Filtration of Fuels and Lubricants

Automatic Filter Type 6.62/6.62.1

BOLL & KIRCH
Filterbau GmbH

Highly-efficient self-cleaning without pressure loss

The fully automatic back-flushing filter 6.62 is primarily used for the filtration of fuels and lubricants. Incorporated into the lower section is a heating chamber for connection of heat tracing.

This range of BOLL filters is unique in the method by which filtered-out residues are completely removed from the filter and thus from the liquid flow system.

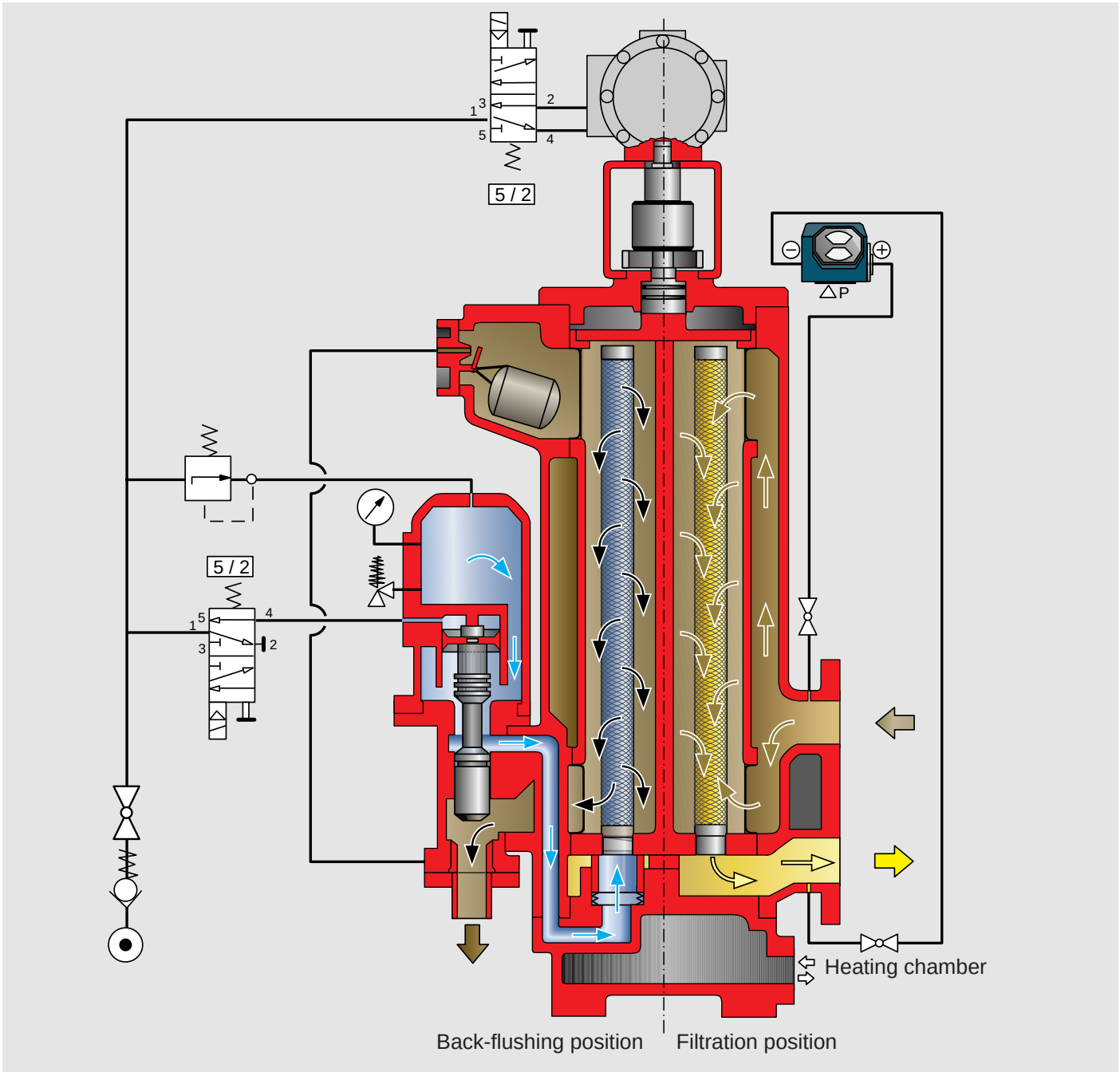
Highly efficient self-cleaning is achieved with the assistance of filter-stored compressed air. Using this independent medium as an energy source for back-flushing ensures uninterrupted operation without pressure loss in the liquid flow system.

The filter contains an inner housing with individual filter chambers to accommodate the filter candles.

During the filtration process one chamber is always held in reserve, cleaned and pressurised, whilst the other filter chamber is simultaneously providing the filtration function.

Special features

- Efficient operation at line pressures as low as 1 bar
- Low flushing losses, thus no higher pump capacity necessary
- Compact, space-saving design
- Fully automatic self-cleaning operation
- Operational safety from robust construction and precise automatic back-flushing system
- Precisely defined filtration fineness via precision-made mesh
- Optimal cleaning of the filter mesh from compressed-air-assisted back-flushing
- Filter designed to meet the requirements of Maritime Classification Societies (GL, LRS, NV, BV, ABS, USSR-Reg., USCG etc.) for ships operating with unmanned machinery spaces.



Precisely defined filtration of fuels and lubricants

Filtration

The liquid to be cleaned enters the individual filter candle chambers through the top inlet flange and flows through the filter candles from the outside inwards.

