

## For Balancing and Flow Measurement Applications

Job Name \_\_\_\_\_

Contractor \_\_\_\_\_

Job Location \_\_\_\_\_

Approval \_\_\_\_\_

Engineer \_\_\_\_\_

Contractor's P.O. No. \_\_\_\_\_

Approval \_\_\_\_\_

Representative \_\_\_\_\_

# LEAD FREE\*

## Series LFCSM-61-S Flow Measurement Valves

Sizes: ½" – 2"

Series LFCSM-61-S Flow Measurement Valves are designed for application on low or medium flow rate HVAC units and for domestic water recirculation system. Their compact size allows for easy installation and use in crowded piping compartments. The LFCSM-61's ball-type design, extended throttling range, and large indicator plate, make for accurate flow measurement, even in very low flow ranges.

The LFCSM-61-S's positive memory feature is easy to see, access, and operate, facilitating system balancing and flow measurement.

These valves are also bi-directional, so there is no chance of installing the valve in the incorrect flow direction.

Series LFCSM-61-S's valves provide positive shutoff, eliminating the need for a separate service valve. These may be installed without disassembly, saving costly installation time. These valves are also provided with blowout resistant stems. The LFCSM-61-S features Lead Free\* construction to comply with Lead Free\* installation requirements and meets NSF 61 AnnexG.

### Features

- Flow measurement
- Easy to use memory
- Bi-directional flow
- Positive shutoff
- Safe "blowout" resistant stem
- Integral drain port
- Meets NSF 61 Health Effects AnnexG

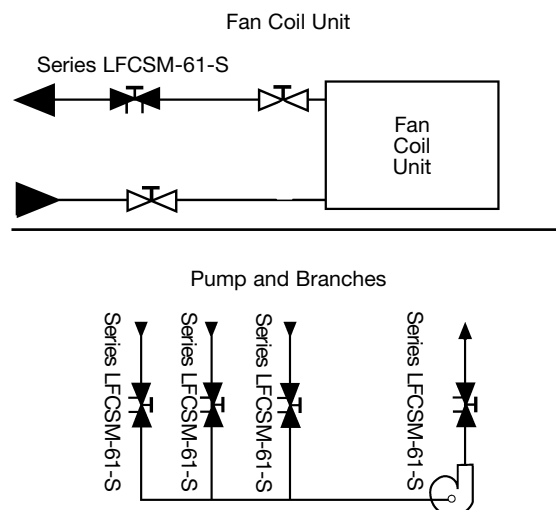
### Applications

- Fan coil units
- Water source heat pumps
- Reheat coils
- Panel coils
- Small branch lines
- Unit heaters
- Unit ventilators
- Finned radiation
- Small domestic hot water lines
- Convector
- Small pumps
- Domestic water re-circulating system



LFCSM-61-S

### Typical Installation



### 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.

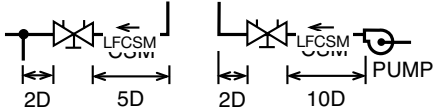
\*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.

## Specifications

A Lead Free\* flow measurement valve that meets NSF 61 AnnexG shall be installed on each hot/chilled water unit or as otherwise shown on plans. The valve shall be of the bi-directional, blow-out resistant, tight shutoff, ball design, with position indicator, memory device, checked metering ports with drip caps and integral drain ports opposite the metering ports. Lead Free\* flow measurement valves shall comply with state codes and standards, where applicable, requiring reduced lead content. The valve shall be a Watts Series LFCSM-61.

## Installation

Generally locate the valve five pipe diameters downstream from a fitting with two diameters downstream from the balancing valve free from fittings. If a balancing valve is located downstream from a circulation pump, allow a distance of ten (10) diameters between the pump and balancing valves.



## Materials

Housing/Body	Lead Free* Brass
Packing Material	Viton® ½" – 2"
Pressure Taps	Brass ¼" SAE 45° Flare
Seats	Carbon/Glass filled PTFE - ½" – 1" Virgin PTFE 1¼" – 2"
Drain Plug	Lead Free* Brass

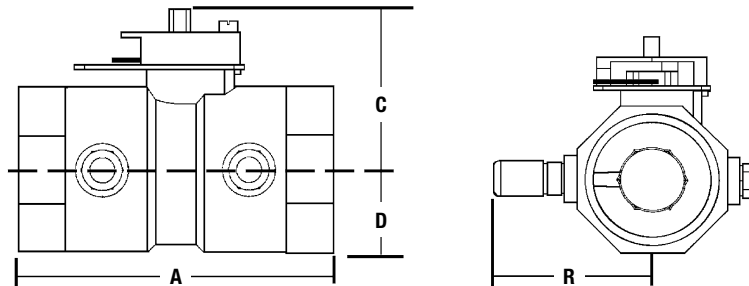
## Pressure -Temperature

Pattern	Size	Working Temp		Max. Working Pres.	
		°F	°C	psi	bars
Solder	½"- 2"	200**	93	125	9

†Solder used in joints: 95 - 5 Tin Antimony

Viton® is a registered trademark of Dupont Dow Elastomers

## Dimensions - Weights



MODEL	SIZE	DIMENSIONS								WEIGHT	
		A		C		D		R		lbs.	kgs.
	in.	in.	mm	in.	mm	in.	mm	in.	mm		
LFCSM-61-M1-S	½	2 <sup>11</sup> / <sub>16</sub>	68	1 <sup>5</sup> / <sub>8</sub>	41	½	13	1 <sup>1</sup> / <sub>4</sub>	45	1.0	0.45
LFCSM-61-M1-S	¾	3 <sup>1</sup> / <sub>8</sub>	79	1 <sup>11</sup> / <sub>16</sub>	43	9 <sup>1</sup> / <sub>16</sub>	15	1 <sup>1</sup> / <sub>8</sub>	47	1.3	0.59
LFCSM-61-M1-S	1	3 <sup>13</sup> / <sub>16</sub>	97	1 <sup>7</sup> / <sub>8</sub>	47	1 <sup>3</sup> / <sub>16</sub>	20	2 <sup>1</sup> / <sub>16</sub>	52	1.8	0.82
LFCSM-61-M2-S	1¼	4 <sup>9</sup> / <sub>16</sub>	116	1 <sup>7</sup> / <sub>8</sub>	47	1 <sup>1</sup> / <sub>8</sub>	29	2 <sup>3</sup> / <sub>16</sub>	56	1.5	0.68
LFCSM-61-M2-S	1½	4 <sup>7</sup> / <sub>8</sub>	123	2	50	1 <sup>5</sup> / <sub>16</sub>	33	2 <sup>5</sup> / <sub>16</sub>	59	1.9	0.86
LFCSM-61-M2-S	2	6	153	2 <sup>5</sup> / <sub>16</sub>	66	1 <sup>1</sup> / <sub>16</sub>	40	2 <sup>5</sup> / <sub>8</sub>	67	3.4	1.54



A Watts Water Technologies Company

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