

## Medium Pressure Filters ■ Type SMPF



### Product Description

STAUFF SMPF Medium Pressure Filters are designed for in-line hydraulic applications with a maximum operating pressure of 110 bar / 1600 PSI. Used together with STAUFF Filter Elements, a high efficiency of contamination removal is assured.

### Technical Data

#### Construction

- In-line assembly

#### Materials

- Filter head: Aluminium Alloy
- Filter bowl: Aluminium Alloy
- Sealings: NBR (Buna-N®)

#### Port Connections

- BSP
- SAE O-ring thread

#### Flow Rating

- Up to 90 l/min / 25 US GPM

#### Operating Pressure

- Max. 110 bar / 1600 PSI

#### Burst Pressure

- 300 bar / 4350 PSI

#### Temperature Range

- -25°C ... +110°C / -13°F ... +230°F

#### Filter Elements

- Specifications see page C48

#### Media Compatibility

- Mineral oils, other fluids on request

### Options and Accessories

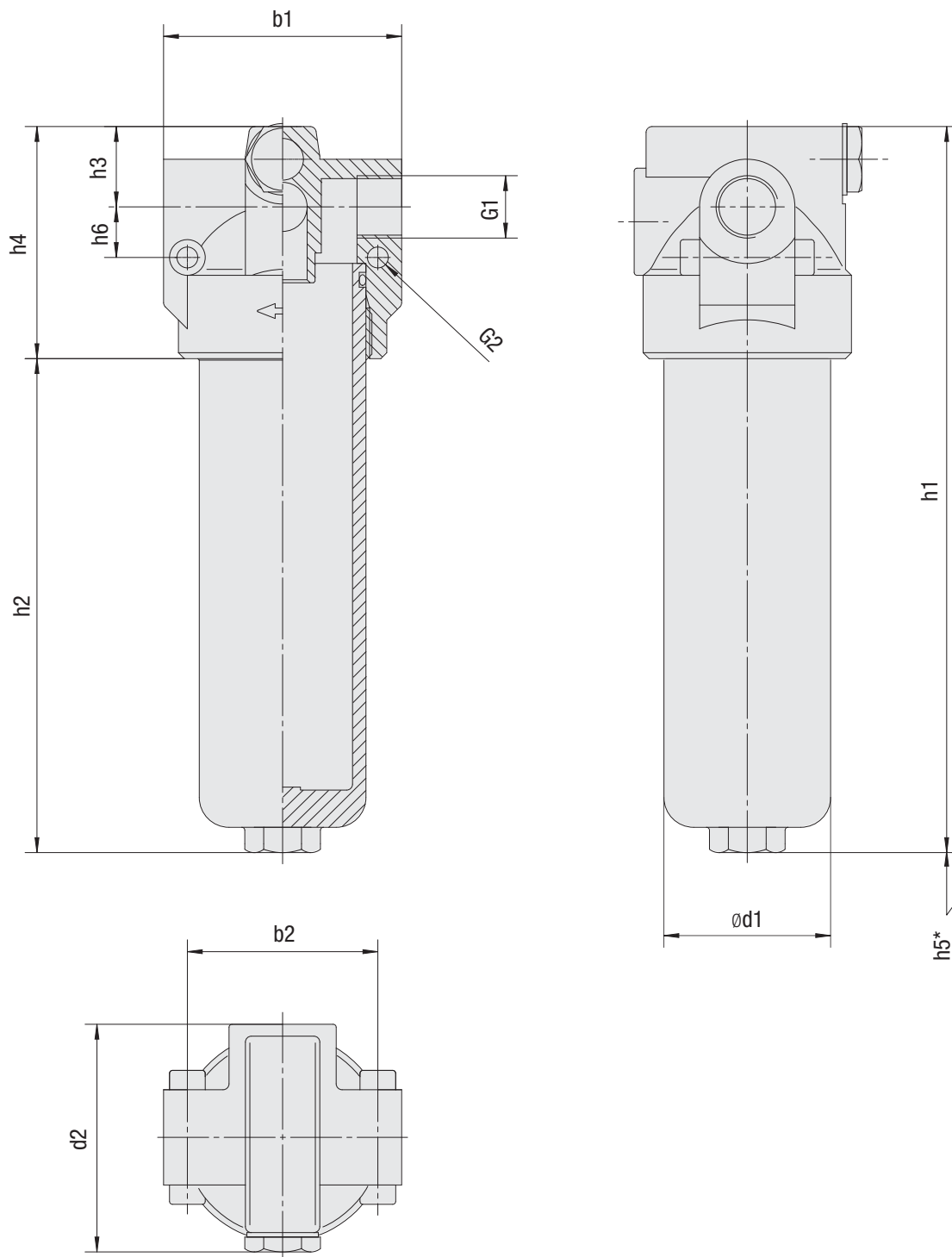
#### Valve

- Bypass valve: Allows unfiltered oil to bypass the contaminated element once the opening pressure has been reached  
6 bar / 87 PSI  $\pm 10\%$  is the standard actuating pressure

#### Clogging Indicators

- Standard actuating pressure: 5 bar / 72.5 PSI  $\pm 10\%$
- Available indicators: Visual  
Visual-electrical

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\* recommended space for element change

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Thread Connection G1	Filter Size SMPF	
	015	025
Nominal Flow (l/min / US GPM)	60	90
	15	25
BSP	1/2	1/2
SAE O-ring thread	3/4-16	3/4-16
Weight (kg/lb)	0,95	1,25
	2.09	2.76

