

MICROtrac

Cooling Tower Controller



MICROtrac Toroidal Conductivity Cooling Tower Controller

The MICROtrac is a microprocessor based feed and bleed toroidal conductivity controller designed to control conductivity and feed inhibitor in cooling tower systems. Featuring innovative toroidal sensor technology, the MICROtrac provides an economical control platform that is not susceptible to sensor fouling and never requires calibration!

Principle of Operation

The MICROtrac measures the conductivity of the cooling tower recirculating water via a toroidal conductivity sensor. The controller activates two independent relay outputs based on a bleed and feed mode of operation. When the conductivity measurement goes above the user defined set point, the two relays are activated until the conductivity drops below the set point and the fixed differential value, or until the user programmable limit times for feed or bleed are exceeded.

Operating Benefits

- **No calibration required!** MICROtrac's toroidal sensor technology saves you valuable service time and money by eliminating routine calibrations. The MICROtrac toroidal conductivity sensor is factory calibrated for the life of the probe.
- **Reduced potential for fouling!** By design, the MICROtrac toroidal conductivity sensor has no exposed electrodes, which means that there is nothing to wear out or foul. When installed according to the manufacturer's instructions, the need for routine sensor removal and cleaning is virtually eliminated – saving you time and money.
- **Two year warranty on controller and sensor!** You can install the MICROtrac controller with confidence, knowing that it is backed by Pulsafeeder with a two year warranty on the controller and sensor.

- **Large range.** The MICROtrac conductivity controller has a 0 - 9,999 $\mu\text{S}/\text{cm}$ range, making it ideal for other applications as well, such as rinse, industrial process, wastewater, etc.
- **Simple user interface.** A large LCD display and simple programming via a three-button interface make the unit extremely easy to set up and program. With no calibration required and a fixed differential, all that needs to be done is to program a conductivity set point and, if desired, the limit times for the feed and bleed relays.
- **Easy installation.** Optional pre-wired receptacles for the relays and an optional pre-wired flowswitch make installation a breeze.



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MICROtrac Model Selection

MICROtrac Selection Guide		M	_	_	_	_	_
PRODUCT DESIGNATOR <small>Position 1, 2 & 3</small>	MTC = MICROtrac Toroidal Conductivity Cooling Tower Controller MCL = MICROtrac Toroidal Conductivity Closed Loop Controller						
VOLTAGE <small>Position 4</small>	1 = 115 volt 2 = 230 volt (no prewired power cord or relays available)						
RELAY & POWER WIRING <small>Position 5</small>	X = Prewired power cord & Liquid-Tight relay connections L = Liquid Tite connections only (required for 230VAC) P = Prewired power cord and relays						
SENSOR TEE <small>Position 6</small>	X = Standard (no tee) T = Sensor Tee with 3/4" inlet/outlet connections						
PANEL <small>Position 7</small>	X = Standard (no flow switch) F = Flow Switch with 3' cable L = Standard Flow Assembly (no panel) A = Standard Panel & Flow Assembly B = Deluxe Panel & Flow Assy, 1 Pump Mount, in/out ball valves, strainer, inj tees & rails						
SUFFIX CODE <small>Sensor Cable Length Position 8 thru 12</small>	XXX = Suffix Code 750 = 3/4" Back Flow Check Valve PC025 = 25 Feet (7.6m) PC050 = 50 Feet (15.2m) PC075 = 75 Feet (22.8m) PC100 = 100 Feet (30.4m)						

MICROtrac Specifications

Controller Specifications

Enclosure	NEMA 4X / IP65
Dimensions	4.73" x 2.28" x 3.15" (120 x 58 x 80 mm)
Power supply	120VAC / 5A
Control Output	Line Voltage @ 240 VA per Relay (2 amps @ 120 VAC)
Display	LCD
Set Point range	0 - 9,999 μ S/cm range in 1 μ S/cm increments
Set Point Differential (Hysteresis)	Fixed 5% of set point

Sensor Specifications

Maximum Temperature	125°F (52°C)
Temperature Compensation Range	32 - 125°F (0 - 52°C)
Maximum Pressure	125 psi (8.6 BAR)
Sensor Type	Toroidal
Cable Length, Standard	15' (4.5 m)
Materials of Construction	High grade stainless steel and high temp polypropylene



An ISO Certified Company



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