

Technical Information
TI 062e00
51503882

Chlorine / Chlorine Dioxide Measurement *OCA 250*

Flow assembly for free chlorine and chlorine dioxide



The flow assembly OCA 250 has been especially designed to hold the chlorine sensors OCS 140 / OCS 141 or the chlorine dioxide sensors OCS 240 / OCS 241. Additionally two mounting positions are reserved for one pH and one redox combination electrode (e.g. types OPS 31-1ABO2GSA and OPS 32-0FBO2GSA).

Areas of application

- Swimming pool water
- Industrial water
- Drinking water
- Other process applications

Features and benefits

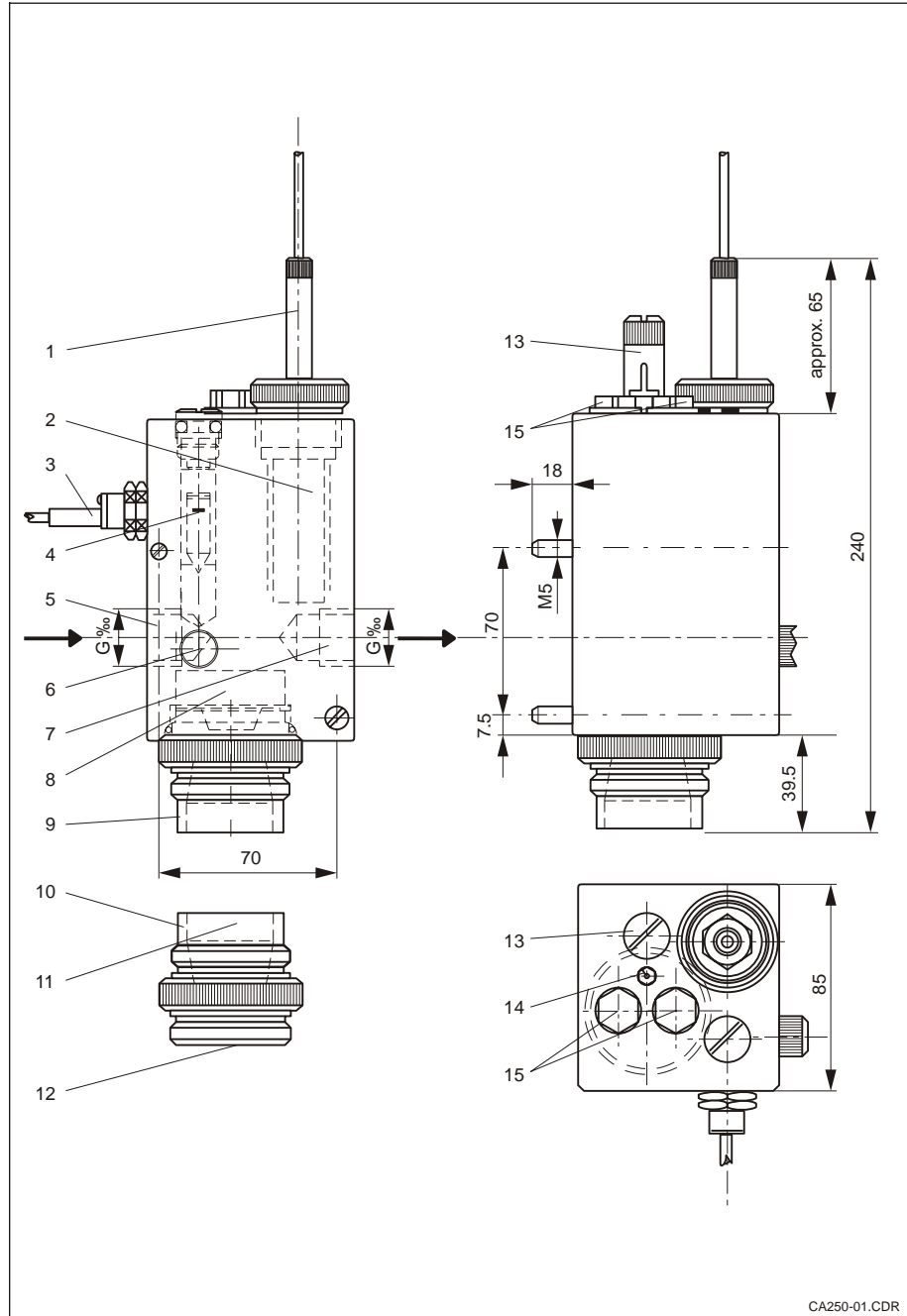
- The PMMA body contains a needle valve to adjust the flow of the measured water and a flowmeter for optical flow monitoring.
- When used with a measuring instrument, e.g. OCM 360 (combination instrument for pH, redox, chlorine and temperature) or OCM 223 (transmitter for free chlorine and chlorine dioxide), a flow alarm can be evaluated by means of an inductive proximity switch.
- Flow alarm evaluation is also possible by means of a separate inductive proximity switch, type INS-R.
- A potential matching pin is built into the assembly for pH and redox measurement.
- Calibration of pH and redox electrodes is possible in the mounted state. The cap screwed onto the assembly from below can be used as a calibration cup.

