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

# **LEAD FREE\***

# IntelliStation® Jr. **Digital Water Mixing Valve System**

#### **Features**

- 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 water born 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)
- 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
- Real time clock for time stamping of error messages
- Control water temperature ± 2°F in accordance with ASSE 1017
- Wi-Fi enable for software upgrades
- Pre-piped system
- \* 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.

















### **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 Test	ing Laboratories (BTL), CE			
Weight LFIS075VL	-SYS075RTN 42lb (19kg			
LFIS100VL	-SYS100RTN 44lb (20kg)			
LFIS150VL	-SYS150RTN 87lb (39g)			
LFIS200VL	-SYS200RTN 114lb (52kg)			

### SUITABLE FOR INDOOR USE ONLY **Technical Specification**

++ Valve only

Ambient Humidity ...... 0 - 90 RH non-condensing



## Capacity

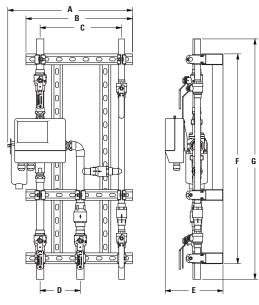
Flow Capacity at 50-50 mixed ratio										
			Pressure Drop Across Valve							
Model	Min System Draw+	cv	5 psi 34 kpa	10 psi 69 kpa	20 psi 138 kpa	30 psi 207 kpa	45 psi 310 kpa	50 psi 345 kpa		
LFIS075VL	0.5 7.3	0.5 7.3		23 gpm	33 gpm	40 gpm	49 gpm	52 gpm		
LI IOUT JVL		.5 7.5	61 lpm	87 lpm	125 lpm	151 lpm	185 lpm	197 lpm		
LFIS100VL	0.5	17.5	39 gpm	55 gpm	78 gpm	96 gpm	117 gpm	124 gpm		
LFISTOUVL	0.5	0.5	0.5	17.5	148 lpm	208 lpm	295 lpm	363 lpm	443 lpm	469 lpm
LFIS150VL	0.5	22.5	50 gpm	71 gpm	101 gpm	123 gpm	151 gpm	159 gpm		
LLIS LOUAL	_FIS150VL   0.5		189 lpm	269 lpm	382 lpm	466 lpm	572 lpm	602 lpm		
LFIS200VL	0.5	39.5	88 gpm	125 gpm	177 gpm	198 gpm	265 gpm	279 gpm		
LFISZUUVL U	0.5	0.5	აყ.ე	333 lpm	473 lpm	670 lpm	749 lpm	1003 lpm	1056 lpm	

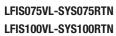
<sup>+</sup> with a properly sized pump

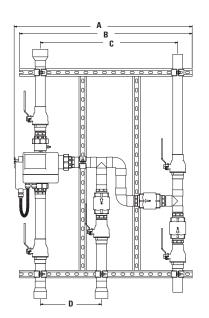
# Ordering Code

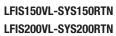
Valve	Valve Inlets Outle (in) (in)		Order Code			
LFIS075VL	1"	1"	LFIS075VL-SYS075RTN			
LFIS100VL	1 1/4"	1 1/2"	LFIS100VL-SYS100RTN			
LFIS150VL	2"	2"	LFIS150VL-SYS150RTN			
LFIS200VL	2 1/2"	2 1/2"	LFIS200VL-SYS200RTN			

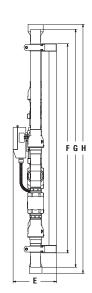
### **Dimensions**











MODEL NO.	INLETS	OUTLETS	RETURN	Α	В	C	D	E	F	G	Н
LFIS075VL-SYS075RTN	1" (25mm)	1" (25mm)	3/4" (19mm)	19" (476mm)	16" (406mm)	12" (311mm)	6" (153mm)	9" (233mm)	32" (801mm)	36" (918mm)	-
LFIS100VL-SYS100RTN	11/4" (32mm)	1½" (38mm)	1" (25mm)	21" (533mm)	17" (441mm)	14" (356mm)	7" (185mm)	9" (233mm)	34" (868mm)	39" (1002mm)	-
LFIS150VL-SYS150RTN	2" (51mm)	2" (51mm)	1 1/2" (38mm)	38 11/16" (983mm)	37 3/8" (949mm)	27 1/8" (689mm)	13 3/8" (340mm)	9 3/8" (238mm)	45 1/4" (1150mm)	51 1/4" (1302mm)	N/A
LFIS200VL-SYS200RTN	2 1/2" (64mm)	2 1/2" (64mm)	2" (51mm)	38 1/2" (979mm)	37 3/8" (949mm)	29 3/4" (756mm)	13 1/4" (337mm)	9 3/8" (238mm)	45 1/4" (1150mm)	51 1/2" (1308mm)	54" (1370mm)

### **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 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.

Valve and controller shall be listed/approved to ASSE 1017, cUPC, NSF, CSA 24/UL873 and BTL (BACnet Testing Laboratories)

System shall be a pre-pipped Powers LFIS075VL-SYS075RTN, LFIS100VL-SYS100RTN, LFIS150VL-SYS150RTN or LFIS200VL-SYS200RTN.

#### **A** 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 by request to www.PowersControls.com.



A WATTS Brand