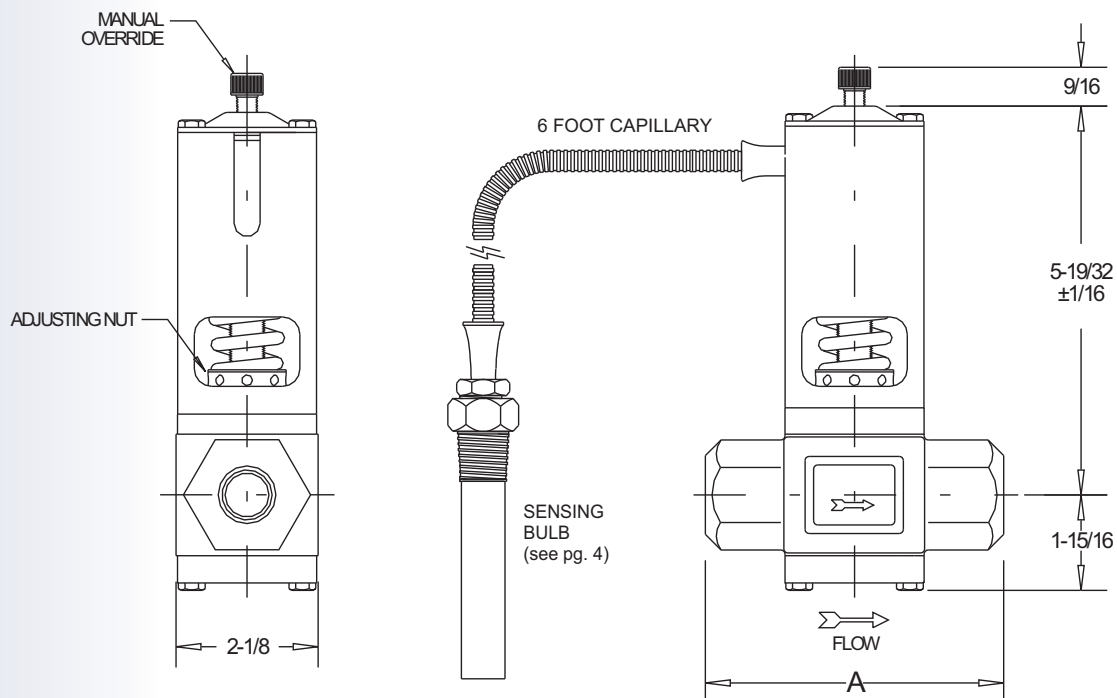


## SELECTION CRITERIA

- Fresh water use
- Direct acting
- Actuation by temperature
- Open on temperature increase
- 350 PSI water pressure rating
- NPT end connections (British threads available)
- 2-way configuration
- 3/8" thru 1" sizes
- Manual override
- Optional water pressure rating to 500 PSI

## CONSTRUCTION DETAILS

- Brass & Stainless Steel internals
- All O-Ring sealed (Buna-N)
- Brass body



Reference Metrex drawing WCCW-3099

## VALVE SIZING CHART & PRESSURE RATING

VALVE PART NUMBER	PIPE SIZE	$C_v$	A
WCCWT-3050-SE	3/8"	2.2	4-3/8
WCCWT-3060-SE	1/2"	2.6	4-3/8
WCCWT-3070-SE	3/4"	4.5	4-3/8
WCCWT-3080-SE	1"	6.0	4-15/16

PRESSURE RATING			
PRESSURE RATING	STANDARD	H	EH
DESIGN PRESSURE	350 PSI	400 PSI	500 PSI
PROOF PRESSURE	525 PSI	600 PSI	750 PSI

## ORDERING INFORMATION

- Use the valve sizing chart on the preceding page tables and charts on page 4 to determine the complete part number.

