

1. Overview

Measuring cells CAA2580 to CAA2584 are used to measure hydrogen peroxide (H₂O₂) in disinfectants solutions for boiler feed water, medical, food, food industries, industries. They are not or a bit dependant of surfactants or with presence of peracetic acid.

2. Technical features

Measured variable:	Hydrogen peroxyde H ₂ O ₂
Applications:	Boiler feed water, medical, industrials process
Measurement range:	5 - 500 ppm, réf. CAA2582 10 - 1000 ppm, réf. CAA2580 20 - 2000 ppm, réf. CAA2581 100 - 10000 ppm, réf. CAA2584
pH range:	5,5 - 9,5 pH
Presence of surfactant:	Neutral
Presence of peracetic acid:	Neutral
Temperature range:	0 - 50 °C (compensated temperature)
Maximal pressure:	1 bar
Supply flow :	mini : 20 l/h Maxi : 100 l/h Recommended : 30 l/h
Starting time:	First calibration after 3 H
Total stability for definitive calibration	After 24 H
Membrane cap lifetime:	Currently 1 year (according to water quality) 0 to 2000 ppm, ref. CAA 2649 10 000 ppm, ref. CAA 2629
Internal chemical reagent:	Filling liquid solution, ref. CAA2598 Filling solution in gel, ref. CAA2597
Membrane cap material:	Grey PVC
Electrode shaft material:	Grey or blue PVC
Electrical protection type:	I P 65
Supply voltage:	12 - 30VDC
Output signal:	4-20mA

3. Electric installation

Turn the upper part of the sensor a quarter of a turn anticlockwise and remove it. Loosen the PG-7 threaded connector and guide the 2-lead cable through, providing a spare 5 cm of bare cable inside the sensor. Connect the cable to the terminal: 1 = plus, 2 = minus. Tighten the PG-7 threaded connection. Push the upper part of the sensor right into the housing and turn it clockwise as far as it will go. After you've locked the PG nut, insert the cell measurement into the measuring chamber.



Caution: The probe output signal has not galvanic isolation

4. Assembly/installation



Caution: Neither the membrane, nor the electrode must be touched or damaged.

Depressurise the system before assembling the probe. Close stop valves in front of and behind the in-line probe housing.
Take care with any handling of chemicals products you have to measure.

4.1 Filling the cap with electrolyte

Open the electrolyte bottle (Liquid or gel), plug the white nozzle on the top of bottle and screw it. Squeeze out excess air. (Caution: electrolyte mustn't contain air bubbles). Place the electrolyte bottle nozzle completely over the membrane cap and fill it slowly with electrolyte avoiding air bubbles. At the same time, pull the bottle back steadily. The cap is completely full when the electrolyte can be seen at the low level of threading.



Caution: Avoid air bubbles when pouring the electrolyte. The membrane cap must be used only once.

Place the electrode shaft on the full membrane cap in a vertical position. Turn the membrane cap by hand as far as it will go.
In first time excess air then electrolyte will escape through a hole below the rubber seal in the groove of the membrane cap while you are turning it. Wipe away any electrolyte with a soft paper towel or other similar item.

4.2 Plugging into probe housing

Before the assembly in probe housing, pass the O ring around the shaft, below the washer on membrane side. Then slip the ring of tightening over the stem. Block the retaining nut until the O ring ensures the sealing. The correct depth of assembly of the probe is determined by the ring of tightening.

5. Calibration

A zero point calibration is not necessary. The slope calibration is performed with an appropriate hydrogen peroxide instrument.

Set the controller/measuring device to the value obtained in accordance with the operating instructions.

In order to carry out a correct calibration, the probe must be used in probe housing with recommended flows.

Repeat calibration at regular intervals. Repeating period is function of the probe. Use currently 3 or 4 weeks for the water treatment of swimming pool.



Caution: In all case, after changing the membrane, a slope calibration must be performed.

6. Connections identification

1: White wire 2: Blue wire

7. Accessories

Membrane cap: reference. CAA 2649 for probes 500, 1000 and 2000 ppm
reference. CAA 2629 for probe 10 000 ppm

Electrolyte liquid: reference. CAA 2588 or in gel: reference. CAA 2587

Fixation kit 1"(O ring + nut): reference. CAA2510

Maintenance kit: reference. CAA 2619

Transport case: reference. FTH2500