# Non-Membrane Disinfection Sensors

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Walchem's amperometric disinfection sensors offer a cost effective and reliable solution to your disinfection control requirements. Compatible with the W100, W600, W900 and WebMaster® series controllers, the sensors continuously and directly measure the Chlorine or Chlorine Dioxide chemical concentration, without the use of reagents.

Whether the application is a cooling tower, food and beverage, drinking water, wastewater, or swimming pool, these sensors are the ideal solution.

### Summary of Key Benefits

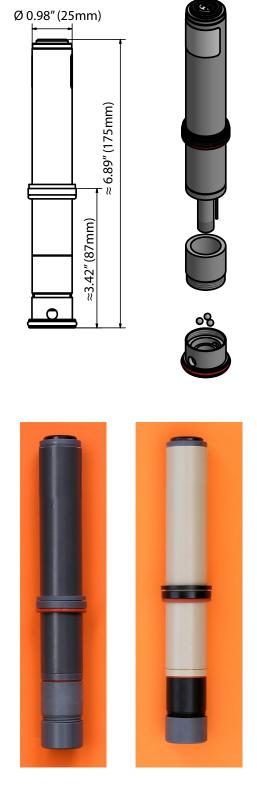
- Low maintenance no costly reagents or tubing to replace
- Broad range of applications high pressure and temperature ratings
- > Fast response continuous measurement technique
- No waste the sample can be returned to the process



	Free Chlorine PVC	Free Chlorine 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	NaOCI, Ca(OCI <sub>2</sub> ), CI <sub>2</sub> O <sub>3</sub> (900%), CIO <sub>2</sub> (400%), CIO <sub>2</sub> - detected		$CIO_2$ $CI_2$ , $CIO_2$ - <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	No Limit			
Response time	30 seconds			
Conditioning time	1 hour - 2 days depending on water quality			
Operating pressure	0 - 8 bar (0 - 116 PSI)			
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	Acrylic (PMMA), Natural PVDF			
Mounting rings	Natural PVDF, PETP, FKM, Silicone			
Optional cleaning cap	PVDF. Acrylic (PMMA), Silicone, Ceramic balls			
Optional flow switch	Switch: Stainless Steel, Polyester (not wetted) Float: PEEK, Epoxy			



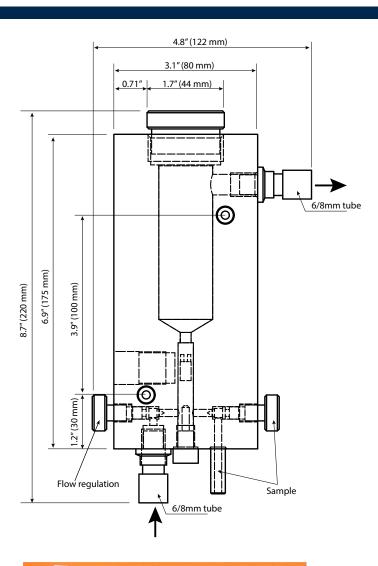
## **Dimensions**







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## **Ordering Information**

104030	Sensor, Cl <sub>2</sub> , PEEK, Non-Membrane
104037	Sensor, Cl <sub>2</sub> , PVC, Non-Membrane
103939	Sensor, ClO <sub>2</sub> , PEEK, Non-Membrane
104038	Sensor, CIO <sub>2</sub> , PVC, Non-Membrane
103940	Cleaning Kit
104039	Electrolyte
104040	Emery Paper
104033	Acrylic Flow Cell
104034	Flow Switch, Acrylic Flow Cell
191655-03	Cable, W100/600/900, Disinfection, 3 Ft.
191655-20	Cable, W100/600/900, Disinfection, 20 Ft
191303-05	Cable, WebMaster, Disinfection, 3 Ft.
191303	Cable, WebMaster Disinfection, 20 Ft.