# seepex.com all things flow

# Pressure control LC-FPPU

## The cost-efficient seepex filter press feeding system

The LC-FPPU pressure control is a cost-efficient system solution for filling filter presses. The control PLC, control console and frequency inverters are connected with each other via a CAN bus.

Via this bus system, the input and output signals of the frequency converters can be used for the control process. The following functions are integrated in the compact control:

Setting of the delivery rate The delivery rate of the pumps depends on the filtration pressure and is set through a freely

programmable characteristic curve.

Integrated prefilling pump A prefilling pump can be connected for faster filling of the filter press.

Integrated dosing pump A dosing pump can be connected to dose additional chemicals.

Pressure control In the final phase of the filling process, the filter press is filled with constant pressure.

The reference variable of the pressure control can be set as desired.

Operating and fault messages Depending on the type of fault, either a warning is issued or the process is switched off.

Faults are listed in clear text.

Dry running protection for protecting the pumping elements rotor and stator against dry running.

Overpressure protection with freely adjustable shut-off pressure.

Settable parameters Plant and control parameters such as drive data and limit values can be set.

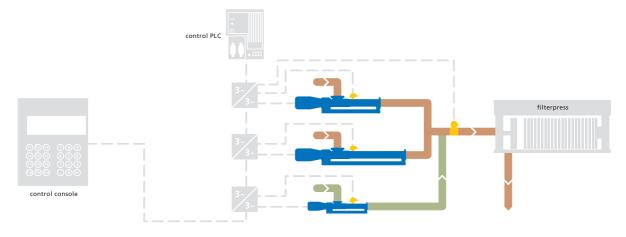
All the entries are password-protected.

Saving the plant-specific For fast and simple plant setting, the characteristic curves can be saved and retrieved again characteristic curves

Connection to site systems Connection to a site control system is possible through various bus systems.

Remote data transfer permits fault diagnosis through a GSM modem controlled from the seepex headquarters.

# Process of filter press feeding



#### Characteristics of the LC-FPPU pressure control

- Simple operation through various display pages
- Different operating languages can be set
- Membrane keyboard for parameter entry and switching the control functions
- Storage of the control parameters in the user ROM that is not affected by power loss
- Very low wiring effort due to internal bus system



Control console, frequency converters and control PLC are connected with each other via a CAN bus.

## **Technical Data**

Structure: PLC with integrated LC-display

Supply: 24V DC
Power consumption: max. 20W

Operator display: 4 lines of 20 characters each

Membrane keyboard with 24 keys

12 keys with LEDs Protection class IP65

**Dimensions:** 180 x 145 x 35 (HxWxD)

**Installation:** in the control cabinet door

Control PLC

Dimensions:

Supply: 24 ∨
Power consumption: 20 W

Command cycle time: approx. 1.6µs

Memory structure: 350 kByte SRAM 512 kByte FlashPROM

Communication: via internal CAN bus

**Buffer battery:** Lithium battery 3V / 950 mAh, life cycle approx. 5 years

120 x 78 x 75 (HxWxD)

Installation: on mounting plate