

AF100-V AUTOMATIC CANDLE FILTER OPERATING AND MAINTENANCE INSTRUCTIONS

The AF100-V automatic candle filter is equipped with four filter elements, through which the fluid being filtered flows. If the filter elements get fouled and the pressure gradient has been increased, the electric pressure indicator will go on and individual filter elements will be subject to gradual back rinsing. Automatic rinsing of the filter elements shall be set to take place at certain time intervals irrespective of the signal from the electric pressure indicator. This process is controlled by own electronic control unit. To place the filter into operation, just connect it to the emulsion being filtered and to pressure air and power supply. Besides, the signal can be used for error message of a CNT filter failure. For technical parameters of the automatic filter, please refer to Table 1.

Technical parameters of the automatic candle filter:

Max. fluid pressure	8 bar
Recommended fluid flow	100 l/min
Filtration capacity	40 μm

Table 1

Filter installation:


- 1) connection of the piping, hoses
- 2) connection of the electrical part
- 3) connection of the pneumatics

1) Connection of the piping, hoses

The supply of fouled fluid shall be connected to "P" inlet. The filter outlet, i.e. "P1" shall serve as an outlet of the already filtered fluid. The discharge piping leading to the tank for collecting the impurities shall be connected to "T" outlet.

2) Connection of the electrical part

A connector for electrical wiring "EW" shall be integral part of the automatic filter. The control unit of the filter shall be connected to the four-pin plug that is located on the lateral side of the filter. This plug is fitted with a wiring connector. Individual terminals of the connector are marked with numbers that have to be followed when connecting.

1	24V POWER SUPPLY
2	nevyužito
3	 +24V OUTPUT (ERROR CONTROL SIGNAL)
4	0 V

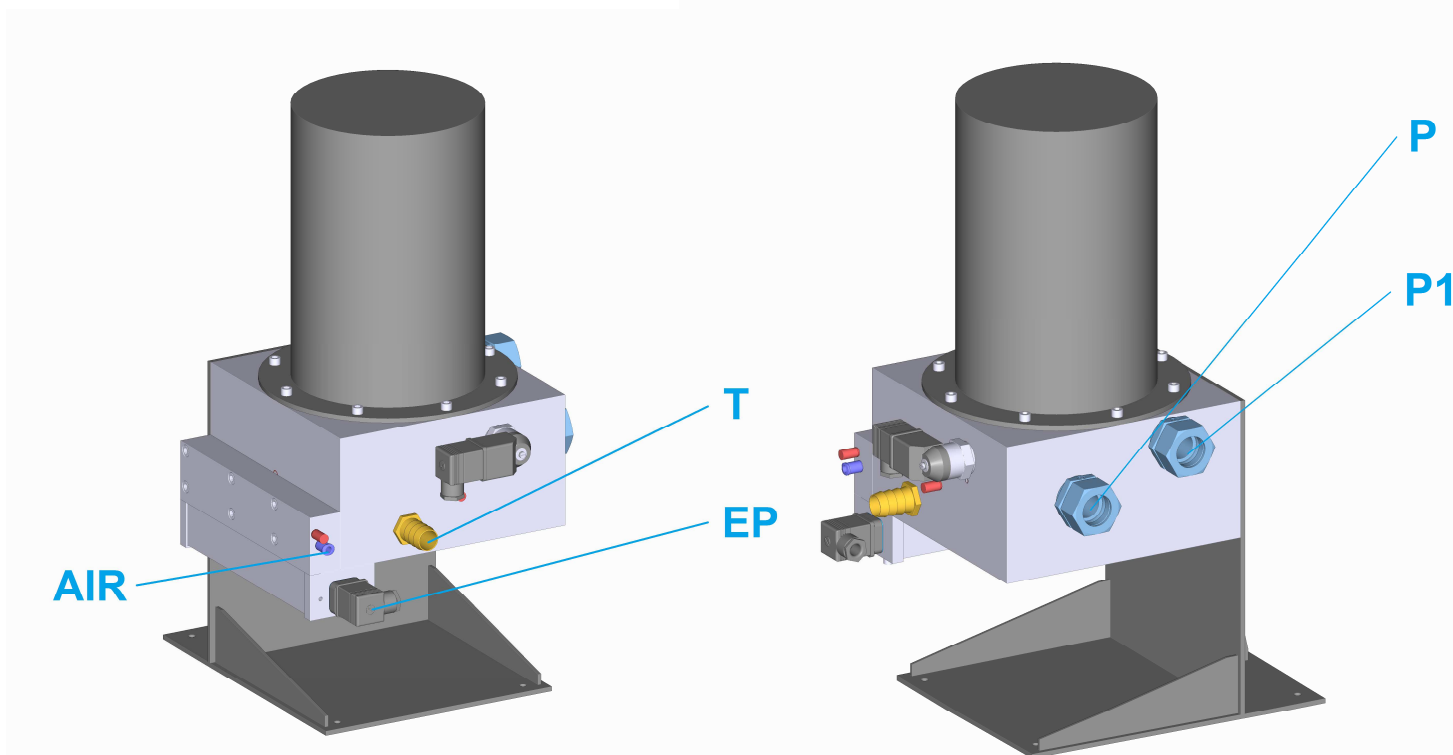
The maximum current at the power terminal is 1 A.
The max. allowed switching current at terminal 3 is 100 mA.

