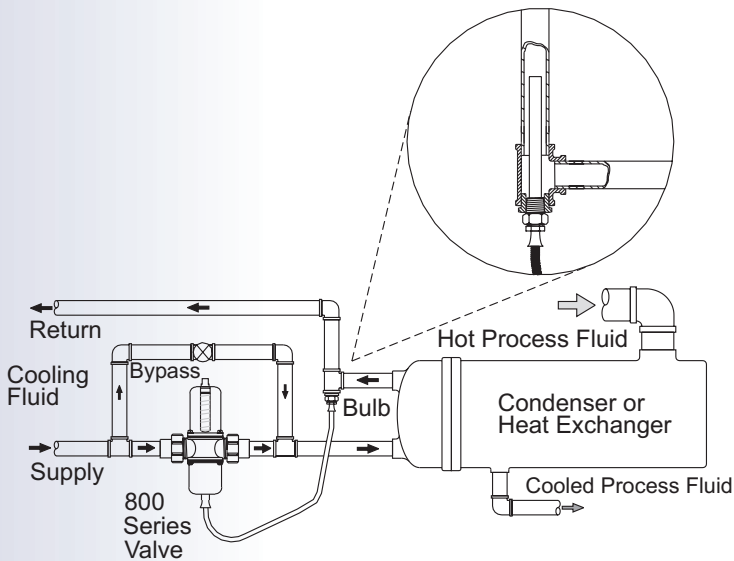


Thermostatic actuated valves are typically used to modulate the water flow in response to a temperature signal and are used in a wide variety of industrial and commercial process control applications where water is used as a heat transfer medium. For example, this type of valve is used to maintain precise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



TYPICAL APPLICATION

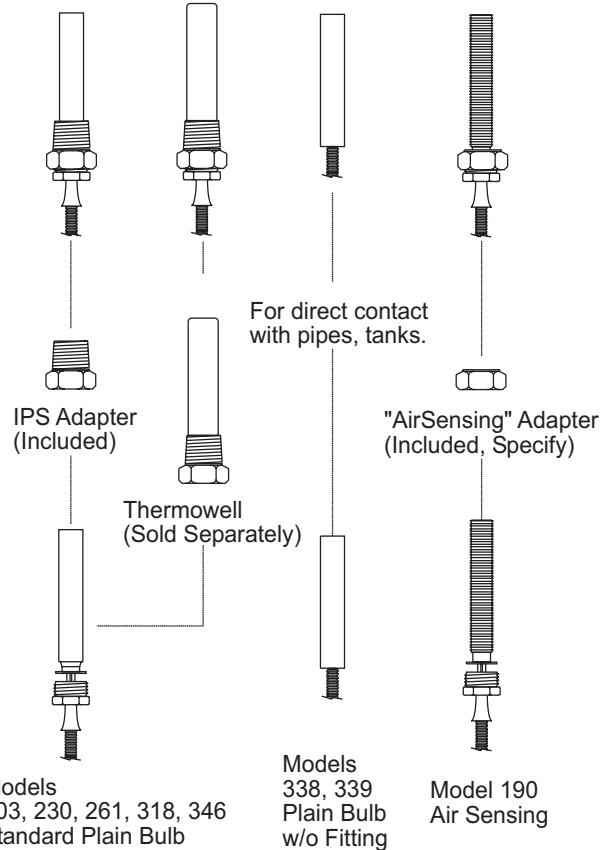
FEATURES

- Actuation by temperature
- For all Metrex Valve sizes, 2-Way and 3-Way
- For Direct Acting and Pilot Operated valves
- For fresh water and marine
- Fully adjustable control within desired range
- Self-operating
- Available in a wide variety of sensing bulb styles
- Optional open on temperature decrease (on most direct acting models)

TEMPERATURE RANGES

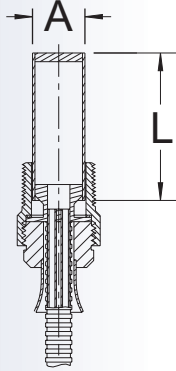
Range Designator	Crack Open Temperature Adjustment Range	Change to Full Open Across the Range*
L low	5 to 105 F (-15 to 40 C)	35 to 12 F (19 to 7 C)
X cross ambient	60 to 140 F (15 to 60 C)	25 to 12 F (14 to 7C)
S standard	90 to 140 F (30 to 60 C)	20 to 12 F (11 to 7 C)
H high	100 to 170 F (40 to 80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



SENSING BULB STYLES

ORDERING INFORMATION



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 a 1" 2-Way application to control at 110°F, you could select our 800 Series valve and specify a 50M-203-1S thermostatic actuator (see Model 203 below).

