

# Pump Controller Type ABS PC 242

Monitoring and Control of Pumps and Pumping Stations



### A Single Unit for Monitoring and Control

There are many ways to improve the efficiency and reliability of your collection network – even without changing a single pump. The Sulzer pump controller type ABS PC 242 is an easy, all-in-one solution that can boost and safeguard pump station and collection network performance.

### Save time, effort and money

When you can see events in your network as they happen, you can make decisions in time to make a difference. The PC 242 offers possibilities for monitoring your collection system in real time, as well as the tools to control it.

The PC 242 gives you instant access to alarms, pump status, level information and trends – both on site and remotely. Added to this are functions that help to prevent downtime and flooding, as well as to reduce maintenance and energy costs. Pumps can be automatically started and/or stopped in many smart ways.

By taking full advantage of the PC 242, you can increase pumping station availability, minimize energy consumption and even reduce stress on the network downstream.

### One easy-to-use solution

Many users are surprised by how much monitoring and control can improve their network. Perhaps even more surprising is how much can be packed into a single unit. The PC 242 is a monitoring system, a control system and an easy-to-use operator panel, all rolled into one. The PC 242 can be used with one or two pumps and is easy to connect and configure. Ideal for smaller pumping stations, it can be used in a network together with the Sulzer pump controller type ABS PC 441. The PC 441 is an expandable system that works with 1-4 pumps and offers additional advanced functions, such as support for frequency-steered operation.

### Information at your fingertips

Best of all, there are many ways to access the PC 242. Configuration can be done on site via the control panel, or remotely using our PC software type ABS AquaProg. Thanks to our app solutions for Android and iOS, it can even be done via smartphone or tablet.

Alarms, logs, trends and other information can also be accessed remotely, either through our PC software or AquaApp. By making the most important functions available from your phone, AquaApp puts your whole network right in the palm of your hand.

### How you can benefit

### Collection network managers

- Reduced risk during peak loads
- Reduced equipment and labor costs
- Reduced tankering and energy costs

#### Collection network operators

- Fewer emergency call-outs
- Reduced service needs
- Clear information for correct decisions

#### Technicians

- Easy installation
- Easy configuration



### Always in Control, Wherever You Are

The Sulzer pump controller type ABS PC 242 offers many ways to reduce maintenance, energy use and costs. You have easy access to all of them, whether on site or off.



# Preventing flooding through intelligent level control

During heavy rainfall, the PC 242 can start and stop the pumps based on the speed of level change. If the water level rises more quickly than normal, pumping will begin before the set start point. If the water level drops more quickly than normal, pumping will stop before the stop point is reached.

This function prevents peak stress in both the pumping station and the network, because it spreads out the pumped volume over time.



## Preventing clogging with individual pump exercise runs

The control functions of the PC 242 allow the pumps in a station to be run independently, with different start/ stop levels and different start/stop delay times. If one pump is not used for a period of time, the controller can force an exercise run to prevent it from clogging due to disuse.



## Lowering the risk of total stops and repeated blockage

Using the asymmetric start function of the PC 242, one pump can be run for fewer hours than the other. This increases availability by reducing the risk of simultaneous breakdowns.

Alternatively, a pump that frequently clogs due to flows within the pumping station can be run more frequently, which will help to keep it blockage-free. If a breakdown does occur, the controller will send an SMS alert.



### Monitoring & configuration software Type ABS AquaProg

AquaProg is the PC software hub for configuring and working with every aspect of your PC 242 unit, either locally or remotely. Using AquaProg, you can view, transfer and restore all settings, status data and logged values, as well as perform firmware upgrades. You can even view trends online with a range of timeframe options, which lets you analyze and improve the performance of pumps and pumping stations.

### AquaWeb makes it all accessible

AquaWeb is a web-based interface that offers access to all the most important information and PC 242 functionality. It provides a complete range of options for alarm management, including alert messages and alarm acknowledgment via SMS. Tools for viewing and analyzing the status of pumps and pumping stations, as well as operating trends, are also included.

### Mobile information with AquaApp

When needs arise, you may be far from a computer. AquaApp, Sulzer's solution for Android and iOS smartphones, puts key functionality in your pocket. AquaApp offers a graphical pit status display for the pumps, including inflow, outflow and alarms, plus the ability to change start/stop levels or reset the motor protector. Events, running hours and electrical properties can also be reviewed, and there is even a tabletoptimized version of the app: AquaPad.

ASM

Actual





## Pump Controller Type ABS PC 242 in Overview



Hydrocarbon processing

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Power generation

Pulp and paper

General industry



Water and wastewater

### Main applications

The Sulzer pump controller type ABS PC 242 is an all-in-one unit for monitoring and control of one or two pumps. It is designed primarily for smaller municipal pumping stations.

### Key control parameters

- Level set-point, incl. time delays
- Speed of level change
- Random start levels
- Tariff control
- Maximum runtime

### Data communication

- Communication via ModBus (RTU/TCP) protocol with other telemetry or SCADA systems
- I/O and register cross-reference tables for efficient communication setup

### **Operator panel**

The built-in operator panel with graphical display and keypad ensures easy configuration and operation of the PC 242. It allows the operator to see pump status at a glance. Data can be viewed or accessed in several formats: alphanumeric characters, animated graphical symbols or trend curves.



- Graphical operator panel
- 2 Alarm output
- 8 Start/Stop P1 & P2
- 4 Digital outputs (3)
- 6 Analog inputs (4)
- 6 Temp inputs (2) PTC / Pt 100
- 7 Communication indicator
- 8 Power indicator
- 9 Alarm indicator
- 10 Com port for laptop connection
- 1 Com port for modem connection
- 12 Leakage sensor inputs (2)
- 13 Digital inputs (14)
- Power connection

### We Do What We Say



### A Global Specialist at Your Doorstep

Sulzer serves clients worldwide through a network of over 150 production and service sites and has a strong footprint in emerging markets.





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