Engineering Specification

Job Name	_____	Contractor	_____
Job Location	_____	Approval	_____
Engineer	_____	Contractor's P.O. No.	_____
Approval	_____	Representative	_____

LEAD FREE*

Works with the Watts® OnSite
Mobile and Web App

IntelliStation® Jr.
Digital Water Mixing Valve

Features

- Control water temperature ± 2°F in accordance with ASSE 1017
- Programmable set point range 60°F to 180°F for wide range of temperature
- Lead Free* construction to comply with lead free* installation requirement
- 3.5" full-color, user-selectable touch screen display
- High temperature Sanitization mode to address waterborne bacteria
- Integral check valves on hot and cold inlets to prevent cross flow
- In case of power failure, valve flows full cold for safety
- Configurable on location. Does not require factory pre-programming, lap top or special software
- Control module supports BAS (Building Automation System) communication with BACnet MSTP and Modbus protocols. It is native to the unit and does not require an add on module
- Mixed outlet temperature can be adjusted/monitored at the valve or remotely by BAS (Building Automation System) or Mobile and Web Apps
- Includes single operating sensor for a mixed outlet temperature reading
- Pass code protected for security
- Programmable hi/lo temperature alert
- Programmable schedule for setback of temperature
- On board clock for time stamping of error messages
- Wi-Fi enable for software upgrades, temperature monitoring, control and alerts
- Wi-Fi security protocols include WPA2-PSK and WPA2-PEAP-MSCHAPv2

Now available: Mobile and Web App

- Provides monitoring and visibility of mixing valve assets across multiple locations/sub-locations
- Remote temperature control for Owner & Admin levels
- Sends system alerts via text and/or email
- Prioritizes alerts based on levels of safety and potential liability
- Three user levels for security
- Data logging
- Reporting capabilities (PDF and CSV file formats)

NOTICE

Watts OnSite® application is only available for use in Canada and the United States of America.

LFIS150VL

Patent No. 10,823,296

ASSE 1017 | U.P.C. C ® | NSF Certified to NSF/ANSI/CAN 61 & 372 | BTL | c UL us LISTED E365015 Temp. Ind. and Reg. Equip. | CE

Valve Only   *Controller Only*

* The wetted surface of this product contacted by consumable water contains less than 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. (5GPM minimum)

**** 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.

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.

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Powers product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Powers Technical Service. Powers reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Powers products previously or subsequently sold.

Specifications

Maximum Operating Pressure........................	200psi (1379kPa)
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 (4-26°C)
Minimum Flow ***	0.5gpm (1.89lpm)
Temperature Adjustment Range****...............	60-180°F (16-82°C)
Listing /Compliance	ASSE 1017, cUPC, NSF
	CSA 24/UL873, Bacnet Testing Laboratories (BTL), CE
Weight	LFIS075VL 13lb (6kg)
	LFIS100VL 17lb (8kg)
	LFIS150VL 16lb (7kg)
	LFIS200VL 19lb (9kg)
Ambient Temperature	32°F (0°C) to 122°F (50°C)
Ambient Humidity	0 - 90 RH non-condensing
SUITABLE FOR INDOOR USE ONLY	

Technical Specification

Power	115-230 V (ac) ± 10%, 50/60 Hz, 20 VA
Actuator Load	24 V (dc), 0.55 A, 13 W

Ordering Code
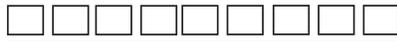
Valve	Inlets (in)	Outlet (in)	Order Code
LFIS075VL	¾"	¾"	LFIS075VL
LFIS100VL	1"	1 ¼"	LFIS100VL
LFIS150VL	1½"	1½"	LFIS150VL
LFIS200VL	2"	2"	LFIS200VL

Capacity

Flow Capacity at 50-50 mixed ratio								
			Pressure Drop Across Valve					
Model	Min System Draw+	cv	5 psi 34 kpa	10 psi 69 kpa	20 psi 138 kpa	30 psi 207 kpa	45 psi 310 kpa	50 psi 345 kpa
LFIS075VL	0.5	7.3	16 gpm 61 lpm	23 gpm 87 lpm	33 gpm 125 lpm	40 gpm 151 lpm	49 gpm 185 lpm	52 gpm 197 lpm
LFIS100VL	0.5	17.5	39 gpm 148 lpm	55 gpm 208 lpm	78 gpm 295 lpm	96 gpm 363 lpm	117 gpm 443 lpm	124 gpm 469 lpm
LFIS150VL	0.5	22.5	50 gpm 189 lpm	71 gpm 269 lpm	101 gpm 382 lpm	123 gpm 466 lpm	151 gpm 572 lpm	159 gpm 602 lpm
LFIS200VL	0.5	39.5	88 gpm 333 lpm	125 gpm 473 lpm	177 gpm 670 lpm	216 gpm 818 lpm	265 gpm 1003 lpm	279 gpm 1056 lpm