Back-flushing

As the quantity of filtered-out solids retained on the filter mesh increases, this causes a rise in the pressure differential across the candles which, at a predetermined value, initiates self-cleaning of the filter chamber.

On activation of back-flushing, the pneumatic actuator rotates the filter body and swings the filter candle to be cleaned into the back-flushing position.

The clean filter candle acting as a standby is automatically swung into the operating position. Activation of the clean filter candle causes the differential pressure to immediately fall.

Back-flushing then starts automatically. The sludge discharge valve is opened and the pressure in the chamber released. The compressed air stored in the air reservoir is then 'explosively' released via the inlet valve. The resulting reversed flow of clean liquid presses liquid on the clean side of the candles at high velocity through the filter mesh of the candles.

The solids which have accumulated on the filter mesh are entrained by the liquid and flushed out of the filter through the sludge discharge valve.

After a brief post-blowing period the sludge discharge valve and the air inlet valve are closed automatically. At the same time, the empty chamber is filled with a controlled volume of clean filtered liquid via a pilot bore and the chamber is automatically air vented. The filter candle now cleaned is ready to be put back into operation when required.

Electronic control type 2100

The standard features of the back-flushing filter include an electronic control cabinet type 2100.

All important control and monitoring functions are contained in the electronic control type 2100.

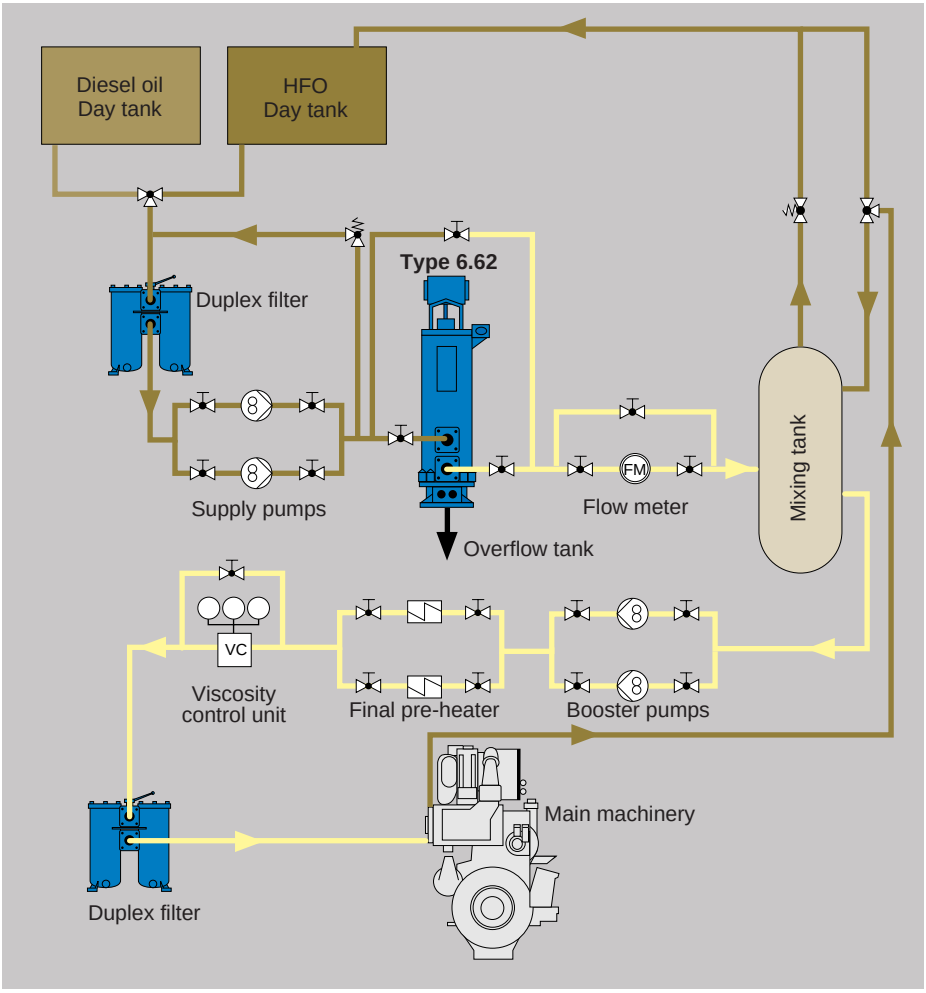
- Only three keys for operation
- 5-place,7-segment display
- Display of the back-flushing operation
- Indication of the number of back-flushing operations
- Display of faults
- CPU board with non-volatile E-Prom and program memory
- Input-/output board in the control box

Technical Data

Booster System (t max 150° C)		
Filter fineness micron	**Flow rate m³/h Type 6.62 (size 40)**	**Type 6.60 (size 50)**
50	5.5	15
34	5.5	15
25	2.2	6

Supply System (t max 100° C)		
Filter fineness micron	**Flow rate m³/h Type 6.62 (size 40)**	**Type 6.60 (size 50)**
50	2.5	7.5
34	2.5	7.5
25	1.0	3.0
10	1.0	1.0

Installation Diagram Supply System



Back-flushing Filters with Bypass for marine Applications

According to the regulations of the classification societies, fuel filters must be equipped with a changeover mechanism and a bypass filter.

Back-flushing filter type 6.62.1 (DN 40)

We recommend the automatic filter type 6.60 or 6.60.1 and 6.61 or 6.61.1 for higher flow rates

Back-flushing filter type 6.60.1 (DN 50)

Certified Quality to DIN-ISO 9001

This quality management system, on which we place particularly strong emphasis, guarantees the highest quality of our products.

F 87 / 2.000 / 9.98 GB

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