

The unique RMF Filter

The principle of the RMF System is based on the unique original filter elements. With a filter fineness of 0.5 micron they have the capacity to remove even the smallest of dirt particles from the oil.

The micro filter works as a fine filter through which oil passes radially, from the outside to the inside. The filter elements are made entirely of cellulose and are specially designed for hydraulic and lubrication systems.

The use of cellulose as the filtration material has the added benefit that water can be absorbed. Water in oil creates a chemical reaction, which seriously deteriorates the oil.

Original elements

The use of original RMF Systems filter elements will result in extreme fluid cleanliness and low water contamination levels in the fluid.

Through a carefully monitored quality control process excellent pressure drop curves, filter efficiency and dirt holding capacity are ensured.

Cellulose elements

The RMF Systems cellulose filter elements are unique in their design. They consist of several hundred layers of long fiber cellulose which are wound on a perforated center tube. The micro filter element works as a fine filter through which oil passes radially, from the outside to the inside, trapping solid particles throughout all the layers of cellulose. The long fiber cellulose is also capable of absorbing water, adding the benefit of moisture removal from the oil. RMF Systems cellulose elements are extremely efficient and have a large dirt holding capacity.

The cellulose elements are produced in various sizes to suit all RMF Systems filter housings. The RMF Systems cellulose elements compatible with most commonly used hydraulic and lubricating fluids, including biodegradable fluids.

Glass fiber elements

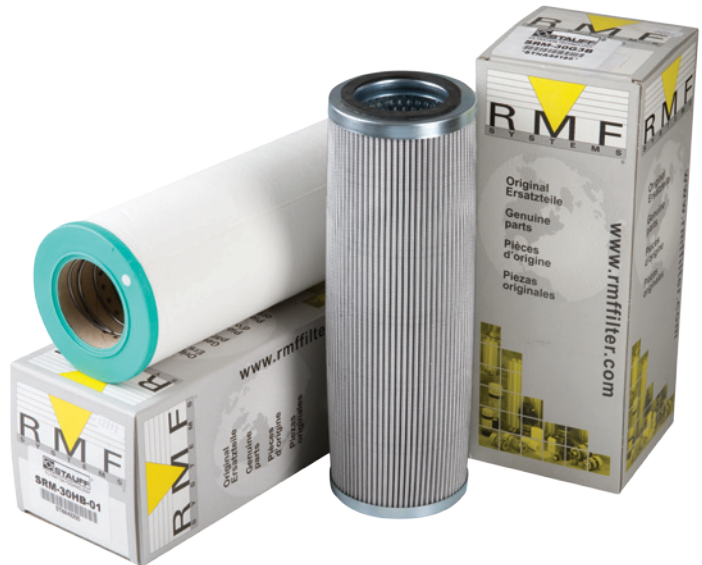
RMF Systems offers a range of glass fiber filter elements in a fineness of 1 micron and 3 micron. The micro filter

Applications

The original filter elements are used in combination with RMF Systems filter housings in an endless range of industries.

Some Examples are:

- plastic industry
- steel industry
- concrete and cement industry
- petrochemical industry
- maritime industry
- paper industry
- forestry industry.



element works as a fine filter through which oil passes radially, from the outside to the inside. RMF Systems glass fiber filter elements (conventional pleated construction) are extremely efficient and have a large dirt holding capacity.

The glass fiber elements are suited for all RMF Systems filter housing (except the size 20 housing) and are compatible with most commonly used hydraulic and lubricating fluids, including biodegradable fluids. The glass fiber elements are particularly suited for gearbox applications where high viscosity fluids limit the use of the cellulose elements.

Water sorb filter inserts

RMF Systems offers a specifically designed water sorb combination filter element: water absorbing and particle retention. This pleated filter element with a fineness of 5 micron has layers of polymers in between layers of glass fiber, creating a unique media to remove both water and solid particles from the fluid.

