Reliable monitoring of the absence of free chlorine

Monitoring system DULCOZERO FCL

DULCONNEX

Monitoring system DULCOZERO FCL
to monitor the absence of free chlorine

Alarm triggered in the event of chlorine breakthrough – quickly and reliably
Within a multi-monthly calibration interval, a breakthrough of chlorine is detected at a low threshold of 0.02 mg/l or higher. It is detected in less than 3 minutes and measured with great precision. The alarm is immediately triggered.

Excellent precision due to intelligent signal monitoring
The controller of the monitoring system DULCOZERO continuously monitors the sensor signals as well as their noise level. The smallest signal can therefore also be evaluated with precision.

Chlorine alarms raised with maximum reliability
Logical linking of chlorine measurement with pH and ORP auxiliary measured variables. The sensor fusion is subject to a special algorithm that combines the measured values with one another, minimises interfering influences and optimises the reliability of detecting breakthroughs.

Ultra-accurate metering of the calibration solution
When checking and calibrating the measurement system, the peristaltic pump meters the calibration solution with great precision.

Saves operating costs
There is no need for continuous metering of chemicals. The calibration intervals only repeat after several months. Maintenance and servicing costs remain low.

Simple and convenient calibration
The controller's calibration wizard automatically controls the calibration process and how it is progressing. The calibration values are evaluated by the system.

Optimum operating conditions during the measurement
Thanks to optimum measurement conditions and integrated sensor cleaning, the modular sensor bypass armature BAMa delivers precise measurements with long-term stability.

Amperometric sensor – optimised to detect a breakthrough of chlorine
The innovative "zero-chlorine-capable" amperometric sensor for free chlorine quickly, precisely and reliably measures the chlorine breakthrough even after an absence of chlorine lasting several months. The sensor is not influenced by turbidity or colouration of the water.

Smart complete system for excellent process reliability even with very small measured values.

The breakthrough of even the lowest concentrations of free chlorine can irreversibly destroy the membranes in reverse osmosis systems and cause huge amounts of damage. The panel-mounted monitoring system DULCOZERO FCL allows you to closely monitor free chlorine with great precision.

Even after a long absence of free chlorine, it will reliably trigger alarms in the event of a sudden breakthrough of chlorine in less than 3 minutes and help achieve excellent process reliability.

The system includes an innovative amperometric sensor, which is tolerant to the absence of free chlorine. The system's functions are rounded off by smart interpretation of the sensor signal by an algorithm and logical evaluation of the pH and ORP auxiliary measured variables.

Thanks to the sensor's long calibration intervals, operating costs are reduced and the use of chemicals is minimised. Integration into ProMinent's IoT platform DULCONNEX makes smart monitoring of parameters possible and provides various additional benefits.

By monitoring the measured values, the system protects the membranes, for example, during seawater desalination to produce drinking water and in the producing of ultra-pure water in industrial processes. The monitoring system DULCOZERO is also a reliable partner for discontinuous disinfection processes.