



STAUFF

Serie SFK-320 e

SFK-445



HYDRAULIC  
COMPONENTS  
& FLUID CONTAMINATION  
CONTROL



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## Replacement Filter Elements for Applications involving Hydraulic and Lubrication Oils

### The STAUFF 4PRO Glass Fibre Elements

The PLUS for customers:

- Longer operating times through higher dirt holding capacity
- Improved energy efficiency through lower differential pressure
- Excellent  $\beta$  values and outstanding  $\beta$  stability



The 4Pro stands for 4 pros that characterise STAUFF glass fibre materials:

- **proACTIVE**
- **proFESSIONAL**
- **proGRESSIVE**
- **proTECTION**

#### Or simply: Fo(u)r Protection

In terms of the  $\beta$  value, STAUFF elements have always exhibited excellent performance. For those who take filtration seriously, there's no other valid approach – the measured values must hold up under any inspection. The elements cannot afford any vulnerabilities. The new generation of elements also have excellent dirt holding capacities. Values that users have been looking for. Values that make it possible for the user to extend operating times thereby providing significant reductions to purchasing costs for elements as well maintenance costs.

### Filter Material – Quality And Properties

The choice of the right filter material is dependent on different criteria. Among others, this includes the type of application, the filter function, degree of contamination or alternatively the required dirt-hold capacity as well as requirements of chemical or physical resistance. Inorganic Glass Fibre, Polyester, Cellulose, Stainless Fibre Material and Stainless Steel Wire Mesh are used for hydraulic applications.

The following list gives you an overview of how these five filter materials differ with regard to specific properties:

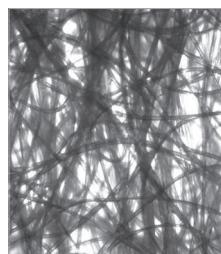


#### Inorganic Glass Fibre

- Inorganic Glass Fibre based on synthetic fibres with acrylic resin binding
- Large dirt-hold capacity
- Excellent separation efficiency of the finest particles due to the three-dimensional labyrinth structure with deep-bed filtration
- Outstanding price/performance ratio

#### Micron rating

- 3 ... 25  $\mu\text{m}$  (alternative micron ratings on request)



#### Polyester Fibre

- 100% Polyester Fibres with thermal bonding
- High pressure differential resistance
- Good chemical resistance
- High separation efficiency of the finest particle
- Tear-proof structure

#### Micron rating

- 3 ... 25  $\mu\text{m}$  (alternative micron ratings on request)

### Protecting Filter Elements Against Direct Flow Impact

The sensitive filter bellows on filter elements are frequently prone to damage during transportation, storage and filter replacement work. In addition, large particles in the flow of fluid may harm the filter material.

STAUFF offers a solution: SE and RE series filter elements with protective sheath (only available for glass fibre elements). This is a thin, perforated plastic sheet that completely encases the pleats of the filter from the outside as well as making the element more stable. A further positive effect is that the volume of flow is distributed more evenly by the protective sheath, thus ensuring an efficient flow rate.

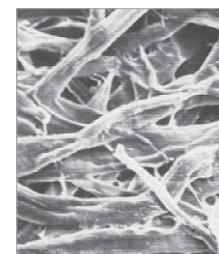
In its standard version, the foil is printed with the STAUFF 4PRO logo, eliminating any mix-up with other brands. Larger quantities can also be produced with a customised imprint on the sheath.

#### $\beta$ value

Key evaluation criteria for filter elements using glass fibre technology are the retention rate (micron rating) the  $\beta$  value, the  $\beta$  stability, the dirt holding capacity and the initial pressure differential. These values are determined using the multipass test established by ISO 16889.

The designation for STAUFF elements typically includes a rating based on filter fineness.

