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KFT® GAP-TYPE FILTERS

ECONOMICAL, EASY TO
MAINTAIN, AND PROVEN
THOUSANDS OF TIMES!



MADE IN GERMANY

... guarantees fast delivery 


Krone
Filtertechnik

RELIABLE PROTECTION FOR MACHINE AND ENVIRONMENT

The company that began in 1990 as a representative of MANN+HUMMEL has now developed into a leading provider of comprehensive filter technology and services. Our core area, the sale of industrial filters, was expanded in 1993 by adding a full range of exhaust after-treatment products as well as trading and assembly services for catalytic converters, soot particle filters and SCR systems. All this is rounded off by an optimised range of services provided by our fitters, ensuring individual customer support.

At our business premises in Achim near Bremen, as well as at 5 additional business locations, more than 25 dedicated employees work under the management of Rainer Krone to develop tailored solutions for meeting our customers' requirements. The industrial filters business unit has companies from virtually every industry among its customers. To ensure intensive customer care, our sales engineers and office staff are highly qualified and a competent contact person is always at your disposal.



Company development through intellectual capital certified by



OUR VALUES:

„Enthusiasm and joy as well as team spirit and honesty are the basics of our success. Through respect, trust and reliability towards colleagues, customers and suppliers we achieve optimal results and satisfaction.“

KFT® GAP-TYPE FILTERS – MADE IN GERMANY

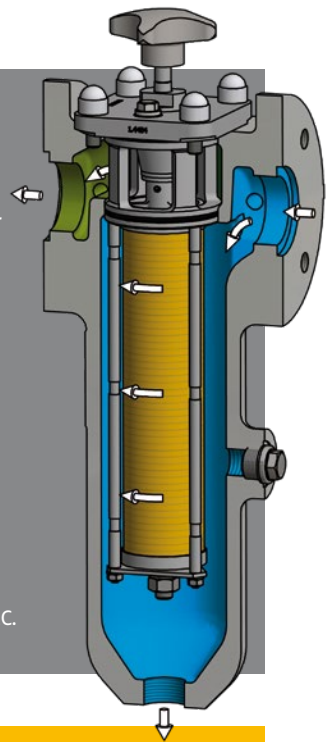
Plate gap-type filters, wire gap-type filters and gap-type tube filters are suited for the filtration of highly contaminated high and low viscous media, such as fuel, lubricating oil, paints, polyol, isocyanate, cooling lubricants, etc. They are used in nearly every industry and field, including:

- polyurethane production
- injection moulding machines
- gears and hydraulic pumps
- cooling agents and lubricants
- paint and varnish production
- in the food industry, as well as
- for cleaning of water and liquids in chemical engineering
- and many more.

KFT® gap-type filters can be cleaned during operation, they are easy to maintain, and especially stand out for their long service life. All gap-type filters work without any filter aid. This eliminates any burden to the environment.

Gap-type filters are used in the main stream and in the side stream, while the stream through the filter element is from the outside inwards. The grade of filtration is determined by different gap widths.

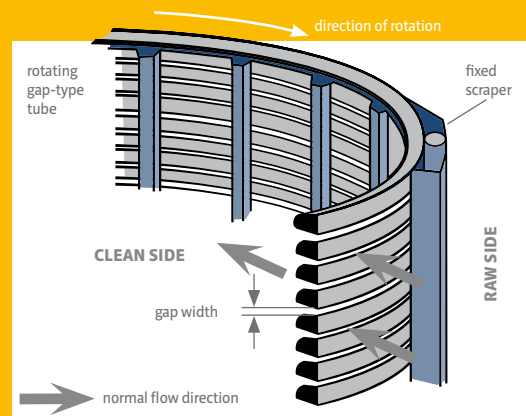
Krone also offers heated gap-type filters for specific applications, as well as electronic control systems for automatic operation of the filters. The filter housings are made of GGG40, aluminium or V4A; special types on request. All our filters are certified by DEKRA, KAT II-A2 and manufactured in accordance with Pressure Equipment Directive PED 2014/68/EC or Machinery Directive 2006/42/EC.



3 TYPES OF GAP-TYPE FILTERS

GAP-TYPE TUBE FILTER

The medium to be cleaned flows into the housing via the filter inlet and flows through the gap-type tube from the outside inwards. All impurities in the medium that are larger than the gap width are retained on the gap-type tube surface. The coarser dirt particles either fall down into the lower part of the housing or form a filter cake on the outside of the gap-type tube. For cleaning, the gap-type tube surface is moved past a fixed scraper, and the filter cake is scraped off. It sinks down inside the housing and can be removed as required through the sludge drainage.