MODEL 190 • FINNED TUBE AIR SENSING TYPE • "A"=3/4" FOR 500, 800, 900 SERIES VALVES			
APPLICABLE VALVE SIZES	TEMPERATURE RANGE	L	PART NUMBER
3/8"	5-105° or 60-140°F	6.00	50M-190-37L OR 37X
	90-140° F	2.00	50M-190-37S
	100-170°F or 160-230°F	2.00	50M-190-37H OR 37V
1/2", 3/4"	5-105°F or 60-140°F	9.00	50M-190-50L OR 50X
	90-140° F	3.00	50M-190-50S
	100-170°F or 160-230°F	3.00	50M-190-50H OR 50V
1", 1-1/4", & 1-1/2"	5-105°F or 60-140°F	24.00	50M-190-1L OR 1X
	90-140° F	7.00	50M-190-1S
	100-170°F or 160-230°F	7.00	50M-190-1H OR 1V
2" & 2-1/2"	90-140° F	20.00	50M-190-2S
	100-170° or 160-230°	20.00	50M-190-2H OR 2V

MODEL 261 • 3/4" NPT INSERTION TYPE • "A"=3/4" FOR PILOT, WCCW AND WCME SERIES VALVES			
APPLICABLE VALVE SIZES	TEMPERATURE RANGE	L	PART NUMBER
ALL	5-105°F or 60-140°F	6.00	50M-261L OR 261X
	90-140°F	2.25	50M-261S
	100-170°F or 60-140°F	2.25	50M-261H OR 261V

MODEL 318 • 1/2" NPT INSERTION TYPE • "A"=9/16" FOR PILOT, WCCW AND WCME SERIES VALVES			
APPLICABLE VALVE SIZES	TEMPERATURE RANGE	L	PART NUMBER
ALL	5-105°F or 60-140°F	11.00	50M-318L OR 318X
	90-140°F	4.00	50M-318S
	100-170°F or 60-140°F	4.00	50M-318H OR 318V

MODEL 203 • 3/4" NPT INSERTION TYPE • "A"=3/4" FOR 500,800,900 SERIES VALVES			
APPLICABLE VALVE SIZES	TEMPERATURE RANGE	L	PART NUMBER
3/8"	5-105° or 60-140°F	4.50	50M-203-37L OR 37X
	90-140°F	2.25	50M-203-37S
	100-170° or 160-230°	2.25	50M-203-50H OR 50V
1/2", 3/4"	5-105°F or 60-140°F	6.00	50M-203-50L OR 50X
	90-140° F	2.25	50M-203-50S
	100-170° or 160-230°	2.25	50M-203-50H OR 50V
1", 1-1/4", & 1-1/2"	5-105° or 60-140°F	15.00	50M-203-1L OR 1X
	90-140° F	4.50	50M-203-1S
	100-170° or 160-230°	4.50	50M-203-1H OR 1V
2" & 2-1/2"	5-105°F or 60-140°F	41.00	50M-203-2L OR 2X
	90-140° F	11.00	50M-203-2S
	100-170° or 160-230°	11.00	50M-203-2H OR 2V

MODEL 338 • PLAIN TUBE STRAP-ON TYPE • "A"=3/4" FOR 500,800,900 SERIES VALVES			
APPLICABLE VALVE SIZES	TEMPERATURE RANGE	L	PART NUMBER
3/8"	5-105° or 60-140°F	4.50	50M-338-37L OR 37X
	90-140° F	2.25	50M-338-37S
	100-170°F or 160-230°F	2.25	50M-338-37H OR 37V
1/2", 3/4"	5-105°F or 60-140°F	6.00	50M-338-50L OR 50X
	90-140° F	2.25	50M-338-50S
	100-170°F or 160-230°F	2.25	50M-338-50H OR 50V
1", 1-1/4", & 1-1/2"	5-105°F or 60-140°F	15.00	50M-338-1L OR 1X
	90-140° F	4.50	50M-338-1S
	100-170°F or 160-230°F	4.50	50M-338-1H OR 1V
2", 2 1/2"	5-105°F or 60-140°F	41.00	50M-338-2L OR 2X
	90-140°F	11.00	50M-338-2S
	100-170° or 160-230°	11.00	50M-338-2H OR 2V

MODEL 230 • 1/2" NPT INSERTION TYPE • "A"=9/16" FOR 500,800,900 SERIES VALVES			
APPLICABLE VALVE SIZES	TEMPERATURE RANGE	L	PART NUMBER
3/8"	5-105° or 60-140°F	8.00	50M-230-37L OR 37X
	90-140° F	2.00	50M-230-37S
	100-170° or 160-230°	2.00	50M-230-37H OR 37V
1/2", 3/4"	5-105° or 60-140°F	11.00	50M-230-50L OR 50X
	90-140° F	4.00	50M-230-50S
	100-170° or 160-230°	4.00	50M-230-50H OR 50V
1", 1 1/4", 1 1/2"	5-105° or 60-140°F	30.00	50M-230-1L OR 1X
	90-140° F	8.00	50M-230-1S
	100-170° or 160-230°	8.00	50M-230-1H OR 1V
2" & 2-1/2"	90-140° F	21.00	50M-230-2S
	100-170° or 160-230°	21.00	50M-203-2H OR 2V

MODEL 339 • PLAIN TUBE STRAP-ON TYPE • "A"=3/4" FOR PILOT, WCCW AND WCME SERIES VALVES			
APPLICABLE VALVE SIZES	TEMPERATURE RANGE	L	PART NUMBER
ALL	5-105°F or 60-140°F	6.00	50M-339L OR 339X
	90-140°F	2.25	50M-339S
	100-170°F or 60-140°F	2.25	50M-339H OR 339V

MODEL 346 • INSERTION PLAIN TUBE TYPE • "A"=1" FOR 500,800,900 SERIES VALVES			
APPLICABLE VALVE SIZES	TEMPERATURE RANGE	L	PART NUMBER
1", 1 1/4", 1 1/2"	5-105°F or 60-140°F	10.00	50M-346-1L OR 1X
	5-105°F or 60-140°F	26.00	50M-346-2L OR 2X