

OPERATOR'S MANUAL

**SZ 7251**  
**AUTOCLEAN FLOW CELL**

Rev. B

## 1 DESCRIPTION

This flow cell series is designed for the use with potentiostatic residual chlorine/dissolved ozone monitors.

The measuring electrode is inserted into the holder 2 for a proper position in the cell 3 (see Fig. 1).

During the flow of the sample, the internal balls 4 will rotate close to the platinum electrodes of the sensor and they will clean them continuously.

The sample inlet 5 is located in the lower part of the cell.

The outlet 6 is located in the higher part of the cell.

The package includes:

- 5 m plastic tubing;
- zim for wall mounting;
- spare balls.

In order to get a good cleaning effect it is important to respect the inlet/outlet position.

The water pressure must be constant in order to warranty a constant flow for a steady and correct measuring.

## 2 SPECIFICATIONS

Body	transparent acrylic
Holder	PVC
O. Rings	NBR
Fittings	polypropylene
Tubing	polytene
Little balls	20 each into the cell
Inlet/outlet	1/8" fitting
Diameter max.	40 mm.
Length max.	150 mm
Water Flow	15/40 l/h constant
Temperature	0/50 °C
Tubing	4 x 6 mm L=5 m
Sensor	SZ 283 to be ordered separately

### 3 CELL ASSEMBLING

This operation has to be done before the installation and when the sensor has to be replaced.

- Unscrew the upper retention ring of the holder.
- Insert the O.Ring, that is included in the package, under the cap of the sensor.
- Insert the sensor into the holder that has an O.Ring already installed in the lower part. Rotate gently the sensor when passing through the O.Ring.
- Insert and screw the retention ring in order to fasten the sensor into the holder. Tighten the holder manually within the elastic limit of the O.Ring under cap.
- Insert 20 little balls into the transparent cell 3 and keep the remaining balls as spare parts.
- Check the O.Ring 8 is placed on the top of the thread of the holder 2 and screw the holder on the cell 3.  
Tighten the holder manually within the elastic limit of the O.Ring.

#### ATTENTION

In order to get an efficient cleaning action and to avoid the breakage of the sensor, the max. number of the balls must be 20.

## 4 INSTALLATION

The cell must be installed in vertical position close to the measuring instrument.

The flow assembly is wall mounted by using the wall mounting cup included in the package.

Connect the tubing to the fittings 5 - 6 and send the sample.

Check the flow rate is inside of the specification limits.

Check the correct rotation of the little balls.

Check the constant flow rate.

Perform the calibration of the monitor.

In general the sensitivity of this cell is higher than the default sensitivity of the meter.

### ATTENTION

- The flow of the liquid in the cell must be constant.
- In order to avoid the breakage of the sensor, the flow must be protected from water hammer.
- The surface of the platinum rings of the sensor is maintained very clean and shining, therefore the sensitivity during the calibration of the unit will be higher than the cell without autoclean.

# SZ 7251 AUTOCLEAN FLOW CELL

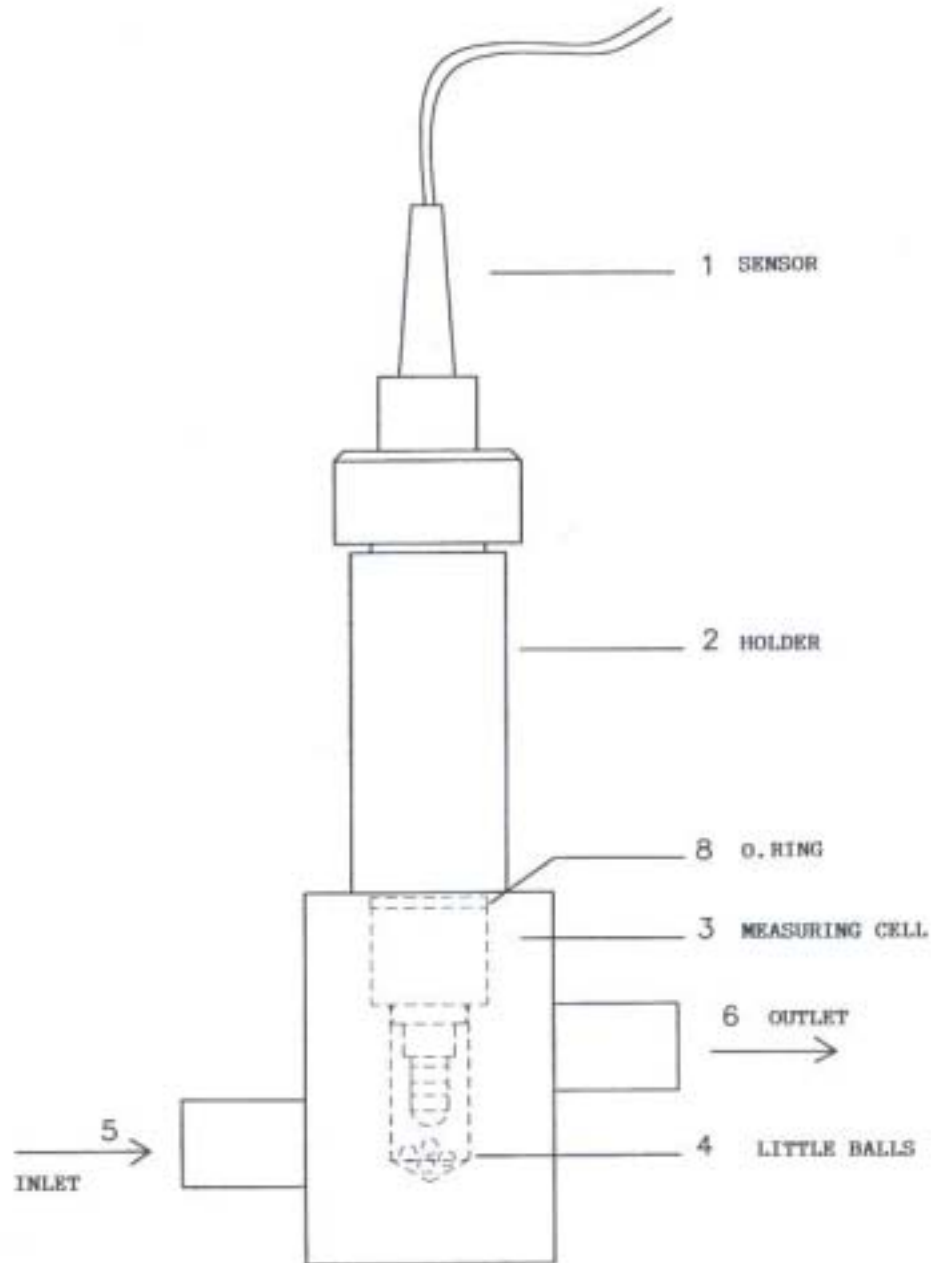


Fig. 1