Filter designation $\beta$ value > 200 according to ISO 4406	$\beta_{(c)} > 200$ ISO 11171	$\beta_{(c)} > 1000$ ISO 11171
03	4,0 $\mu\text{m}_{(c)}$	4,5 $\mu\text{m}_{(c)}$
05	5,0 $\mu\text{m}_{(c)}$	6,0 $\mu\text{m}_{(c)}$
10	8,8 $\mu\text{m}_{(c)}$	11,0 $\mu\text{m}_{(c)}$
20	21,0 $\mu\text{m}_{(c)}$	23,0 $\mu\text{m}_{(c)}$

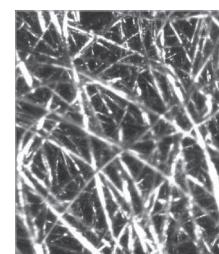


#### Cellulose Fibre

- Filter material made of Cellulose Fibres with special impregnation
- Variants with lowest price with good dirt-hold capacity
- Not suitable for water based fluids

#### Micron rating

- 10 ... 50  $\mu\text{m}$  (alternative micron ratings on request)

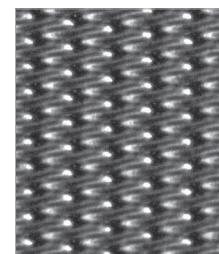


#### Stainless Fibre

- Sintered Stainless Fibres with three-dimensional labyrinth structure for depth filtration
- Low flow resistance with high dirt-hold capacity
- Excellent chemical and thermal resistance

#### Micron rating

- 3 ... 25  $\mu\text{m}$  (alternative micron ratings on request)



#### Stainless Mesh

- Wire Mesh fabric made of material 1.4301 or 1.4305 for surface (other material on request)
- Type of weave: square weave or Dutch weave
- Low flow resistance due to large-pored screening surface
- Excellent chemical and thermal resistance

#### Micron rating

- 10 ... 1000  $\mu\text{m}$  (alternative micron ratings on request)



## Interchanging STAUFF Filter Elements

As well as original Filter Elements for our own filter housings, STAUFF also provides access to a comprehensive range of Replacement Filter Elements. They match the quality and can be installed in the products of for example:

- Argo-Hytos
- Donaldson
- Eppensteiner Bosch Rexroth
- Fairey Arlon
- Hydac
- Mahle
- Internormen
- Pall
- Parker
- Other types are available on request

STAUFF offers many options for filter conversion, design and calculation and supports interested parties and customers with the design of efficient solutions:

- Online filter search with more than 65000 data sets under [www.filterinterchange.com](http://www.filterinterchange.com)
- Offline filter database with deposited measurements, filter surfaces and drawings
- Filter selection software for easy filter design and calculation

Thanks to their excellent dirt-hold capacity, all of the filter products supplied by STAUFF have an impressive long service life and high  $\beta$  value stability:

- Inorganic glass fibre, filter paper, stainless fibre (micron ratings between 3  $\mu\text{m}$  and 25  $\mu\text{m}$  respectively) as well as stainless mesh (micron ratings between 10  $\mu\text{m}$  and 1000  $\mu\text{m}$ )
- Maximum differential pressure depending on filter media and application for the options 16 bar / 232 PSI, 30 bar / 435 PSI or 210 bar / 3000 PSI.

Your local STAUFF Distributor will assist you interchanging to STAUFF elements.

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Find the suitable STAUFF replacement filter element at

[www.filterinterchange.com](http://www.filterinterchange.com)



It's this easy:



search



enquire



save

Your advantages:

- Over 65000 datasets from various manufacturers
- Conversion for all common filter brands and types
- Watch list function for storing search results
- Request price and delivery time with enquiry history

## Order Codes

<b>RE</b>	<b>- 045 - G - 20 - B / X - 123456</b>	
<b>1</b>	<b>2</b>	<b>3</b> <b>4</b> <b>5</b> <b>6</b> <b>7</b>

### ① Type

Series	Filter Element
Argo-Hytos High Pressure Filter Element	SD
Argo-Hytos Medium Pressure Filter Element	MD
Argo-Hytos Return-Line Filter Element	RD
Argo-Hytos Suction-Line Filter Element	AD
Eppensteiner Bosch Rexroth High Pressure Filter Element	SS
Eppensteiner Bosch Rexroth Return-Line Filter Element	RS
Eppensteiner Bosch Rexroth Low Pressure Filter Element	LS
Fairey Arlon High Pressure Filter Element	SA
Fairey Arlon Return-Line Filter Element	RA
Hydac High Pressure Filter Element	SE
Hydac Return-Line Filter Element	RE
Mahle High Pressure Filter Element	SL
Mahle Low Pressure Filter Element	ML
Mahle Return-Line Filter Element	RL
Internormen High Pressure Filter Element	SN
Internormen Return-Line Filter Element	RN
Pall High Pressure Filter Element	SP
Pall Return-Line Filter Element	RP
Medium Pressure Filter Element according to standard	NL
Return-Line Filter Element according to standard	NR
Spin-On Filter Element	SFC
Special Element STAUFF	SXX

