

Non-Membrane Disinfection Sensors



Walchem's Amperometric Sensor

Cost effective and reliable solution to your disinfection control requirements. Compatible with the W100, W600 and W900 series controllers, the sensors continuously and directly measure the Chlorine/Bromine or Chlorine Dioxide chemical concentration, without the use of reagents.

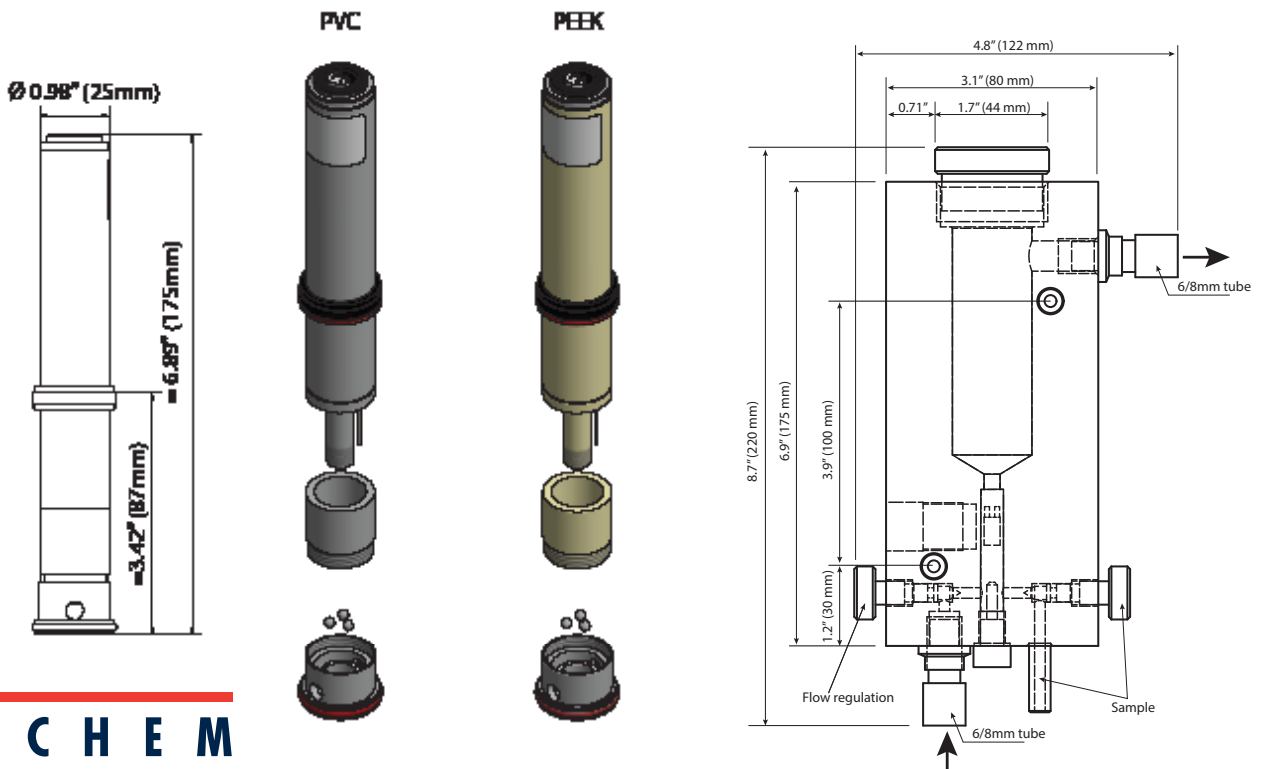
These sensors may be used in any water with qualities similar to those of drinking water; that is, clean water at near neutral pH, especially at higher pressures and/or higher temperatures. Whether the application is a cooling tower, food and beverage, drinking water, wastewater, or swimming pool, these sensors may be the ideal solution. Walchem controllers with amperometric chlorine sensors can be used for reporting chlorine residual measurements in accordance with EPA Method 334.0.

KEY BENEFITS

- Low maintenance - no costly reagents or tubing to replace
- Broad range of applications - high pressure and temperature ratings*
- Fast response - continuous measurement technique
- No waste - the sample can be returned to the process

* Refer to the General Guidelines document for using Chlorine/Bromine Sensors at Walchem.com

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SPECIFICATIONS

	Free Chlorine/Bromine PVC	Free Chlorine/Bromine PEEK	Chlorine Dioxide PVC	Chlorine Dioxide PEEK
Range (W100, W600, W900)	0.03 - 20 mg/l (reduce the range by a factor of 3 if using the optional cleaning attachment)			
Range (WebMaster)	0.03 - 8 mg/l (reduce the range by a factor of 3 if using the optional cleaning attachment)			
Resolution	0.01 mg/l			
Sensitivity	NaOCl, Ca(OCl) ₂ , Cl ₂ , NaOBr, HOBr, BCDMH, not for stabilized bromine O ₃ (900%), ClO ₂ (400%), ClO ₂ - detected		ClO ₂ Cl ₂ , ClO ₂ - <2% detection	
Flow rate of sample	20 -100 liters/hour (constant, 80 l/hr. optimum if using the optional cleaning attachment, 50 l/hr. without)			
pH range of sample	pH 5.00 - 9.00 (pH must be stable within ±0.10)		pH 1.00 - 12.00	
Conductivity range of sample	10 – 5,000 µS/cm			
Response time	30 seconds			
Conditioning time	1 hour - 2 days depending on water quality			
Operating pressure	0-8 bar (0-116 psi) – 104033 flow cell, 0-4 bar (0-58 psi) – 192011 flow cell			
Operating temperature	0 - 50°C (32-122°F)	0 - 70°C (32-158°F)	0 - 50°C (32-122°F)	0 - 70°C (32-158°F)
Storage	Frost protected, dry and without electrolyte - no limit			
Flow cell connectors	6mm ID x 8 mm OD tubing fittings in 1/4" straight threaded holes			
Power requirements	±5 VDC, 5 mA			
Signal	0 to -2000 mV DC			
Maximum cable length	30 meters (100 feet)			
Extension cable	4 conductor 24 AWG shielded (Walchem 100084)			
Materials of Construction				
Sensor	PVC-U	PEEK	PVC-U	PEEK
Flow cell	PMMA and Natural PVDF (104033) or PVC (192011)			
Mounting rings	PETP, FKM, Silicone and Natural PVDF (104033) or PVC (192011)			
Optional cleaning cap	PVDF, Acrylic (PMMA), Silicone, Ceramic balls			
Optional flow switch	Switch: Stainless Steel, Polyester (not wetted) Float: PEEK, Epoxy			

ORDERING INFORMATION

104030	Sensor, Cl ₂ , PEEK, Non-Membrane
104037	Sensor, Cl ₂ , PVC, Non-Membrane
103939	Sensor, ClO ₂ , PEEK, Non-Membrane
104038	Sensor, ClO ₂ , PVC, Non-Membrane
103940	Cleaning Kit
104039	Electrolyte
104040	Emery Paper
104033	Acrylic flow cell, 70 °C
104034	Flow Switch, Acrylic Flow Cell
191655-03	Cable, W100/600/900, Disinfection, 3 Ft.
191655-20	Cable, W100/600/900, Disinfection, 20 Ft.
192011	Acrylic flow cell, 45 °C



ABOUT US

Walchem integrates its advanced sensing, instrumentation, fluid pumping and communications technologies to deliver reliable and innovative solutions to the global water treatment market. Our in-house engineering is driven by quality, technology and innovation. For more information on the entire Walchem product line, visit: www.walchem.com.



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