



HiFlux Filtration A/S

Professional PLC CONTROLLER Abacus

Differential pressure
controller (Abacus)



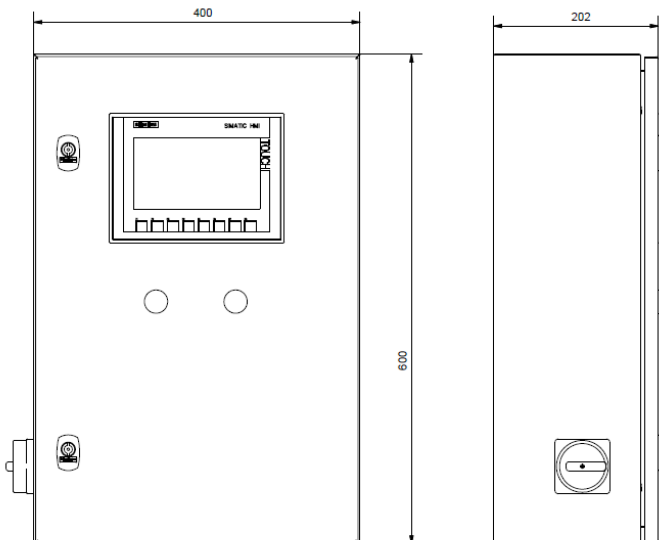
Differential pressure controller (Abacus)

The controller is developed to control the series of Auto-line automatic self-cleaning filters for use in the process industry. The controller controls the filter's cleaning- and drainage sequence where there are adaption possibilities to achieve optimum operation. The process can be controlled by the differential pressure over the filter or/and with help from timers built in the program. The cleaning process is run either with a motor or a cylinder.

The filter can both be controlled by means of the differential pressure over the filter as well as running an operation, where the cleaning process runs continuously.

It can control up to four drain valves connected to the filter in a sluice solution, where two of the valves are flush valves, that help the drain process. For an Auto-line filter with one drain valve, valves can be selected both with and without feedback. For filters with a minimum of two valves, they have to be with feedback.

- **Customized for Auto-line filters**
- **Intuitive and flexible user interface**
- **High operational reliability with built-in Siemens S7 PLC for industrial use**
- **Possibility to monitor operation values**
- **Designed for:**
 - **Differential pressure**
 - **Continuous operation**
- **System information logging**



Screen:	Siemens Simatic KTP700 Basic 7"
PLC:	Siemens S7-1200
Supply:	3 x 400 V + 50 Hz (Motor) 1 x 230 V + 50 Hz (Cylinder)
Degree of tightness:	IP 65
Temperature:	+5°C – 40°C
Cabinet:	Painted steel*

* The cabinet can be supplied in stainless steel on request at extra cost.

OPERATION MODES

Differential pressure

The build-up of sludge determines the cleaning interval.

Continuous operation

When continuous cleaning of the media is needed

Timer override ensures a steady operation and is prolonging lifetime of internal parts (Example: When filling up containers)

(Example: for installation in processing systems)

The best filtration solution depends on the media and process requirements and is therefore made by adapting variables/ settings to fit the individual plant/ facility.

COMMUNICATION VARIANTS

The Siemens S7 PLC can be fitted with 2 different options for communication with a common process system.

I/O communication

Analog and digital outputs, which can be used for reading values on common SRO facilities

- Inlet and outlet pressure
- Error signals
- Valve positions
- Motor/ cylinder operation
- Operation signal (start/ stop)

(possibility for adding a signal, that will stop the controller, when the signal is not present. This is the only option for remote control) It is not possible to perform a remote start.

PROFINET-I/O

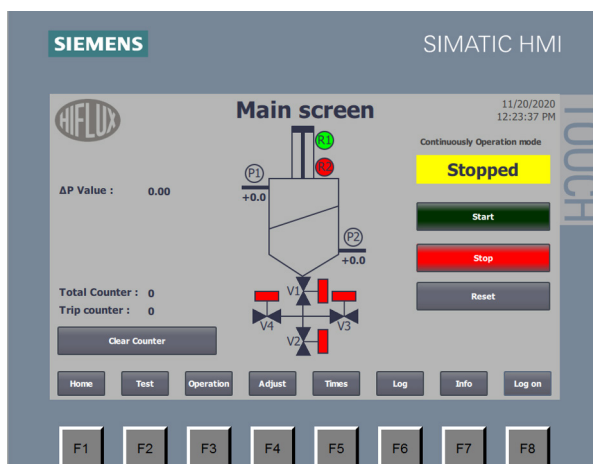
Following values are available:

- Differential pressure
- Inlet and outlet pressures
- Error messages / signal
- Valve positions
- Motor / cylinder operation

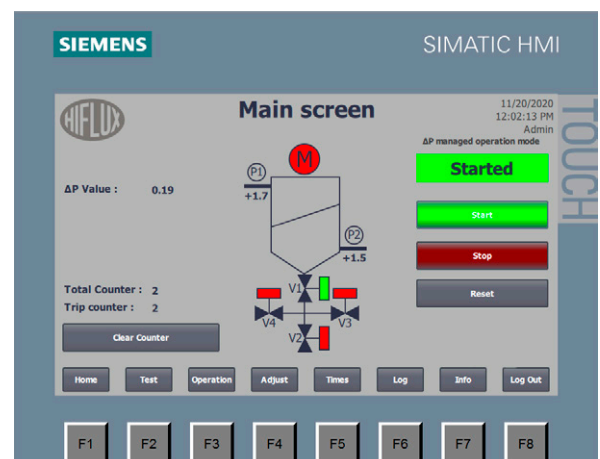
(It is only possible to read values from the network)

Real time operation that displays the current status of the filter.

During operation the main screen is interactive, so the operation can be monitored on the screen. When the motor/cylinder is activated, the interval on the drain/drain sequence depends on the operation mode and the setting of variables.



Linear scraper system



Rotating scraper system

Differential pressure controller (Abacus)

Auto-line XLR self-cleaning filter mounted with differential pressure electrical controller (Abacus)