### BASIC

PART NO.: WCCWT-3 - -SE-50M-XXX

SIZE (SIZING CHART) \_\_\_\_\_  
PRESSURE RATING \_\_\_\_\_  
ACTUATOR PART NUMBER ( Pg. 4 ) \_\_\_\_\_

## TEMPERATURE RANGES

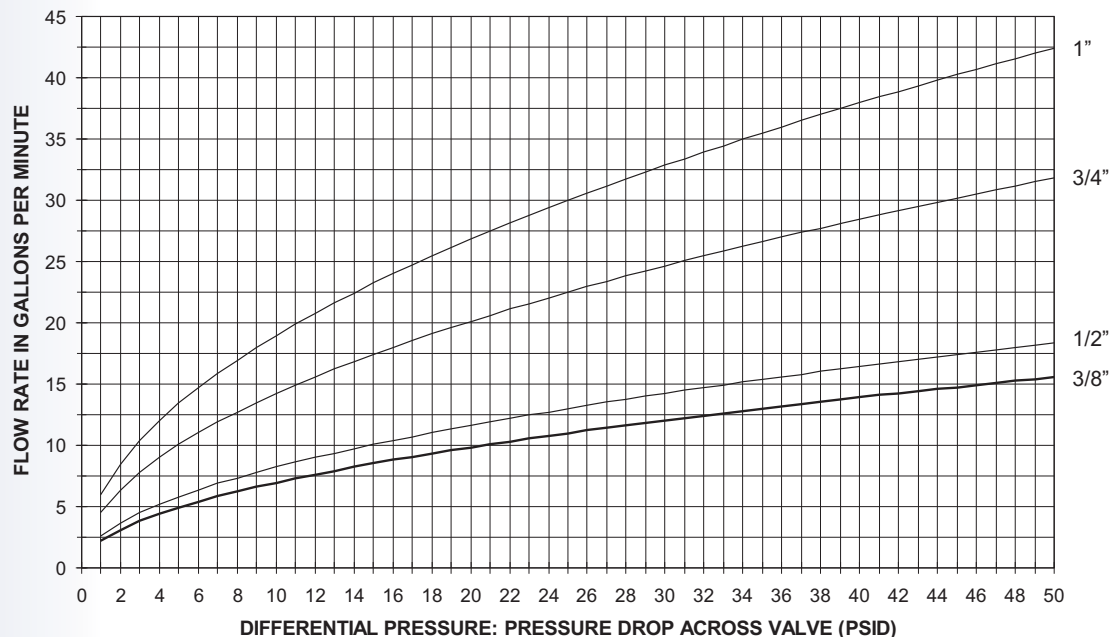
Range Designator	Crack Open Temperature Adjustment Range	Change to Full Open Across the Range*
L low	5 to 105 F (-15 to 40 C)	35 to 12 F (19 to 7 C)
X cross ambient	60 to 140 F (15 to 60 C)	25 to 12 F (14 to 7 C)
S standard	90 to 140 F (30 to 60 C)	20 to 12 F (11 to 7 C)
H high	100 to 170 F (40 to 80 C)	25 to 12 F (14 to 7 C)
V very high	160 to 230 F (70 to 110 C)	40 to 21 F (22 to 12 C)

\* The temperature change necessary to bring the valve from crack to full open decreases exponentially from the low end of the Crack Open Temperature to the high end of the Crack Open Temperature in each range. Example: a valve with a S (standard) range actuator set to open at 95°F will require an approximate rise in temperature of 20°F to go full open. The same valve set to open at 135°F will require an approximate rise in temperature of 12°F to go full open.

