



FLUID FILTRATION

Safety First!

Multi-stage filter elements



- » Lubricating oil free of particles and water - Permanent
- » Compliance with maintenance cycles - Guaranteed
- » Gearbox life time - Optimized



SAFETY FIRST - MULTI-STAGE FILTER ELEMENTS

At the gearbox, the drivetrain converts the kinetic energy of the wind into mechanical energy, which sets the turbine within the power generator in motion. The heart of every wind turbine only runs at full speed when lubricated sufficiently.

Filtration Group uses filter modules and filter components to ensure that the wind turbine can deliver optimum performance in the long term and that unscheduled maintenance work is avoided. In this way, we increase the efficiency of wind turbines and actively contribute to making wind power safer, healthier and more productive.



What does a multi-stage filter do?

- The filter element is the central component in which the filtration process takes place
- The multi-stage filter elements are a combination of depth filter (fiberglass) and surface filter (wire mesh)
- FG filter elements reliably separate water, particles and varnish (oil ageing products) from the lubricating oil and ensure that unfiltered oil never reaches the gearbox, even if the permissible differential pressure is far exceeded



What can it be used for?

- Separation of particles and water with a single filter system
- Guaranteed compliance with wind turbine maintenance cycles thanks to integrated safety filter
- Perfect adaptability to harsh environmental conditions
- Filter performance like casted on: PulseShield™ presses the pleat star closely to the inner core to prevent pleat blocking
- Designed for FG filter housings, as alternative filter elements in the dimensions of other manufacturers and in customer-specific design possible



For whom is such a filter suitable?

- Manufacturers and operators of wind turbines
- Service and maintenance companies
- Users of FG filter modules (Pi 83xx and Pi 260)
- Manufacturer of wind turbine gearboxes



Interested?

- Available in different sizes
- Available as 2- or 3-step filter element
- Replacement of existing elements or entire systems possible on request
- Complete product range for your wind turbine available
- Convince yourself of our performance capabilities
- Contact us today



FG Filter Module Pi 83116

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CONTAINS MUCH MORE THAN YOU THINK - FG MULTI-STAGE FILTER ELEMENTS



Bypass-valves -

increase the operational safety of the whole system

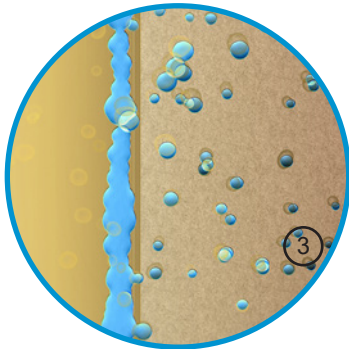
During a cold start of the lubrication system, the viscosity of the lubricating oil can be so high that a very high pressure builds up on the filter element so that the bypass valves open to prevent damage to the filter element and to supply the gearbox with filtered oil (50 µm) as quickly as possible.



Reusable parts -

reduce costs and environmental impact

The 3rd filter stage and the valve carrier can be removed from the element. When the element is changed, only the outer filter element (filter stages 1 and 2) is changed. The reusable 3rd filter stage is inserted into the new filter element and the 3-stage element is complete and ready for use again.



1. Filter stage with 3 µm -

protects the gearbox from particles and water

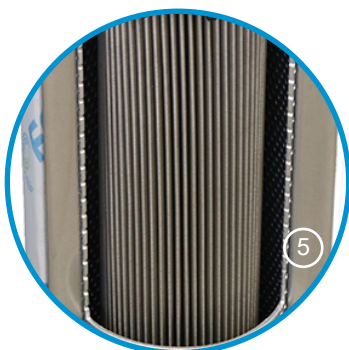
The first filter stage is the WS PS 3 filter stage (water adsorber integrated in the Premium Select pleated star, filter fineness 3 µm). In this filter stage, in addition to dirt absorption, water is also absorbed and oil ageing products are separated.



2. Filter stage with 10 µm -

permanently protects against particle ingress

The second filter stage with PS 10 filter medium (Premium Select, filter fineness 10 µm) keeps the gear oil permanently free of particles and does most of the work in the filter element.



3. Filter stage with 50 µm wire mesh -

protects the gearbox when it counts

In cold start mode, the oil cannot pass through filter stages 1 and 2. A differential pressure builds up at the filter element so that the bypass valves open. This allows unfiltered oil to enter the interior of the filter element, where the third filter stages (50µm) ist used. This ensures that the gearbox of the wind turbine is always supplied with filtered oil.



WORLDWIDE AT OVER 100 LOCATIONS IN 28 COUNTRIES



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