



Type MS05 can be combined with...



Type 8905
Online Analysis
System



Type 8920
Communicator

Turbidity Sensor Cube

- Fully compatible with büS systems and a wide range of further analysis sensor cubes
- Optical sensor according to DIN EN ISO 7027 or EPA method 180.1
- Modular sensor cube for hot swap (exchange during operation)
- Minimal sample water flow needed

This sensor cube measures turbidity according to DIN EN ISO 7027 or EPA method 180.1 and is designed for operation on a fluidic backplane in the Online Analysis System 8905.

The continuous analysis of turbidity in water is an indicator of undesirable, undissolved substances in water. The measurement before and after filter stages can indicate the filter effect and enables, for example, the optimisation of backwashing processes. In the best case, this can lead to water and energy savings.

The electrical and fluidic connections are made via the connection panel of the system. The sensor cube communicates with the system via büS, allowing fully automatic login to the online analysis system. If the sensor is plugged into the system, it is included in the list of büS members and further adaptations to customer requirements can be made.

General data		
Compatibility	with Online Analysis System Type 8905 (see corresponding data sheet)	
Materials with sensor acc. to Housing / Lever / Seal Cuvette / Valve	DIN EN ISO 7027	EPA method 180.1
	PPE+PS / PC / EPDM Glass / Silicone	PPE+PS / EPDM PET, glass / Silicone
Electrical connection	Spring contacts in the fluidic backplane of the Type 8905	
Fluidic connection	Via pinch valve in the fluidic backplane of the Type 8905	
Turbidity sensor acc. to DIN EN ISO 7027 EPA method 180.1	Light scattering, replaceable cuvette ¹⁾ , IR-Laser Tungsten lamp	
Turbidity measurement with sensor acc. to Measuring range Resolution Measurement deviation ³⁾	DIN EN ISO 7027	EPA method 180.1
	0...40 FNU ²⁾ ±0.0006 FNU ±0.02 FNU or 2 % of M.V.* (the greater applies)	0...40 NTU ²⁾ ±0.005 NTU ±0.02 NTU or 2 % of M.V.* (the greater applies)
Linearity Repeatability	±0.5 % of full scale ±0.02 NTU or 2 % of M.V.* (the greater applies)	±0.5 % of full scale ±0.02 NTU or 2 % of M.V.* (the greater applies)
Response time (t90)	Depending on filter settings (by default 8 samples = 1 s)	
Maintenance	12 months nominal, depending on the water quality Regular manual or automatic cleaning (with Type MZ 20)	
Type of medium pH value	Water without particles: drinking water, industrial water pH 4...pH 9	
Sample water temperature	+3...+40 °C (+37...+104 °F)	
Sample water pressure	PN3	
Sample water flow range	> 6 l/h	
Sample water filter	> 100 µm	

¹⁾ Only for sensor acc. to DIN EN ISO 7027 and only by Bürkert qualified staff - contact your nearest Bürkert facility

²⁾ Further measuring ranges on request

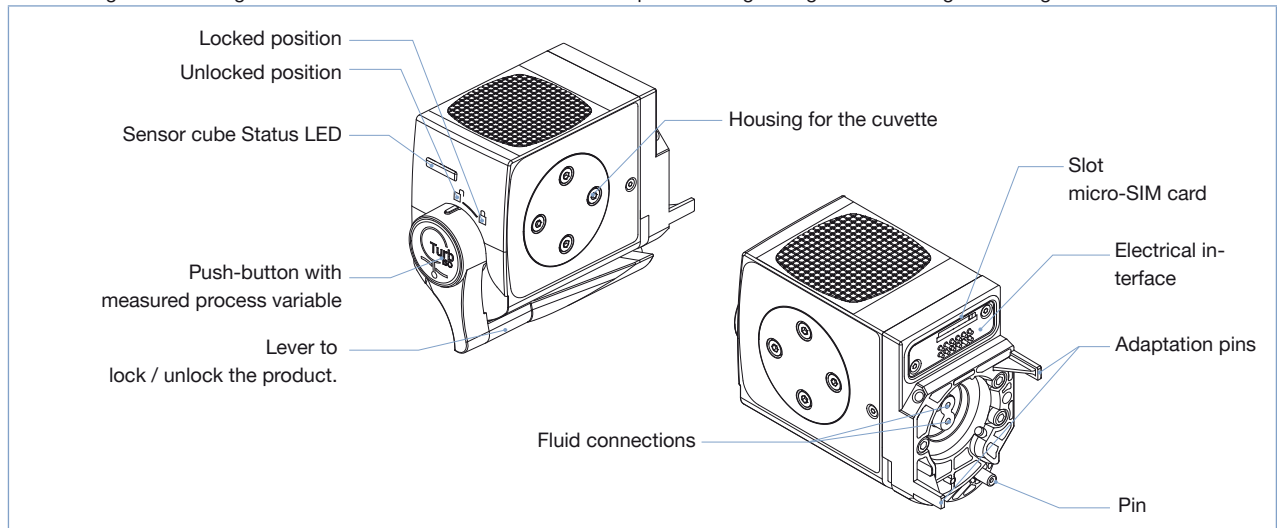
³⁾ = "measurement bias" as defined in the standard JCGM 200:2012

* M.V.= measured value

Environment	
Ambient temperature	+3...+40 °C (+37...+104 °F)
Relative humidity	<90 %, without condensation
Height above sea level	max. 2000 m
Electrical data	
Operating voltage	24 V DC through the backplane of the system Type 8095 via bÜS
Power consumption	0.8 VA
Internal communication	through bÜS (Bürkert bus)
External communication by status LED	According to NAMUR NE 107
Standards, directives and certifications	
Protection class (acc. to IEC/EN 60529)	IP65, when plugged in the fluidic backplane IP20, as standalone product
Standard and directives CE	The applied standards, which verify conformity with the EU Directives, can be found on the EU Type Examination Certificate and/or the EU Declaration of conformity (if applicable)