PROFLUID BACKWASH FILTER

In conventional gap-type tube filters, particles – especially with gap widths up to 150 µm – can settle in the gaps and, depending on the operating conditions, may quickly lead to clogging of the gap-type tube. Through the action of the backwash chamber, it is possible to flush the boundary grains out of the gap-type tube. The backwash chamber acts across the entire gap-type tube length. When the backwash line is opened, the medium flows opposite the normal direction of flow into the non-pressurized backwash chamber and is discharged to the outside. The patented combination of dirt scraping and backwashing in the case of the ProFluid represents an effective form of cleaning the gap-type tube during operation.

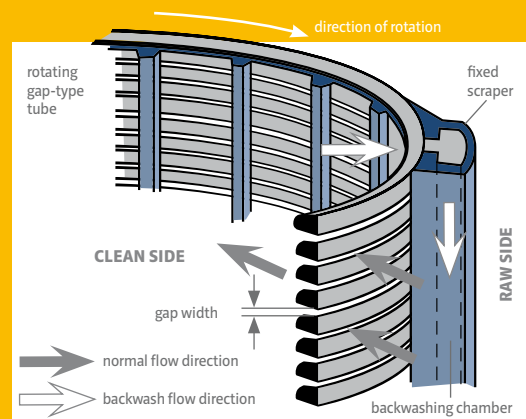
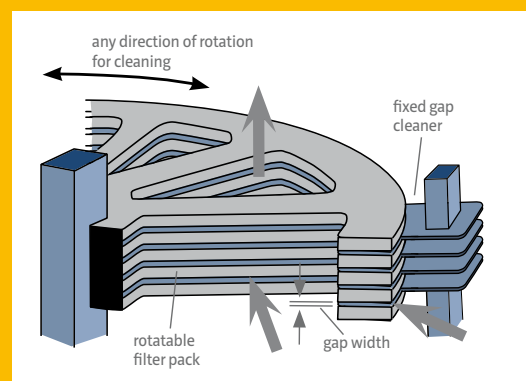
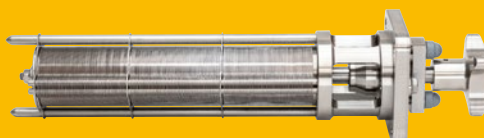


PLATE GAP-TYPE FILTER

The plate gap-type filter element comprises ring-shaped steel plates that are arrayed on a central pin. Spacer shims between the plates determine the gap width. A fixed gap cleaner reaches into every gap. During the flow, the dirt particles in the fluid being filtered deposit on the surface and in the gaps. If the filter element is rotated via the handle, the deposited dirt and contamination settles on the row of gap areas and sinks into the sludge collection chamber, where it is removed by opening a ball valve.





FROM MANUAL GAP-TYPE FILTERS ...

- manual cleaning via star knob or hand ratchet
- connection sizes ½" to 4"
- gap widths from 30 µm to 5,000 µm
- materials steel, aluminium, stainless steel
- edge gap-type/gap-type tube/plate gap-type filter
- incl. documentation in accordance with legally required Pressure Equipment Directive 2014/68/EC
- based on proven Mann+Hummel technology

... TO AUTOMATIC FILTERS

- based on abovementioned gap-type filter
- automated uninterrupted cleaning during operation
- integrated gear motor
- time or differential pressure controlled
- with automated sludge drainage
- optimised Krone control module for gap-type filters
- quality assured and CE certified by DEKRA
- incl. documentation in accordance with legally required Machinery Directive 2006/42/EC
- as an option, the risk assessment, which is legally required from the operator in accordance with the product safety regulation, is available from Krone



WHAT IS SPECIAL ...

