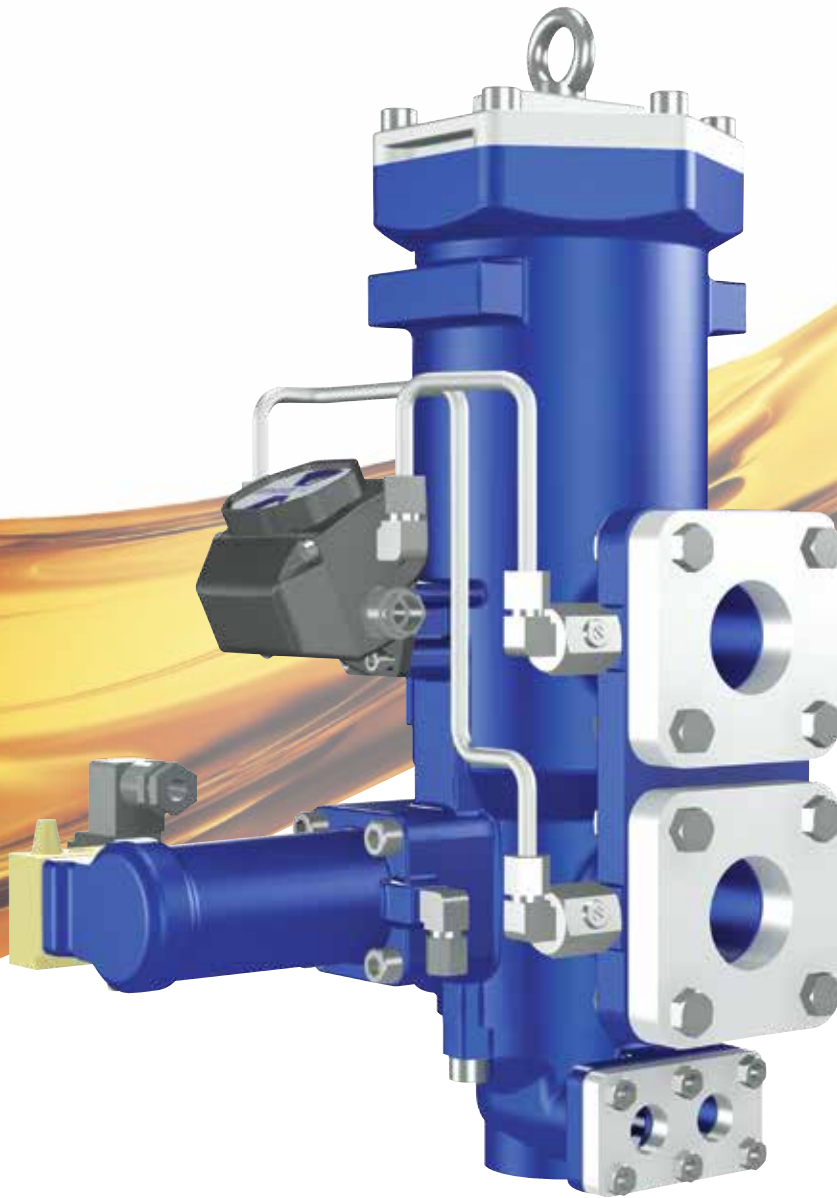




BOLLFILTER
Protection Systems

Engines

BOLLFILTER Automatic
TYPE 6.21



***Compact fuel filter
for optimum protection of
the diesel injection pumps***

The task

Continuous supply of clean fuel

The uninterrupted continuous operation of internal combustion engines places high demands on the cleanness of the supplied fuel. It is only when this defined grade of purity remains constant that the load-dependent fuel supply via the injection system can be ensured, consumption minimized and trouble-free engine operation guaranteed through uniform operating pressure. To achieve all this, efficient automatic filters are needed.

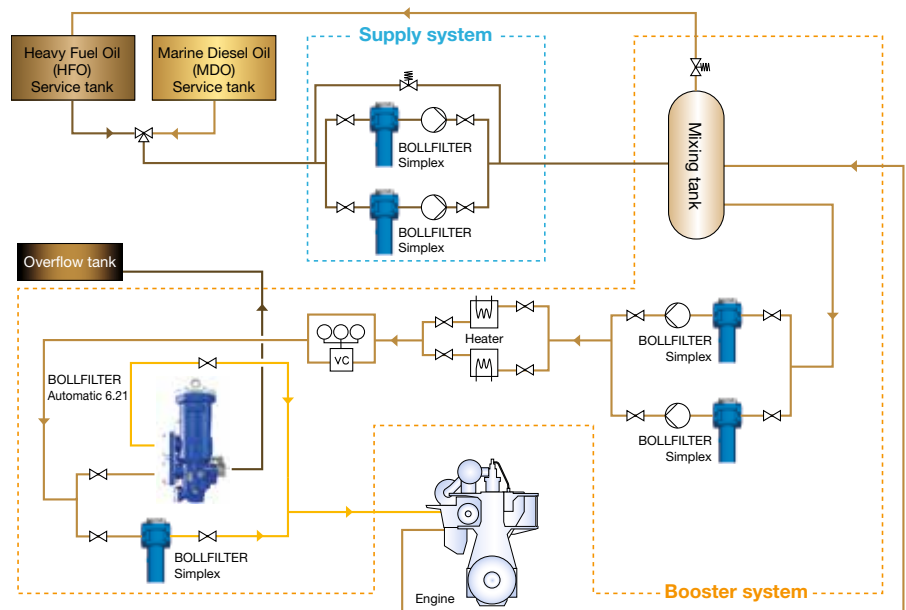


The solution

Minimum flush volumes, consistent pressure

The newly developed BOLLFILTER Automatic Type 6.21 sets new standards in terms of the precision of the filtration result, the efficiency of the automatic backflush unit as well as the price/performance ratio. It is distinguished by the lowest flush volumes and minimum pressure loss as well as low service and maintenance costs. Although technically and functionally of the highest standard, its simple and robust construction makes it extremely reliable economical and durable.

