5.6 Initial calibration

✓ The sensor must have been connected electrically (see section 5.4 page 22).
✓ The running-in time of one hour was observed.

▶ Perform calibration (see section 6, page 25).
▶ After one day, repeat the calibration.

5.7 Start-up

✓ The sensor was put into operation by following the steps in section 5.1, page 19 to section 5.6, page 25.

	**Please note** • If the sensor was operated without disinfectant, a new run-in time must be taken into account (one hour).

6. Calibration

6.1 Calibration: Signal, prerequisites

The sensor outputs a signal proportional to the concentration of the disinfectant in the measuring water. In order to assign the value of the sensor signal to the concentration of the disinfectant in the measuring water, the sensor must be calibrated.

	**Please note** Ensure that: • the flow rate must be constant, • the temperature of the water being measured must be constant, • acclimatisation of the temperature of the sensor to that of the water being measured must be complete (this takes about 20 minutes after a change in temperature), • the sensor must have completed running in (one hour), • No other oxidant may be present in the water be-ing measured, • the pH value must be constant (applies only to chlorine).

6.2 Calibration: Procedure

After ensuring that the above requirements are met, proceed as follows:

- Take the analytical sample of the measuring water from near to the sensor.
- Using appropriate methods, determine the concentration of the disinfectant in the measuring water (see the manufacturer's operating instructions for the analytical equipment)
- In the calibration menu of the measuring and control device, mark up the sensor signal against the value determined by the analytical procedure (see the operating instructions for the device).
- Repeat the calibration at regular intervals (see table 8, page 27).
- Comply with the applicable national regulations for calibration intervals.

6.3 Analytical methods

The following analytical methods can be recommended:

Palin Test Kit
Kemio Disinfectant Test Kit # KEMS10DIS
Starter Kit w/ Glycine #KEM20CDX

Measured variables	Recommended analytical methods	
Free chlorine	DPD-1	Up to 10 ppm: Photometer for chlorine
	Iodometry	Up to 200 ppm: Photometer for chlorine
Chlorine dioxide	DPD-1	Photometer for chlorine dioxide
Ozone	DPD-1 + DPD-3	Photometer for ozone
	DPD-4	

Tab 6: Recommended analytical methods