MS02



Type MS02 can be combined with...



Online Analysis System

The device is a chlorine measurement sensor. It is used within the Online Analysis System Type 8905 by being plugged into a spare fluidic backplane slot.

The chlorine sensor cube contains a high precision membrane covered amperiometric sensor, based on Microelectromechanical systems technology (MEMS). The measurement signal shows the real content of HOCI in the sample water.

The electrical and fluidic connections are made via the connection panel of the system. The sensor cube is communicating via büS, so the configuration is fully automatic. When plugging into a system you will find the sensor in the list of büS members for further customized adjustments.

Chlorine Sensor Cube

- Fully compatible with büS systems and a wide range of further analysis sensor cubes
- MEMS technology sensor
- Modular sensor cube for hot swap (exchange during operation)
- Minimal sample water flow needed

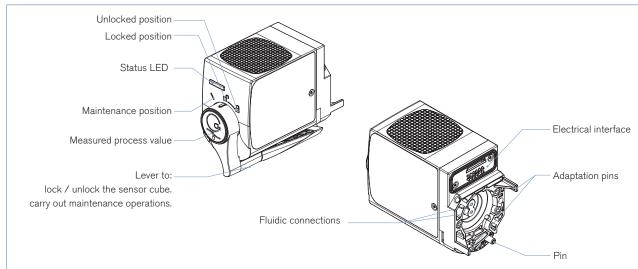
General data		
Compatibility	with Online Analysis System Type 8905	
	(see corresponding data sheet)	
Materials		
Housing, plug / Lever / Seal	PPO / PC / EPDM	
Electrical connection	Plugging/unplugging into backplane of the Type 8905	
Fluidic connection	Plugging/unplugging into backplane of the Type 8905	
Chlorine sensor	Membrane covered PT-cell - amperiometric 3 electrodes measurement	
Temperature sensor	PT1000 Class B, no contact with sample water	
Chlorine measurement		
Measuring range	0.01 to 5 ppm	
Sensitivity	-10.70 nA/ppm (at pH 5); -8.15 nA/ppm (at pH 7)	
Sensor resolution	0.01 ppm	
Measurement deviation ("measurement bias"		
as defined in the standard JCGM 200:2012	±0.03 ppm or ±5%	
Linearity	±0.02 ppm or ± 2.5%	
Repeatability	±0.02 ppm or ±2.5%	
Response time (t90)	< 30 s	
Temperature measurement	0 to 50°C (32 to 122°F)	
Maintenance duration	12 months	
Type of medium	Drinking water, industrial water	
pH value / Conductivity	pH 5 to 9 / > 50 μs/cm	
Sample water temperature	0 to 40°C (32 to 104°F), not freezing	
Sample water pressure	PN 6	
Sample water flow range	> 10 L/h	
Environment		
Ambient temperature		
Operating	0 to +40°C (-4 to 104°F)	
Storage	-20 to +60°C (-4 to 140°F), only for purged cube	
Relative humidity	< 90%, without condensation	
Max. height above sea level	max. 2000 m	

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Electrical data		
Operating voltage	24 V DC through backplane via büS	
Power consumption	0.8 VA	
Communication	büS	
Status LED	Green for activation process, white for working process and red for error acc. to NAMUR NE 107	
Standards, directives and approvals		
Protection class	IP65 acc. to EN 60529	
Standard and directives		
EMC	EN 61000-6-3	
	EN 61000-6-2	
Approvals	CE, UL pending	

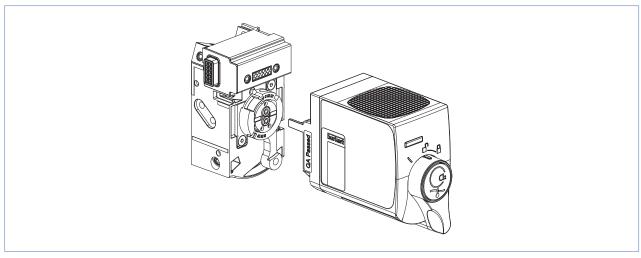
Design and principle of operation

The sensor cube gets the sample water through the fluidic backplane, in which it is plugged in. The measurement is an amperiometric 3-electrode system covered by a membrane.



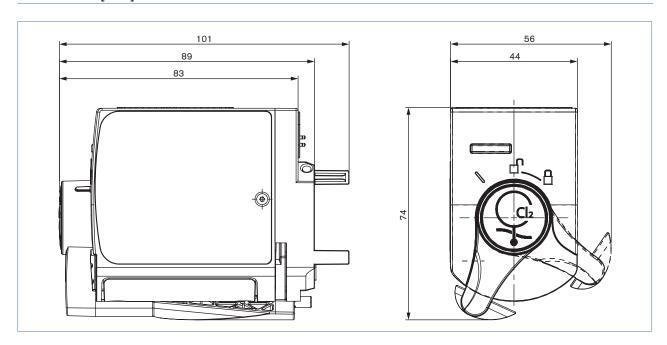
Installation into the Online Analysis System Type 8905

To operate a chlorine sensor cube it is necessary that a spare fluidic backplane is available. It can be installed in a compact system Type 8905 or in a customized version.



MS02

Dimensions [mm]



Ordering information and chart - chlorine sensor cube

The chlorine sensor cube must be operated within a system.

Please refer to the order information for Online Analysis System Type 8905 or contact your Bürkert representative.

Description	Item no.
Chlorine sensor cube	564 831