3) Connection of the pneumatics

The pneumatics shall be connected to the coupling marked "AIR". This is a quick release coupling for $\varnothing 6$ air hose. The requirements for air cleanliness and pressure listed in Table 2 shall be satisfied.

Allowable working pressure of air	5-8 bar
Min. air cleanliness	40 μm , class 5 according to DIN ISO 8573-1

Table 2



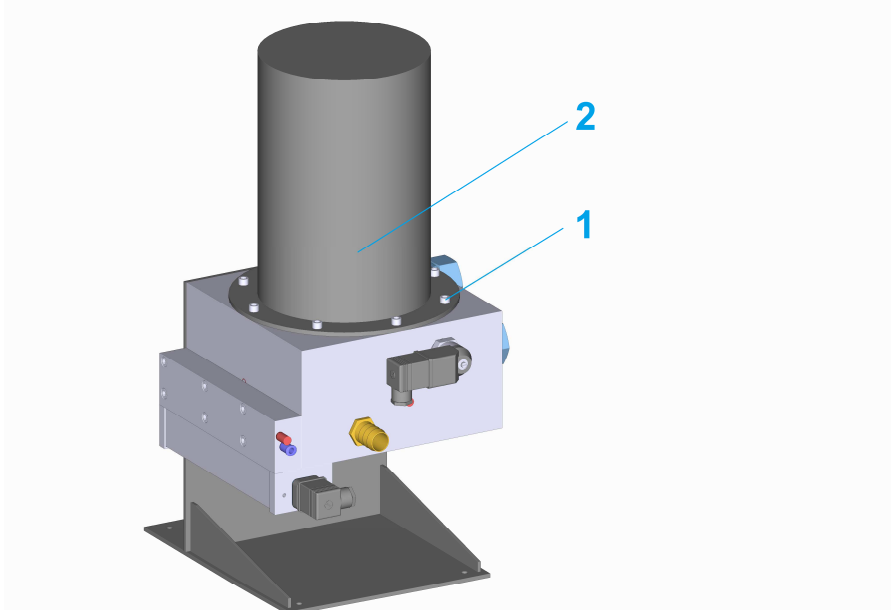
Due to the occurrence of bacteria and undesirable chemical reactions in water emulsion organic compounds can entrap on filtration candles of the automatic candle filter. As a result, the filter elements can get gradually "clogged". Therefore, the automatic filter shall be checked and maintained, if appropriate.

Manual cleaning of the automatic candle filter shall be made if:

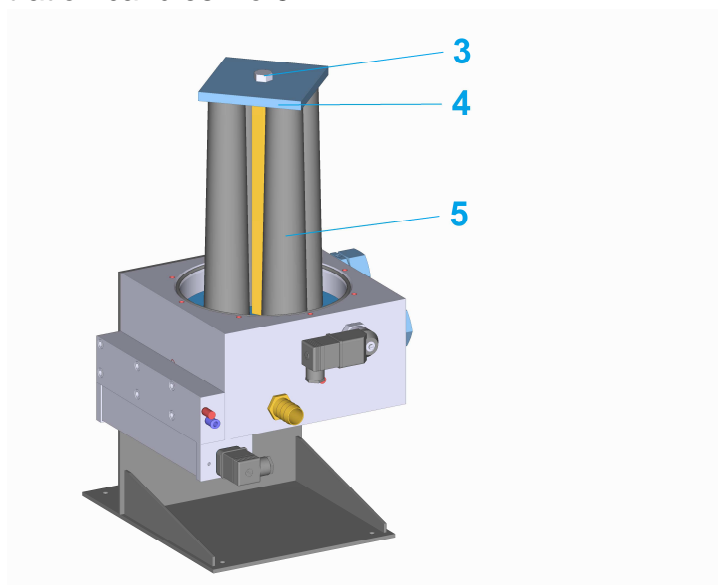
- the pressure indicator of filter fouling goes frequently on = if the switch-on interval is less than 30 seconds.

Cleaning procedure:1) Dismantle the upper cover (during the maintenance the filler shall not be operated)

- Loosen the screws No.1 - 8x M6 (IMBUS 5) and push the cover No. 2 upwards.

2) Dismantle the upper holder of candles, remove the candles from the filter body

- Loosen the screw No. 3 - M12 and push out the holder No.4.
- Remove the filtration candles No.5.

3) Rinse the filtration candles

- Rinse the candles thoroughly using water pressure washer.
- Always rinse the candles from outside.

4) Re-assemble the filter

- Clean all seating and sealing surfaces.
- Re-assemble the filter.