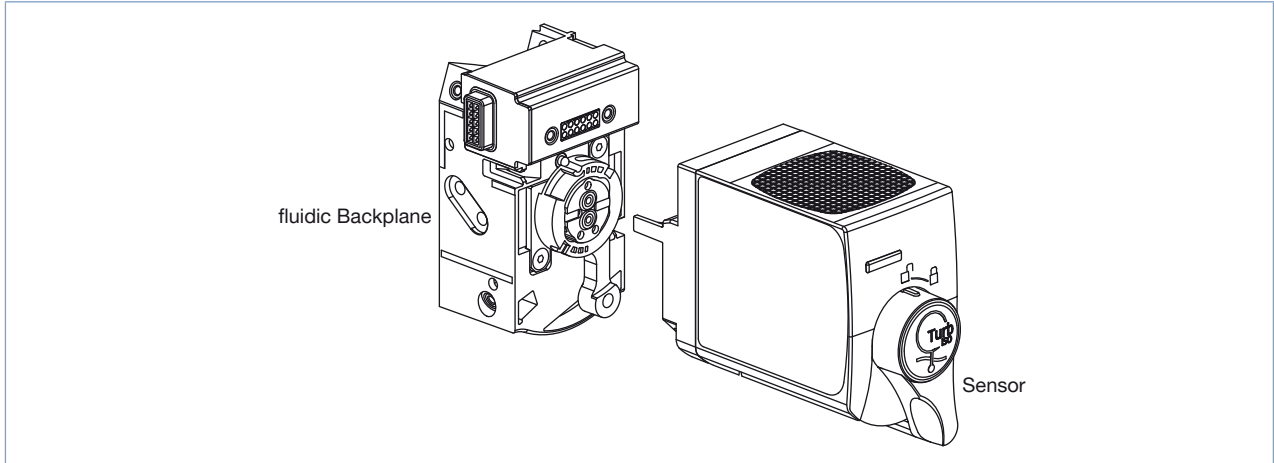
Design and principle of operation

The sensor cube gets the sample water through the fluidic backplane, in which it is plugged in. The measurement is based on the detection of scattered light in an arrangement of 90° to the incident beam. The sample is flowing through a cuvette in glass or in glass/PET.

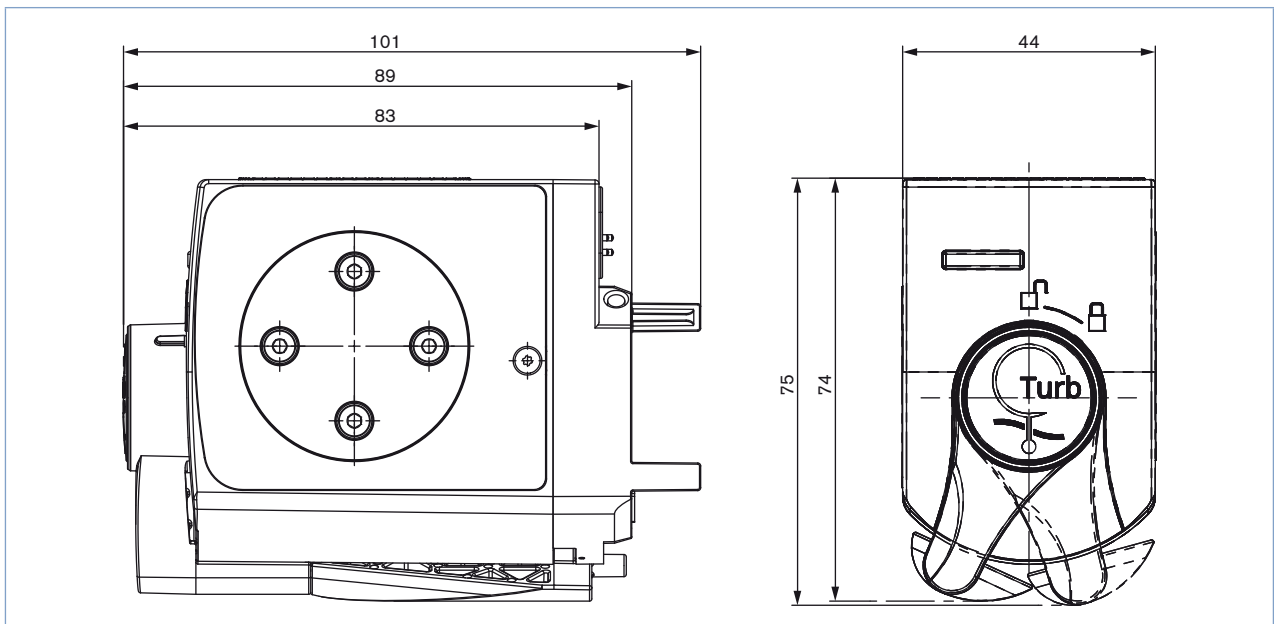


Installation into the Online Analysis System Type 8905

The sensor only works if it is plugged into a fluidic backplane. It can be installed in a compact system type 8905 or in a customized solution.



Dimensions [mm]




Ordering information and chart - Turbidity sensor cube

The turbidity sensor cube must be operated within a system.

Please refer to the order information for Online Analysis System Type 8905 [More info.](#) or contact your Bürkert representative.

Description	Article no.
Turbidity sensor cube - DIN EN ISO 7027	567634 
Turbidity sensor cube - EPA method 180.1	567635 

Ordering chart - accessories and spare parts

Description	Article no.
More info. Type MZ20 Cleaning system, 2 solutions	567124 



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In case of special application conditions,
please consult for advice.

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