Note: Other series on request

### ② Nominal Size

Depending on the nominal flow or element length

### ③ Filter Material and Pressure Setting

Stainless Fibre, high collapse pressure	A, M
Stainless Wire mesh, low collapse pressure	B, S
Polyester Fibre, high collapse pressure	C
Filter Paper, low collapse pressure	D, K, L, N
Inorganic Glass Fibre, low collapse pressure	E, G
Inorganic Glass Fibre, high collapse pressure	F, H
Stainless Wire Mesh, high collapse pressure	R, T, W

### ④ Micron Rating

#### Stainless Wire Mesh

10 $\mu\text{m}$	10
20 $\mu\text{m}$	20
25 $\mu\text{m}$	25
40 $\mu\text{m}$	40
50 $\mu\text{m}$	50
60 $\mu\text{m}$	60
80 $\mu\text{m}$	80
100 $\mu\text{m}$	100
125 $\mu\text{m}$	125
150 $\mu\text{m}$	150
200 $\mu\text{m}$	200
500 $\mu\text{m}$	500
1000 $\mu\text{m}$	1000

#### Stainless Stainless Fibre

3 $\mu\text{m}$	03
5 $\mu\text{m}$	05
10 $\mu\text{m}$	10
20 $\mu\text{m}$	20
25 $\mu\text{m}$	25

#### Filter paper

10 $\mu\text{m}$	10
20 $\mu\text{m}$	20
50 $\mu\text{m}$	50

### ④ Micron Rating

#### Inorganic Glass Fibre

3 $\mu\text{m}$	03
5 $\mu\text{m}$	05
10 $\mu\text{m}$	10
15 $\mu\text{m}$	15
20 $\mu\text{m}$	20
25 $\mu\text{m}$	25

#### Polyester Fibre

3 $\mu\text{m}$	03
5 $\mu\text{m}$	05
10 $\mu\text{m}$	10
20 $\mu\text{m}$	20
25 $\mu\text{m}$	25

Note: Other micron ratings on request

### ⑤ Sealing Material

NBR (Buna-N®)	B
FKM (Viton®)	V
EPDM	E

Note: Other sealing materials on request

### ⑥ Design Code

Only for information

X

### ⑦ STAUFF Special Number

If element varies from the standard type

X



## Checklist for the selection of filter housings

Please use the following Checklist as a guideline when preparing an enquiry for the selection of filter housings. Scan or copy the page from the catalogue, print and com-

plete it with as much information as possible, before sending it by email or fax to the closest STAUFF branch office. If possible, please also let us know the quantities required,

and if the enquiry is for a one-time or recurring demand. We look forward to hearing from you, and are always available for consultation, when required.