Fuel System – BOLLFILTER Automatic in booster and supply system



Heating chamber
can be rotated
in 90° steps



BOLL automatic filter with change-over valve, bypass filter and integrated heating chamber (TYPE 6.22)

The details

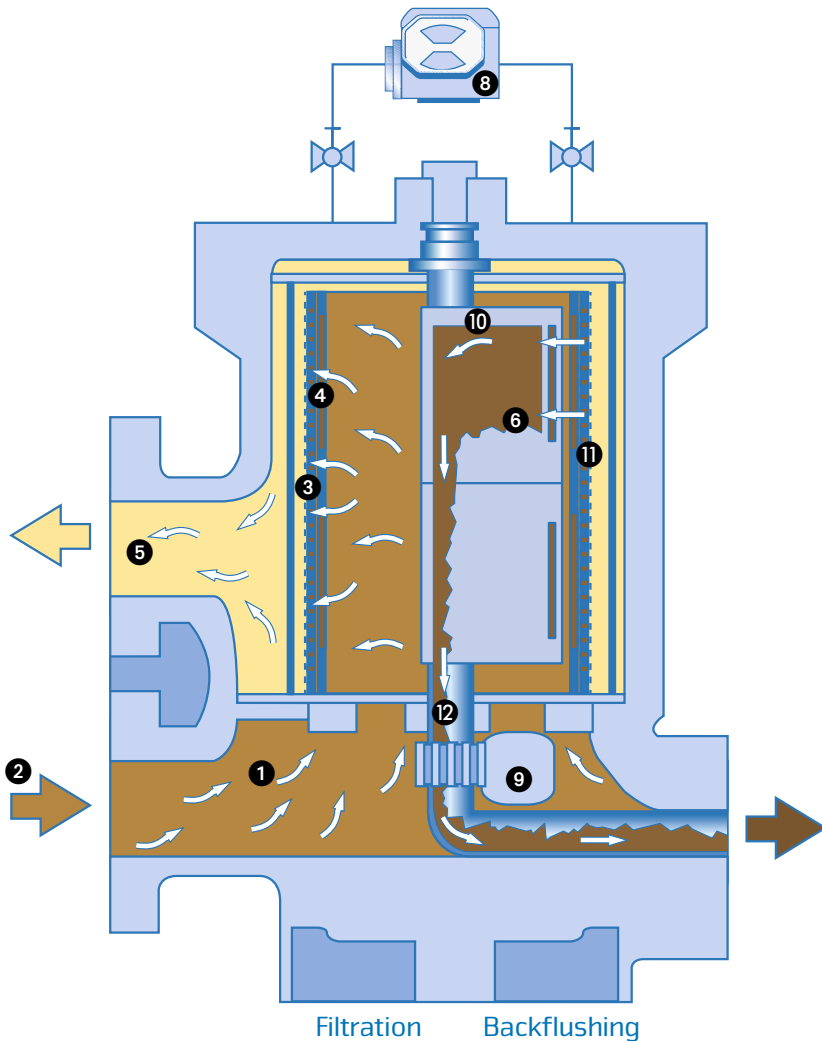
Overview of data and facts

Range of application	Filtration of fuel to protect the injection pumps
Flow rate	4 - 11 m ³ /h (depending on filtering grade and fluid temperature)
Filter-fineness	a choice of 10, 25, 34 or 48 microns
Operating pressure	max. 16 bar
Operating temperature	max. 160 °C
Nominal widths	DN 50 (optional with adapter to DN 32)

Segmental backflushing of the filter medium

The fuel enters the filter housing **1** through the inlet flange **2** located at the bottom. It flows through the integrated filter element **3** from the inside to the outside. Particles of dirt carried in the flow are retained in the filter element **4**. The cleaned fuel passes to the filter outlet **5** and is fed from there to the engine.

The backflush unit is stationary **6** during filtration and the flush valve **7** is closed. A differential pressure gauge registers the rising pressure drop between the dirty and the clean side by the growing layer of dirt on the filter medium.



When the differential pressure reaches a preset threshold value, the backflush cycle is automatically initiated. An air-pressurized pneumatic cylinder **9** then sets the backflush unit in motion simultaneously opening the backflush valve **7**. The rotating flushing arm **10** with longitudinal gap **11** openings at the outer end passes appropriately sized openings in the main body of the filter element and isolates a precisely defined sector of the filter medium from the filtration process. There a strong current is generated by the fluid flowing back from the clean side in the opposite direction. This strips away the adhering dirt particles from the filter surface and discharges them from the filter together with a small amount of flushing fluid through a central flushing pipe **12** and the flush valve **7**. During a backflush cycle, the backflush unit rotates 360° in a clockwise direction and then again rotates in a counter-clockwise direction. This thoroughly cleans the whole filter surface area. Then the flush valve closes again. During the backflush process filtration continues to run uninterrupted and the operating pressure remains almost constant.



The BOLLFILTER Automatic Type 6.21 is optionally available with a heating medium connection on the bottom of the housing.

BOLLFILTER worldwide

For vessels with BOLLFILTERs on board, there are service centers and original spare parts in stock in the main ports all over the world. This extensive network of branches and subsidiaries ensures that there are no gaps in the operational capability of the installed BOLLFILTERs.



In addition, BOLLFILTER users have the option to sign a "Global Agreement". Then they have access to a service hotline 24 hours a day, seven days a week. If required, a service technician can be mobilised immediately and set out en route with the required spare parts to ensure optimum operation of the BOLLFILTER at all times.



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