Characteristics

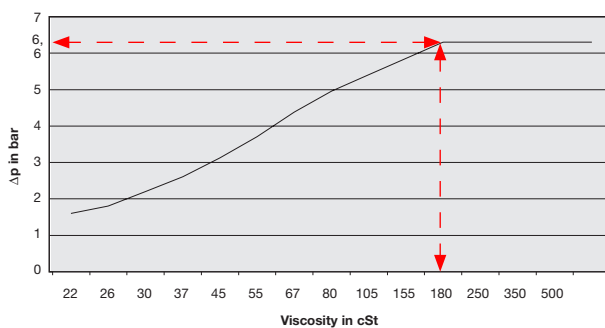
- Continuous quality with stable flow/ Δp performance
- Extremely fine filters (0.5 micron!)
- Large filtration surface
- High water absorption capacity
- Additives are not removed
- Large dirt collection capacity
- Extends oil usage life
- Extends life cycle main stream filters

Filter Element Technical Data

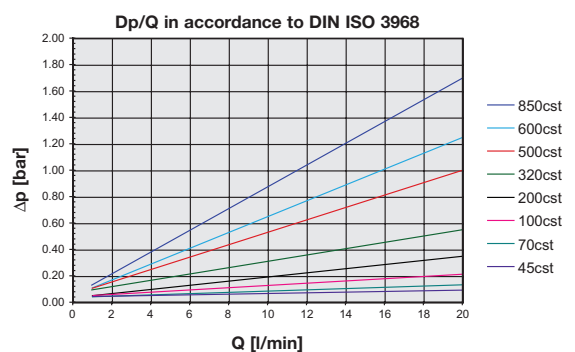
Element model	SRM-30HB	SRM-30G01B	SRM-30G03B	SRM-30A05B
Filter material	Cellulose	Glass fiber	Glass fiber	Glass fiber and Polymer
Filtration efficiency	$\beta(0.5) \geq 200$ / $\beta(2) \geq 2331$	$\beta(1) \geq 200$	$\beta(3) \geq 200$	$\beta(5) \geq 200$
Water absorption capacity	150 ml (5 oz)	N/A	N/A	350 ml (11.8 oz)
Nominal flow per element	2.1 l/min (0.6 GPM)	2.1 l/min (0.6 GPM)	2.1 l/min (0.6 GPM)	2.1 l/min (0.6 GPM)
Max viscosity at nominal flow rate	180 cSt	800 cSt		
at other flow rate	Consult factory			
Max oil temperature	80C (176F)			
Length of element	300 mm (11.8 in)			
Seal material (standard)	NBR (Buna-N®) and Silicone Rubber	NBR (Buna-N®)	NBR (Buna-N®)	NBR (Buna-N®)
Other seal material	Consult factory			
Fluid compatibility				
--Mineral oils				
H, HI, HLP, HVLP	OK	OK	OK	OK
--Biodegradable oils				
HEPG Poethylene glycol	Consult factory			
HEES Synthetic ester	OK	OK	OK	OK
HETG Vegetable seed oil	Consult factory			
--Fire inhibiting fluids				
HFA emulsions	NO	OK	OK	NO
HFC glycol/water solution	NO	OK	OK	NO
HFD fluids no water content	Consult factory			
Approximate weight	0.8 kg (1.8 lb)	1.25 kg (2.8 lb)	1.25 kg (2.8 lb)	1.25 kg (2.8 lb)

FILTRATION

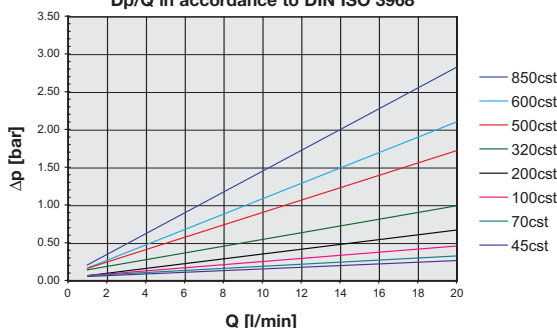
ΔP / Viscosity Graph 30HB Element at 2,3 L/min



Filter Element SRM-30G03B DP / Viscosity-Graph



Filter Element SRM-30G01B DP / Viscosity-Graph
Dp/Q in accordance to DIN ISO 3968



Filter Element SRM-30A05B DP / Viscosity-Graph
Dp/Q in accordance to DIN ISO 3968