<b>Information on the fluid in use</b>					
<b>Type of fluid</b>	<input type="text"/>	Brand	<input type="text"/>	ISO designation	
<b>Fluid viscosity</b>	<input type="text"/>	<input type="checkbox"/> mm <sup>2</sup> /sec	<input type="checkbox"/> cSt		
<b>Fluid temperature</b>	<input type="checkbox"/> °C	<input type="checkbox"/> °F	<input type="text"/>	In cold condition	<input type="text"/> In warm condition
<b>Information on the filter housing</b>					
<b>Position in the hydraulic system</b>	<input type="checkbox"/> Suction line	<input type="checkbox"/> Pressure line	<input type="checkbox"/> Return line		
<b>Operating pressure</b>	<input type="text"/>	<input type="checkbox"/> bar	<input type="checkbox"/> PSI		
<b>Nominal flow</b>	<input type="text"/>	<input type="checkbox"/> l/min	<input type="checkbox"/> US GPM		
<b>Valve</b>	<input type="checkbox"/> No, not required	<input type="checkbox"/> Yes, the following type:	<input type="checkbox"/> Bypass valve	<input type="checkbox"/> Non-return valve	<input type="checkbox"/> Reverse flow valve
			<input type="checkbox"/> Multi-function valve		
<b>Clogging indicator</b>	<input type="checkbox"/> No, not required	<input type="checkbox"/> Yes, the following type:	<input type="checkbox"/> Visual	<input type="checkbox"/> Electrical	<input type="checkbox"/> Visual-electrical
<b>Connection type and size</b>	<input type="text"/>				
<b>Sealing material</b>	<input type="checkbox"/> NBR (Buna®)	<input type="checkbox"/> FKM (Viton®)	<input type="text"/>	Other	
<b>Information on the filter element</b>					
<b>Filter media</b>	<input type="checkbox"/> Inorganic Glass Fibre	<input type="checkbox"/> Polyester Fibre	<input type="checkbox"/> Cellulose Fibre	<input type="checkbox"/> Stainless Fibre	<input type="checkbox"/> Stainless Mesh
<b>Micron rating</b>	<input type="text"/> µm				
<b>Cleanliness level</b>	<input type="text"/> (to ISO 4406)				
<b>Information on the application</b>	<input type="text"/>				
<b>Information on the ambient conditions</b>	<input type="text"/>				
<b>Additional information and requirements</b>	<input type="text"/>				



## Replacement Filter Elements for Single, Double and Automatic Filters

Due to the pleated design of STAUFF Paper Elements, they can offer a large filter area in a small place and with a long durability. The cover made of Polyester allows a safe treatment during the installation and the demounting without damaging the filter media.

**Length**

- 254 mm, 500 mm or 750 mm / 10.00 in, 19.69 in oder 29.53 in (alternative lengths on request)

**Diameter**

- 124 mm / 4.88 in

**Filter media**

- Paper, Fibreglass and Polyester (Stainless Mesh on request)

**Micron rating**

- 10 µm or 50 µm (alternative micron ratings on request)

**End cap**

- Steel, zinc plated or Stainless Steel

**Application**

- Bypass and flushing filter for automatic filters and double filters in the field of lubricating oil

## Paper, Fibreglass and Polyester Elements ▪ Type SBS-124



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## Plastic Elements ▪ Types SFK-320 and SFK-445

STAUFF Plastic Elements have a special cloth and a special format which ensure the safety and the optimal protection of the motors. The molded end caps allow a quick installation and demounting as they can be easily connected.

**Length**

- 320 mm or 445 mm / 12.59 in oder 17.52 in

**Diameter**

- 19 mm ... 33 mm / 0.75 in ... 1.29 in

**Filter media**

- Plastic (Stainless Mesh on request)

**Micron rating**

- 25 µm or 31 µm

**End cap**

- Plastic

**Application**

- Pre-filter of motors



## Multimantle Elements ▪ Type SBM

Multimantle Elements in different types and sizes complete the STAUFF exchange program.

**Length**

- 128 mm ... 723 mm / 5.03 in ... 28.46 in

**Diameter**

- 86 mm ... 230 mm / 3.39 in ... 9.05 in

**Filter media**

- Stainless Mesh

**Micron rating**

- 10 µm ... 2000 µm

**End cap**

- Aluminium

**Application**

- Multimantle filter elements are generally used in marine applications for filtering fuels and lubricants as well as water. The elements are also used in the processing industry for purifying water, oils, coolants and chemicals.



## LubeTeam Hydraulic S.r.l.

Administration and Headquarter:

Via Tufara Scautieri, 6

83018 - San Martino Valle Caudina (AV)

Office and Warehouse:

S.S. 7 Appia, Km. 237,00

82011 - Airola BN

ITALY

Tel. +39 0823 950 994

Fax +39 0823 412 546

[www.lubeteam.it](http://www.lubeteam.it) [info@lubeteam.it](mailto:info@lubeteam.it)

Italian VAT / C.F. e P.IVA: 01251720627

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