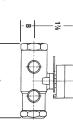
#### Dimensions (Inches)

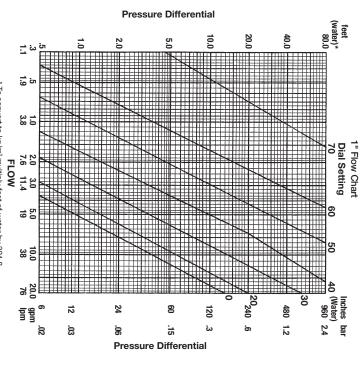
	Size	Order	•	,	Weight
Valve No.	(ln.)	No.	Α	В	(lbs.)
CSM-61T-M1	1	0856740	31%	3/4	1.75
CSM-61S-M1	_	0856739	37%	3/4	1.87

Note: (T) = Threaded, (S) = Solder





Valves conform to ANSI B16.18 and ANSI B16.22



To convert to kg/m² multiply feet of water by 304.8 \*To convert to psi multiply feet of water by .4335

Limited Warranty With Septidor Co. The "Consept") warrants each product his fire from directs in material and workmands) under complication of the control of one year from the date of original subject to 1. The control of the year from the date of original subject to 1. The Control of the year from the date of the Warranty SET PORTH HEREIN IS OWNER DEFRESSLY AND IS THE ONLY WARRANTY GETER BY THE CONTRACT OF THE PRODUCT. THE CONTROL WARRANTY SET PORTH HEREIN SO WEREIN AND IS THE PRODUCT. THE CONTROL WARRANTY SET PORTH HEREIN SO WEREIN AND IS THE WARRANTY SET PORTH HEREIN SO WEREIN AND IS THE WARRANTY SET PORTH HEREIN SO WEREIN AND THE PORTH WARRANTY SET PORTH WARRANTY SET PORTH HEREIN SO WEREIN AND THE PORTH WARRANTY SET PORTH

IS-CSM-61M1-S 0829 EDP# 1910821 © Watts, 2008

Series CSM-61M1

IS-CSM-61M1-S

# Flow Measurement/Balancing Valves

Sizes: 1/2", 3/4", 1" (15, 20, 25mm)

### Installation Instructions

Walts Flow Measurement/Balanding Valves are available in the straightway pattern with threaded or solder end connections. All tapered pipe threads conform to FEDERAL SPECS H28, Valves conform to ANSI B16.18 and ANSI B16.22. Maximum Pressure/Temperature Ratings: 300 psi (20.7 tag) - 250°F (121°C).

- Install valve on return line of equipment to be balanced or as shown on the plans.
- For maximum accuracy, the flow measurement valve should be located in an unrestricted straight pipe run so that no fittings (elbow, valve, tea, etc.); so closer to the measurement valve than 5 pipe diameters upstream and 2 pipe diameter downstream. If a balancing valve is located downstream from a circulation pump, allow a distance of ten (10) diameters between the pump and balancing valves.
- Series CSM-61M1 flow measurement valves are bi-directional and should be installed to ensure ease of hooking up meter, adjusting setting, and enabling memory device. A ½ "Gmm) NPT plugged port is installed on each measurement valve ½" 1" (15-25mm) and can be used as a drain port if needed.
- Solder end valves are designed to be soft soldered into lines without disassembly, using a low temperature solder 400°F (204°C). Other solders such as 95/5 th antimony 460°F (238°C) can be used, however, extreme caution must be used to prevent seat damage. Higher temperature solders will damage the seat material.
- Remove indicator knob prior to soldering. Replace after soldering is completed.
- Apply heat with flame directed away from the center of the valve body. Excessive heat can harm the seats
- Heat solder joints only to the point were solder will flow properly. Excessive heat may distort brass castings.

## Pressure - Temperature Limits

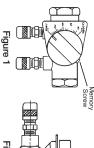
Pattern	Type of Solder	Workin	Working Temp.	Maximum Pressure	Pressure
		ů	റ്	psi	bar
	95.5	200	93	300	20.7
	(Tin-Antimony)	225	107	250	17.2
Solder-to-Solder		250	121	200	13.8
	50-50 and	100	38	200	13.8
	60-40	150	66	150	10.3
	(Tin-Lead)	250	121	85	5.9
Thread-to-Thread	_	250	121	300	20.7

## Flow Measurement Instruction

- Loosen memory screw.
- Turn indicator knob to open position on indicator plate. Do not force past this point.
- Connect, vent and prepare the differential gauge. Refer to instructions furnished with the gauge.
- 4. After initial pressure differential reading is taken, refer to flow rate charts to obtain flow rate based on pressure differential and valve setting. If flow rate is in excess of that specified, turn indicator knob towards closed position, noting pressure drop and valve setting and determining new flow rates from flow rate chart. Once correct flow rate settings has been established, slide memory screw counter-clockwise towards closed side of indicator pate until memory stop ring hits indicator pate. Do not force beyond this point. Tighten memory screw. Refer to Fegures 1 and 2. The unit or system has now been balanced and the memory set.
- After memory is set, disconnect differential gauge.



(California law requires this warning to be given to customers in the State of California.) WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. For more information: www.watts.com/prop65







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Canada: 5435 North Service Rd., Burlington, ONT. L7L 5H7; www.wattscanada.ca USA: 815 Chestnut St., No. Andover, MA 01845-6098; .watts.com

Water Safety & Flow Control Products

