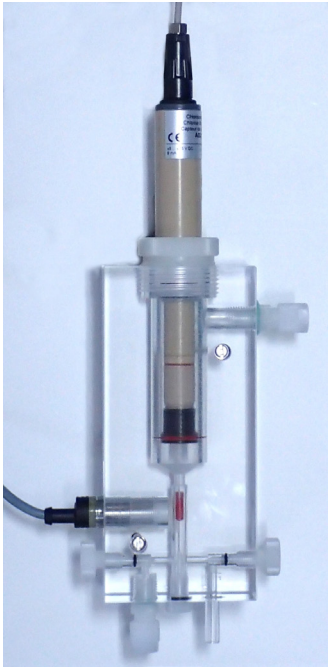


Non-Membrane Disinfection Sensors



Walchem Amperometric Sensors

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

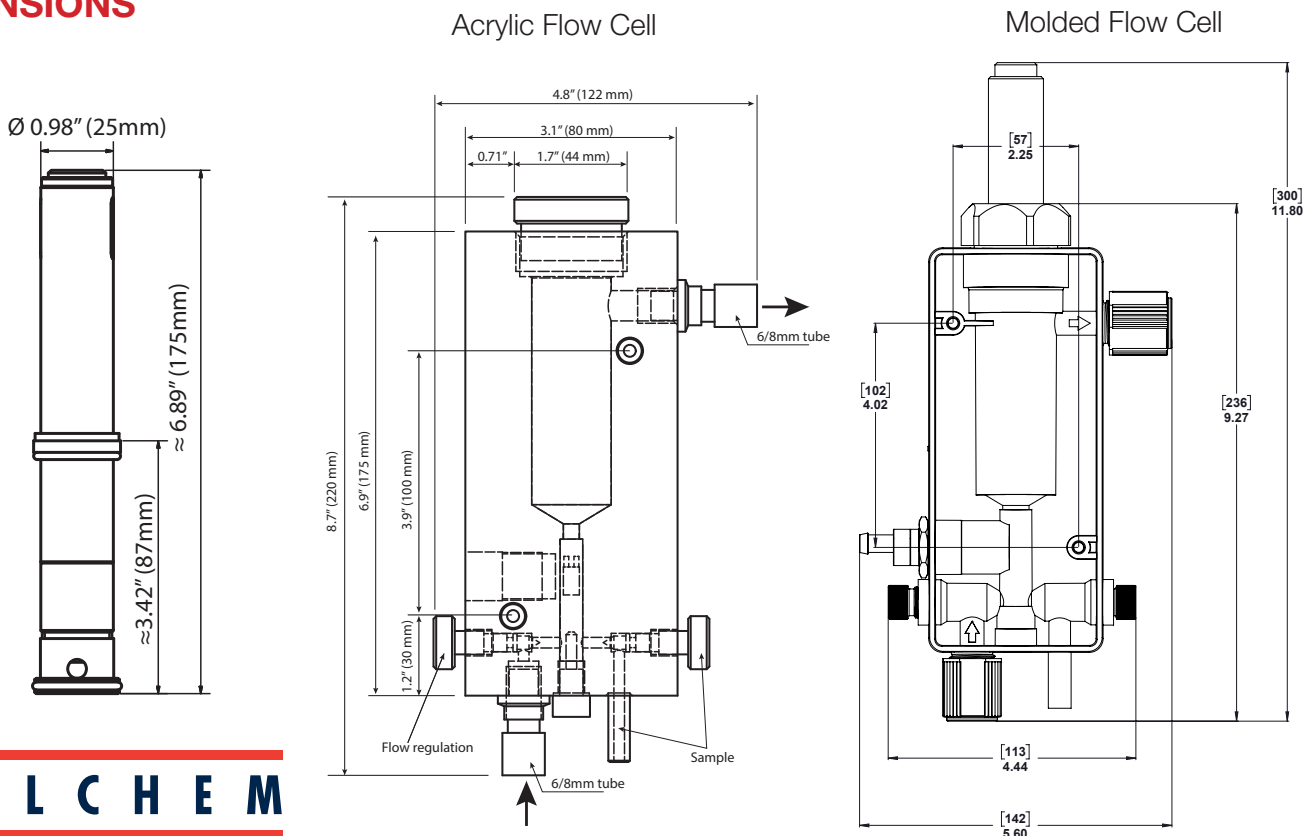
Amperometric sensors perform best in drinking water or any clean water application with near neutral pH, and are typically used in higher pressure and/or temperature installations. Whether the application is a cooling tower, food and beverage, drinking water, wastewater, or swimming pool, these sensors provide stable, accurate measurements with low maintenance. 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

DIMENSIONS



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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%), Chlorite detected		ClO ₂ Cl ₂ , Chlorite <2% detection	
Flow rate of sample	15 - 90 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, 192059, 192060 flow cells, 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	8 mm OD tubing fittings (104033, 192011, 192060 flow cells), 3/8" OD tubing fittings (192059 flow cell)			
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), PMMA and PVC (192011), PSU and GFRPP (192059, 192060)			
Mounting rings	PETP, FKM, Silicone and Natural PVDF (104033) or PVC (192011), GFRPP (192059, 192060)			
Optional cleaning cap (Highly recommended for chlorine sensors)	PVDF, Acrylic (PMMA), Silicone, Ceramic balls			
Optional flow switch	Switch: Stainless Steel, Polyester (not wetted) Float: PEEK, Epoxy			

ORDERING INFORMATION

104030	Cl ₂ Sensor, PEEK, Non-Membrane
104037	Cl ₂ Sensor, PVC, Non-Membrane
103939	ClO ₂ Sensor, PEEK, Non-Membrane
104038	ClO ₂ Sensor, PVC, Non-Membrane
103940	Cleaning Kit
104039	Electrolyte
104040	Emery Paper
104034	Flow Switch, Non-Membrane Flow Cells
104033	Acrylic flow cell, 8 mm OD tubing fittings, 70 °C
192011	Acrylic flow cell, 8 mm OD tubing fittings, 45 °C
192059	Polysulfone flow cell, 3/8" OD tubing fittings, 70 °C
192060	Polysulfone flow cell, 8 mm OD tubing fittings, 70 °C
191655-03	Cable, W100/600/900/Intuition, Disinfection, 3 ft, 4-pin connector
191655-20	Cable, W100/600/900/Intuition, Disinfection, 20 ft, 4-pin connector
192148-03	Cable, W100/600/900/Intuition, Disinfection, 3 ft, M12 connector
192148-20	Cable, W100/600/900/Intuition, Disinfection, 20 ft, M12 connector



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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