## GENERAL DESCRIPTION

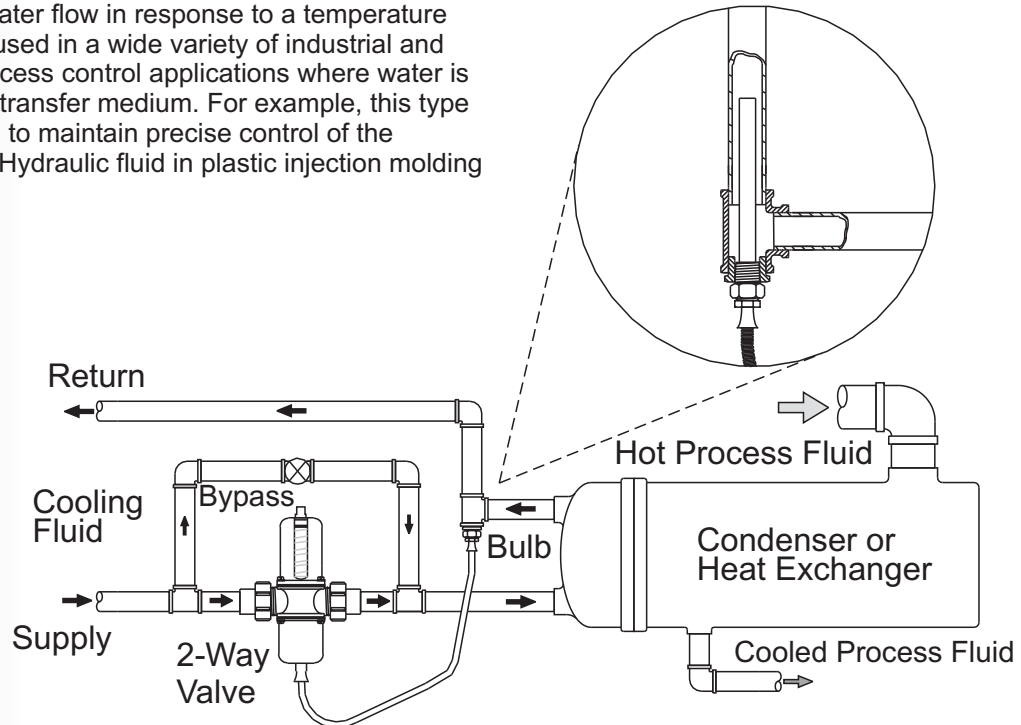
- The WCCWT series valves are direct acting, modulating water regulating valves utilizing all o-ring construction to accommodate high water pressures up to 500 PSI. A manual flushing/override is provided.

## FLOW DATA



## 2-WAY TEMPERATURE REGULATOR TYPICAL APPLICATION

- Thermostatic actuated valves are typically used to modulate the water flow in response to a temperature signal and are used in a wide variety of industrial and commercial process control applications where water is used as a heat transfer medium. For example, this type of valve is used to maintain precise control of the temperature of Hydraulic fluid in plastic injection molding Equipment.



The Bypass allows a continuous low flow of water (usually 10% of maximum flow) through the heat exchanger to transport heat to the sensing bulb. Valves with internal bypass are available.

## INSTALLATION INSTRUCTIONS

- Valves can be mounted in any position without affecting performance. However, for ease of adjustment consider the accessibility of the adjusting nut.
- Connect the incoming water line to the valve inlet. Direction of water flow (see drawing) is indicated by the arrow cast on the side of the valve body.
- Install sensing bulb in desired location

## ADJUSTMENT

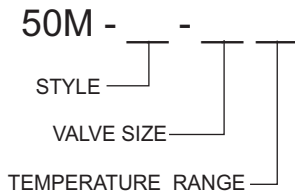
- To increase the temperature setting, insert a pin or hex key into the adjustment nut and turn counter-clockwise. To lower the temperature setting, turn adjustment nut clockwise.

## MANUAL OVERRIDE

- To flush the valve, independent of temperature setting, insert an allen wrench into the manual flush screw on top of the valve and turn clockwise until the screw bottoms. After flushing, reverse this procedure for automatic operation. **Caution:** If the manual flushing screw is not unscrewed or backed off sufficiently The valve will not close.

## TO DETERMINE ACTUATOR PART NUMBER

1. Select the desired Bulb style for the appropriate valve series.
2. Select the Applicable Valve size.
3. Select the Temperature Range to reference the part number.



Example: For an application to control at 110°F, you could select our WCCWT Series valve and specify a 50M-261S thermostatic actuator (see Model 261 on right).

MODEL 261 • 3/4" NPT INSERTION TYPE • "A"=3/4"			
VALVE SIZE	TEMPERATURE RANGE (°F)	L (in)	PART NUMBER
ALL	5-105 or 60-140	6.00	50M-261L or 261X
	90-140	2.25	50M-261S
	100-170 or 160-230	2.25	50M-261H or 261V

MODEL 318 • 1/2" NPT INSERTION TYPE • "A"=9/16"			
VALVE SIZE	TEMPERATURE RANGE (°F)	L (in)	PART NUMBER
ALL	5-105 or 60-140	11.00	50M-318L or 318X
	90-140	4.00	50M-318S
	100-170 or 160-230	4.00	50M-318H or 318V

MODEL 339 • PLAIN TUBE STRAP-ON TYPE • "A"=3/4"			
VALVE SIZE	TEMPERATURE RANGE (°F)	L (in)	PART NUMBER
ALL	5-105 or 60-140	6.00	50M-339L or 339X
	90-140	2.25	50M-339S
	100-170 or 160-230	2.25	50M-339H or 339V