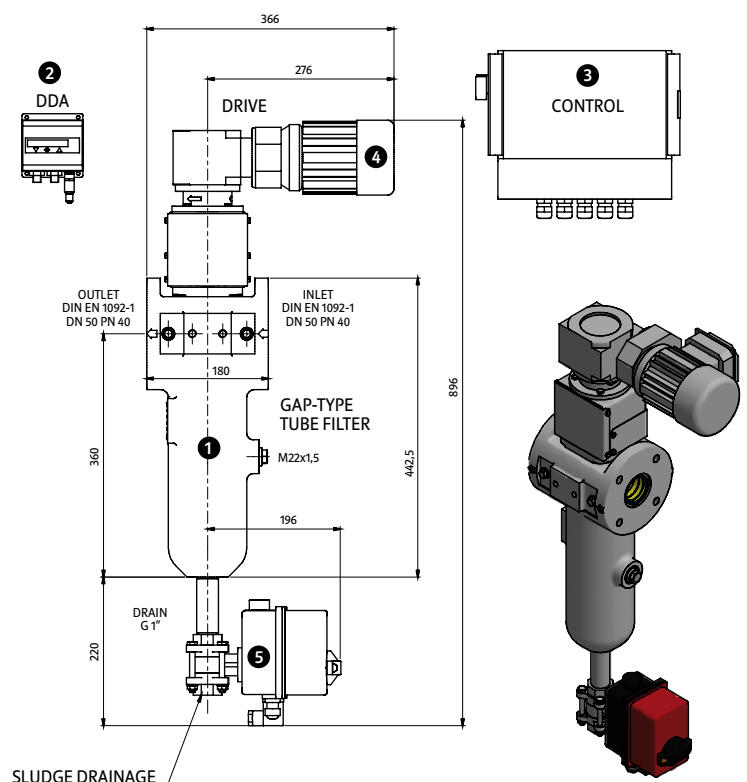
about the KFT® automatic gap-type filter is that it does not consume any filter material and cleaning is done fully automatically without interruption of operation.

The medium to be cleaned is fed into the filter housing (1) under pressure. The measuring device for the differential pressure (2) detects, when the set differential pressure (max. 6 bar) between dirty and clean side is reached. In that case, the measuring device for the differential pressure sends a pulse to the filter control (3), which activates the electric gear motor (4). The gear motor leads the interior gap-type tube past the spring-mounted scrapers, which releases the filter cake from the gap-type tube. Afterwards, the Krone control issues the command to open the electric sludge drainage (5), so the released filter cake is removed from the filter. This cleaning process is executed during operation and without interruption.

The process control described above is executed via a gap-type filter control (3) from Krone, which can be integrated into your system, ready for operation. As an alternative, you can also let the existing control execute the automatic cleaning. The entire documentation for a smooth start-up is of course included in the normal delivery.

Of course, also a ProFluid gap-type tube filter (possible from a filter fineness of 50 – 200 µm) can be operated as an automatic filter.

EXAMPLE FOR AUTOMATIC FILTER DN50 – 2"



KFT® GAP-TYPE FILTERS ARE SAFE

- » Certified and tested in accordance with applicable EC Pressure Equipment and/or Machinery Directive.
- » A specific risk analysis for gap-type filters, which supports your internal documentation obligation in accordance with the product safety regulation, is available from us upon request.
- » Before delivery to the customer, each gap-type filter manufactured by Krone is pressure tested and accordingly documented by our internal quality control.
- » Our documentations and declarations of conformity for gap-type filters meet the specifications of the applicable CE directives for pressure equipment and machinery.
- » In addition, all manufacturing steps are based on our DIN ISO 9001 certification.
- » Of course, we manufacture "Made in Germany".

NO CAN DO – NOT WITH US!

- » materials: GGG / V4A / ALU
- » gap widths: 30/50/75/100/200/300/400/500/750/1,000/2,000/5,000 µm
- » connection sizes: 22x1.5 / ½" / ¾" / 1" / 1 ½" / 2" / 3" / 4"
- » temperature range: -10 °C to 200 °C
- » permissible operating pressure: up to 40 bar
- » permissible differential pressure: up to 6 bar
- » delivery time for standard filters: approx. 1-2 weeks
- » with manual or automatic cleaning
- » customised solutions on request



WEAR AND SPARE PART SERVICE

At Krone Filtertechnik, you do not only receive first-class products and systems, but also a wide range of services.

TECHNICAL ADVICE

You have a task and need technical advice?
Our qualified staff will be gladly at your disposal.

COST ESTIMATE

We look forward to checking the condition of your filter products and estimating the expenses for reconditioning. Of course, you will receive an offer for the most-economical solution.

OVERHAUL AND REPAIR

We have every spare part for all Mann+Hummel gap-type tube filters and plate gap-type filters in stock, or we will procure it in a very short amount of time.

EXTREMELY SHORT DELIVERY TIMES

Due to our high inventory level, we may not be magicians, but often times very fast!

CONTACT

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