+ with a properly sized pump

Dimensions
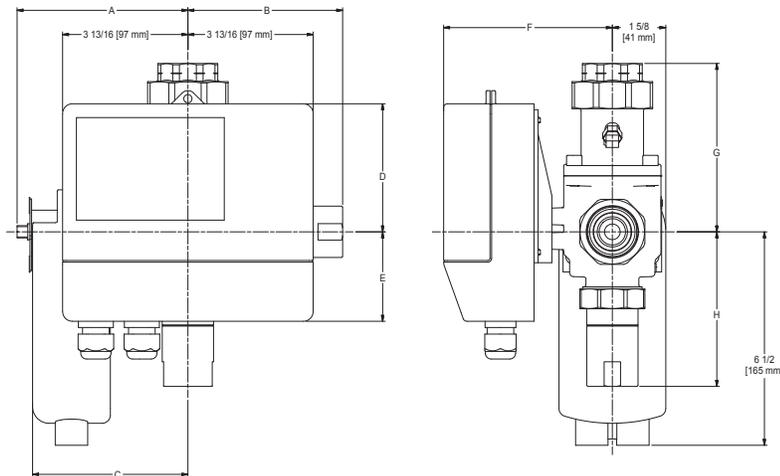
Model	Inlets	Outlet	A	B	C	D	E	F	G	H
LFIS075VL	¾" (20 mm)	¾" (20 mm)	4⅞" (123 mm)	4¹⁄₁₆" (103 mm)	4⅜" (110 mm)	4¹⁄₁₆" (103 mm)	2⁹⁄₁₆" (66 mm)	4¾" (120 mm)	4⁵⁄₁₆" (110 mm)	4⅛" (105 mm)
LFIS100VL	1" (25 mm)	1¼" (32 mm)	5³⁄₁₆" (132 mm)	4¹¹⁄₁₆" (120 mm)	4¾" (120 mm)	3⅞" (99 mm)	2¾" (69 mm)	5⅛" (130 mm)	5⅛" (130 mm)	4¹¹⁄₁₆" (120 mm)
LFIS150VL	1½" (38 mm)	1½" (38 mm)	5⅓" (135 mm)	6¼" (159 mm)	5¹⁄₁₆" (129 mm)	2⅛" (54 mm)	4½" (114 mm)	4⅞" (124 mm)	5⅓" (135 mm)	5⅖" (147 mm)
LFIS200VL	2" (51 mm)	2" (51 mm)	5⅔" (144 mm)	6⅔" (169 mm)	5⅖" (137 mm)	2⅛" (54 mm)	4½" (114 mm)	4⅞" (124 mm)	5⅔" (144 mm)	6⅕" (158 mm)

Typical Specification

Lead free* digital water temperature control and monitoring system shall feature 3.5" 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 resist "temperature creep" during periods of low/zero demand. Controller shall be password protected and feature a user-adjustable outlet temperature range of 60 – 180°F with high and low temperature alerts, and an approach temperature of 2°F.

System shall digitally control and monitor mixed outlet temperature. Controller shall integrate with building automation systems (separate module not required) through BACnet and Modbus protocols and feature local and remote temperature alarms.

System shall provide monitoring and visibility of mixing valve assets across multiple locations/sublocations. System shall offer the ability to remote temperature control for owner and admin levels. App shall be capable of sending system alerts via text and/or email and prioritizes alerts based on levels of safety and potential liability. System offers three user levels for security. Controller shall be equipped with secure Wi-Fi protocols WPA2-PSK and WPA2-PEAP-MSCHAPv2.

System will feature a user-set, high-temperature sanitization mode for thermal disinfection of bacteria and a programmable temperature set back feature to improve energy efficiency. System will also feature high speed actuator with override feature. In the event of a power failure, system will open full cold supply. In case of a loss of cold water, the system will close hot water supply.

System shall be listed/approved to ASSE 1017, cUPC, NSF, CSA 60730 and BTL (BACnet Testing Laboratories)

System shall be a Powers LFIS075VL, LFIS100VL, LFIS150VL, or LFIS200VL.

⚠ WARNING

IntelliStation® Jr. system 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 Jr. system'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 the IntelliStation Jr. system as part of a ASSE compliant water distribution system, including point-of-use mixings valves

Installation and adjustment of the IntelliStation Jr. system 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 Jr. system 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 at www.PowersControls.com.

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