Measuring system

The complete measuring system consists of the OCA 250 assembly and:

- Sensors for free chlorine OCS 140 / OCS 141 or sensors for chlorine dioxide OCS 240 / OCS 241
- Measuring instrument, e.g. OCM 360 or OCM 223
- pH and redox electrodes
- RC module for PM connection.

Dimensions



Dimensions of OCA 250

- 1 Chlorine sensor OCS 140 / 141 or chlorine dioxide sensor OCS 240 / 241
- 2 Measuring chamber for chlorine sensor or chlorine dioxide sensor
- 3 Inductive proximity switch INS for automatic flow control (option)
- 4 Stainless steel plummet for monitoring of minimum flow rate 30 l/h
- 5 Inlet
- 6 Needle valve for regulation of flow rate < 120 l/h
- 7 Outlet
- 8 Measuring chamber for pH or redox electrode
- 9 Closing cap with calibration cup
- 10 Cup for cleaning and calibration of pH or redox electrode
- 11 Cup side
- 12 Closing side
- 13 Vent screw
- 14 Connection of potential matching PM
- 15 Mounting position for one pH and one redox electrode

Technical data

Dimensions

Instrument with electrode equipment	85 × 85 × 250 mm
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Materials

Sensor body	PMMA, PVC, stainless steel 1.4571 (AISI 316Ti), EPDM
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Process connections

Threaded connection for pH and redox electrodes	2 × Pg 13.5
Water inlet and outlet	G ½ internal thread
Pipe connection	NV ½ for change-over from G ½ internal thread to adhesive coupling for pasting of PVC pipe (OD = 16 mm)
Hose connection	SV ½ for change-over from G ½ internal thread to hose connection D 6/12 in inlet and hose connection D 16 in outlet

Assignment of mounting positions

Mounting position for chlorine or chlorine dioxide sensor	OCS 140 / 141 or OCS 240 / 241
Two mounting positions for electrodes with Pg 13.5 thread	one pH combination electrode (e.g. type OPS 31-1ABO2GSA) and one redox combination electrode (e.g. type OPS 32-0FBO2GSA)
Optional	one inductive proximity switch

Operating data

Max. permissible water pressure	4 bar without sensors, 1 bar with sensors (at 40°C)
Measured water flow (adjustable via needle valve)	30 ... 120 l/h
Max. operating temperature	45 °C

Subject to modifications.

Accessories

- **INS**
Inductive proximity switch for OCA 250 assembly for flow monitoring
Order No.: 51500489
- **SV ½**
Two adapters D 6/12 and D 16 for OCA 250 for hose connection
Order No.: 51500478
- **SV ½**
Two adapters D 6/12 for OCA 250 for hose connection
Order No.: 51500479
- **NV ½**
Two adapters OD 16 for OCA 250 for pipe connection
Order No.: 51500480

Supplementary documentation

- o Sensors for free chlorine
OCS 140 / 141
Technical Information No. 51503879
- o Sensors for chlorine dioxide
OCS 240 / 241
Technical Information No. 51503880
- o Combination measuring instrument
OCM 360
Technical Information No. 51503205
- o Transmitter for free chlorine and chlorine dioxide OCM 223
Technical Information No. 51503822

Product structure

