## Application Note

# Instructions for Regenerating Filter Cartridges BECO PROTECT® PG and BECO PROTECT TS



## **Depth Filter Cartridges**

#### Regeneration

Due to their exceptional mechanical, chemical, and thermal stability, BECO PROTECT PG/TS depth filter cartridges are backwashable at room temperature with up to 43.5 psi, 300 kPa, 3 bar or at 176 °F (80 °C) with up to 29.0 psi, 200 kPa, 2 bar.

These pressure values must not be exceeded.

The BECO PROTECT PG/TS depth filter cartridges should always be flushed out as follows after each filtration:

- Drain the candle housing.
- Flush out with cold water in the opposite direction of filtration for at least 2 minutes. If possible, the flow rate should be one and a half times the previous filtration output. Set the counter pressure to 7.3 psi, 50 kPa, 0.5 bar.
- Flush out with hot water (176 °F (80 °C)) in the opposite direction of filtration for at least 5 minutes. The flow rate should be one and a half times the previous filtration output in this case as well. Then circulate for 15 to 30 minutes. Set the counter pressure to 7.3 psi, 50 kPa, 0.5 bar. Let the hot water stand in the housing overnight and flush out again with hot water for approx. 2 minutes the next morning.
- Chemical cleaning is possible due to the chemical stability of the filter cartridge. In order to increase the service life, Eaton recommends this kind of cleaning when the effectiveness of the daily regeneration diminishes. For this reason, watch the initial pressure every day at the beginning of the filtration process.

Information about chemical cleaning can be found in our Application Note 1 A 4.7, which describes the special cleaning procedure for BECO PROTECT PG/TS depth filter cartridges.

#### Note

Best regeneration results are achieved by flushing the filter cartridge in the <u>opposite direction of filtration</u>. If possible, the <u>flow rate</u> should be <u>one and a half times</u> the <u>filtration output</u>. The effectiveness can be increased further by letting the filter cartridge stand <u>filled with hot water overnight</u> after flushing out as indicated above and back flushing the cartridge again with hot water for approx. 2 minutes the following day.

Ensure that the water used for flushing is free of rust, lime, and other impurities.

Eaton recommends filtering the water used for flushing as a precautionary measure. Match the fineness of the filter to the filter to be flushed out.

Also filter any steam used to sterilize the filter cartridges. Metal filter cartridges with a clarifying strength of 10 µm are suitable for this purpose.

Eaton will be glad to answer any further questions you might have. You can call either the sales manager in your area or contact the application technology department at Eaton directly at: +49 6704 204-0.





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