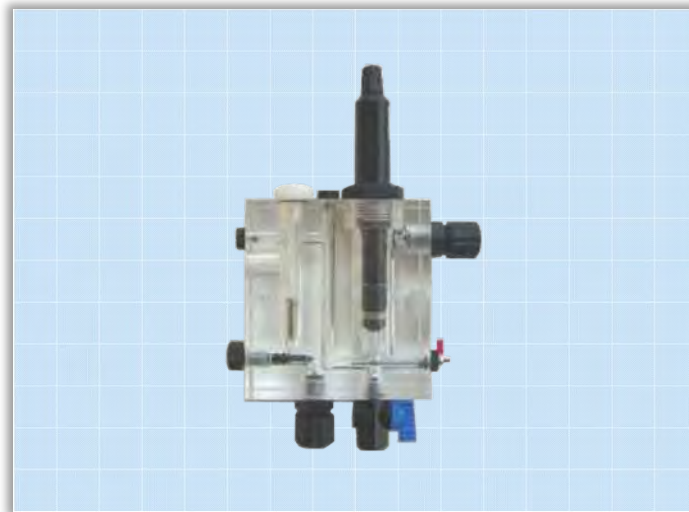


CROSS SMART SENSOR

DG7-Br: Free Bromine Sensor

DIGITAL TECHNOLOGY FOR OPTIMIZED MEASURES



The **DG7-Br** is a panel-mount, ready-to-use Free Bromine Sensor with flow cell. The flow cell (FLC) can remove bubbles in water samples, adjusts sample flow and keeps it stable. The sensor is designed to monitor free Bromine (HOBr) in drinking water, rinse water, swimming pool water, sea water, and any other process water samples. The sensor also measures 1-Bromo-3-chloro-5.5-dimethyl-hydantoin (BCDMH). It provides two measurement ranges, the standard 0.005~2 ppm, and the extended 0.05~20 ppm for high values..

Bromine is a powerful disinfectant that can kill many pathogens. It also has a persistent capacity: it immediately purifies the water, but continues to destroy bacteria as they appear. The advantages of bromine:

- a. Bromine is effective in water up to 30 °C which is much higher than chlorine. This particularity makes it an ideal treatment for hot tubs, indoor pools and heated pools;
- b. Bromine is less sensitive to water pH. It remains effective for water disinfection even if the pH is high, which is not the case for chlorine, and it even requires a higher pH to be very effective;
- c. Bromine is odorless and does not irritate the skin, mucous or eyes;
- d. Bromine is not highly sensitive to UV rays, which means that it does not deteriorate with sunlight;
- e. Bromine is easy to use and does not require stringent maintenance;

However, bromine is expensive in both equipment and dosing, the cost is usually 30 to 40% higher than chlorine treatment. Also, like chlorine, bromine is a harmful chemical product. You must be very careful when handling this product, but also with its storage.

SPECIFICATIONS

Measuring system	Membrane-covered, amperometric 3-electrode system with integrated electronic
Range	Standard: 0.005 to 2 mg/l; Extended: 0.05 to 20 mg/l or ppm.
Accuracy	0.005mg/l for standard range; 0.05mg/l for extended range
Resolution	0.001mg/l for standard range; 0.01 mg/l for extended range.
Repeatability	±1% FS
Operate Temp.	32 to 113 °F (0 to 45 °C)
Temp. Compensation	Automatically, by an integrated temperature sensor
Operating Pressure	Typical 0.5 to 3 bar, no pressure impulses and/or vibrations
Sample Flow Rate	15 to 30 L/h
pH-range	pH 6.5 to pH 9.5, reduced pH dependence
Run-in Time	First start-up 2 hours
Response Time	T90: <2 min
Slope adjustment	At the device, by analytical determination of the Bromine concentration, Recommendation depending on bromine agent - Free Bromine DPD-1-method - BCDMH DPD4 - method
Interferences	ClO ₂ : Slope -75 mV/ppm, d. s. 75 % of the ClO ₂ concentration O ₃ : Slope -80 mV/ppm, d. s. 80 % of the O ₃ concentration Cl ₂ : Also measured
Power	24VDC, 40mA
Digital Interface	RS485 Modbus RTU
Material	Sensor: Microporous hydrophilic membrane, PVC, PEEK, 316SS; PMMA FLC and PVC panel.
Dimensions	Sensor: 1" x 8.07" (25 x 205 mm); FLC (W x H x D): 3.54" x 4.72" x 2"(90 x 120 x 50 mm)
Spare parts	Typically change membrane cap once a year. Typically change electrolyte once 3 to 6 months.

Specifications subject to change without notice.

ORDER CODE

DG7-Br: Free Bromine Sensor with flow cell and mounting panel

	-	0.005~2.00ppm		
	-H	0.05~20.00ppm		
			-C10	10' cable
			-C20	20' cable
			-C30	30' cable
				Specify length up to 100ft (30m) in order.
DG7-FC	-N	-C30		



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