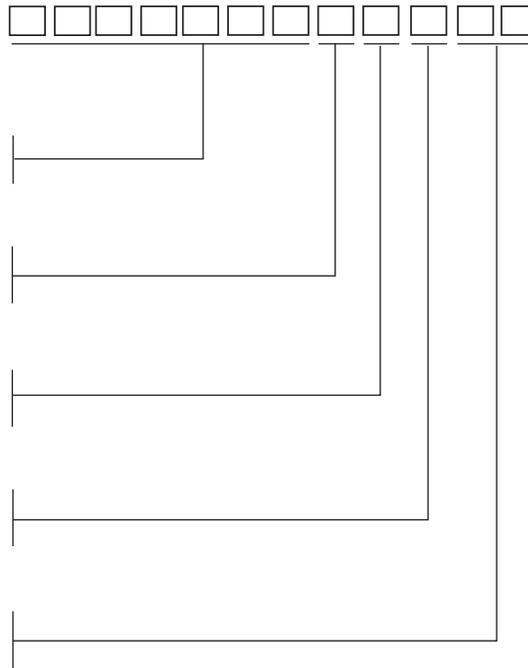
Must Provide Following Pump Information to Factory to Select the Pump:

Pump Manufacturer: _____

Their Part/Model # _____

System Head Loss _____

Required Flow to Maintain Recirculating Temperature _____

⁺Strainers ship loose and must be installed by a plumber at the job site

High Capacity

☐☐☐☐☐☐☐☐☐☐☐

Valve	Inlets	Outlet	Order Code
LFIS150/LFIS150	4″ (100mm)	4″ (100mm)	LFIS150DV
LFIS200/LFIS200	6″ (150mm)	6″ (150mm)	LFIS200DV
LFIS200/LFIS200/LFIS200	6″ (150mm)	6″ (150mm)	LFIS200TV

Return Pipe Size
3″	H

Flow/BTU Package
None	0
Flow/BTU Package	F

Strainers
None	0
On inlets	S

Pump
Less Pump	LP
Pump Assigned by Factory	--
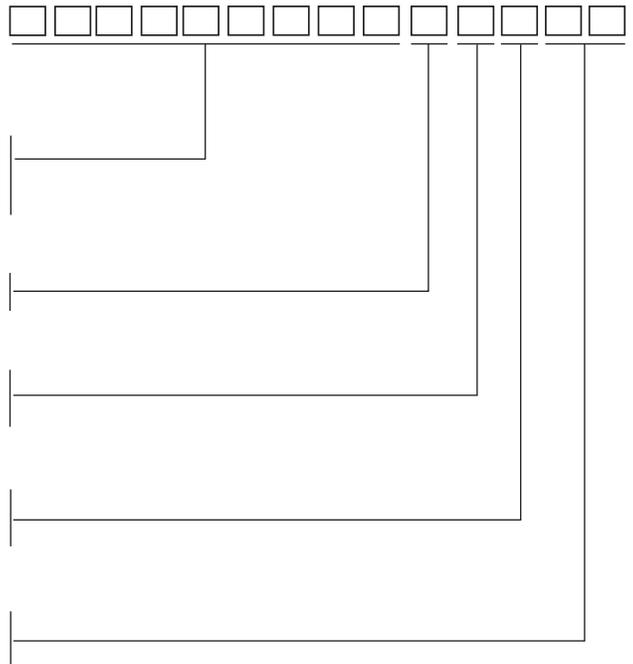
Must Provide Following Pump Information to Factory to Select the Pump:

Pump Manufacturer: _____

Their Part/Model # _____

System Head Loss _____

Required Flow to Maintain Recirculating Temperature _____

Typical Specification ■

Lead free* digital water temperature control and monitoring system shall feature full-color touchscreen interface which is configurable on location and does not require factory pre-programming. System shall control water temperature to +/- 2°F in accordance with ASSE 1017 and during periods of low/zero demand and feature a user-programmable high temperature alarm. Unit shall feature Feed Forward or Predictive Control which anticipates changes in system demand and adjusts valve pre-emptively to maintain mixed set point. Controller shall be password protected and feature a user-adjustable outlet temperature range of 80 - 180°F and an approach temperature of 2°F.

System shall digitally monitor inlet pressure and temperature, mixed outlet temperature, mixed outlet set point, pressure and flow/BTUs (optional), as well as return temperature without the use of an external module. System shall control an engineer specified recirculation pump based on user-set return temperature limits. Controller shall integrate with building automation systems through Bacnet and Modbus protocols and feature local and remote temperature alarms. System will also feature a user-set and controlled, high-temperature sanitization mode for use as part of user's safe and properly designed thermal bacteria eradication protocol. In the event of a power failure or loss of cold water, system will close the hot water supply. System shall be listed/approved to ASSE 1017, cUPC, NSF , CSA 24/UL873 and BTL (Bacnet Testing Laboratories) and should be mounted on a heavy-duty welded strut with corrosion resistance coating and factory tested as a complete unit.

System shall be a Powers LFISXXXXXXXX.

⚠ WARNING

IntelliStation provides user-directed control and monitoring of water distribution systems. It is the user's responsibility to select and maintain water temperatures that are safe and appropriate for the water system users and facility. IntelliStation's Sanitization mode is intended for use as part of a user-directed, controlled and supervised protocol that has been safely and properly designed.

It is recommended to install IntelliStation™ as part of a ASSE compliant water distribution system, including point-of-use mixings valves

Installation and adjustment of the IntelliStation™ are the responsibility of the owner and installer and must be done by qualified personnel in accordance with the manufacturer's instructions, and complying with all governmental requirements, building and construction codes and standards. The owner and user of the IntelliStation™ is responsible for selecting and installing the product in an appropriate water distribution system, proper sizing, maintaining proper water quality/condition, and deciding what temperature is safe and appropriate for the water distribution users and facility.

Always read and follow User Guide & Instruction Manual and all product warnings and labels, and comply with all governmental and safety requirements.

NOTICE

A copy of the applicable limited warranty and disclaimers is available by request to www.PowersControls.com.

NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

POWERS™

A Watts Water Technologies Company