Dimensions (mm/in)	Filter Size SMPF	
	015	025
b1	80	80
	3.15	3.15
b2	64	64
	2.52	2.52
d1	56	56
	2.20	2.20
d2	76,5	76,5
	3.01	3.01
h1	157	244
	6.18	9.61
h2	79	166
	3.11	6.54
h3	27	27
	1.06	1.06
h4	78	78
	3.07	3.07
h5	60	60
	2.36	2.36
h6	17	17
	.67	.67
G2	7	7
	.28	.28

## Medium Pressure Filter Housings / Complete Filters ■ Type SMPF

**SMPF 015 ... B / T B / B / VE / X**

1 2 3 4 5 6 7 8 9 10

## 1 Type

## 2 Group

Flow	Size
60 l/min / 15 US GPM	<b>015</b>
90 l/min / 25 US GPM	<b>025</b>

Note: Exact flow will depend on filter element selected  
Consult technical data on page C50.

## 3 Filter Material

Material	Max. $\Delta p^*$ collapse	Micron ratings available	Code
Without filter element	-	-	...
Inorg. glass fibre	20 bar / 290 PSI	03, 10, 20	<b>E</b>
Stainless mesh	20 bar / 290 PSI	60	<b>S</b>

\* Note: Collapse/burst resistance as per ISO 2941.  
Other materials on request.

## 4 Micron Rating

3 $\mu\text{m}$	<b>03</b>
10 $\mu\text{m}$	<b>10</b>
20 $\mu\text{m}$	<b>20</b>
60 $\mu\text{m}$	<b>60</b>

Note: Other micron ratings on request.

## 5 Sealing Material

NBR (Buna®) **B**  
Note: Other sealing materials on request.

## 6 Mounting Style

In-line **T**

## 7 Connection Style

BSP 1/2 **B**  
SAE O-ring thread 3/4-16 **U**

## 8 Valve

Without valve **0**  
Bypass valve **B**

## 9 Clogging Indicator

Without Clogging Indicator **0**  
Visual **V**  
Visual-electrical **VE**

## 10 Design Code

Only for information **X**

## Filter Elements ■ Type SME

**SME - 015 E 03 B / X**

1 2 3 4 5 6

## 1 Type

Filter Element Series **SME**

## 2 Group

According to filter housing

## 3 Filter Material

Material	Max. $\Delta p^*$ collapse	Micron ratings available	Code
Inorg. glass fibre	20 bar / 290 PSI	03, 10, 20	<b>E</b>
Stainless mesh	20 bar / 290 PSI	60	<b>S</b>

\* Note: Collapse/burst resistance as per ISO 2941.  
Other materials on request.

## 4 Micron Rating

3 $\mu\text{m}$	<b>03</b>
10 $\mu\text{m}$	<b>10</b>
20 $\mu\text{m}$	<b>20</b>
60 $\mu\text{m}$	<b>60</b>

Note: Other micron ratings on request.

## 5 Sealing Material

NBR (Buna®) **B**  
Note: Other sealing materials on request.

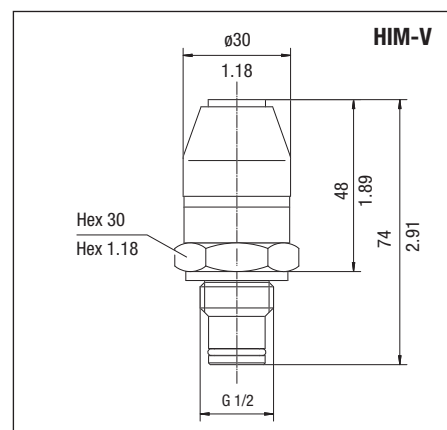
## 6 Design Code

Only for information **X**

## Medium Pressure Filters ■ Type SMPF

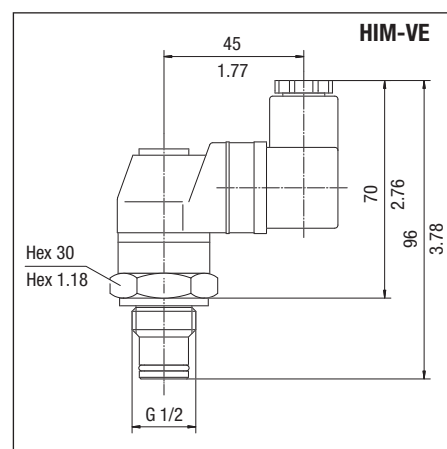
### Visual Clogging Indicator

Part number HIM-V is a clogging indicator actuated by the differential pressure across the filter element. The actuating pressure of 5 bar / 72.5 PSI allows the dirty element to be changed before the bypass setting of 6 bar / 87 PSI is reached.



### Visual-Electrical Clogging Indicator

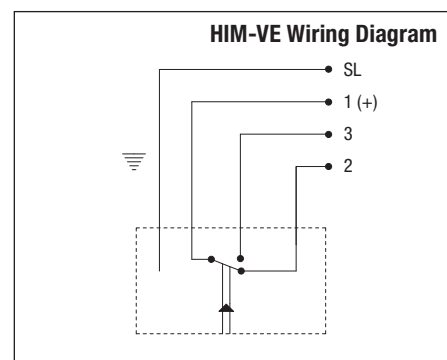
Part number HIM-VE is used when an electrical signal is needed to indicate when the element needs changing. It is actuated by the differential pressure across the filter element. The actuating pressure of 5 bar / 72.5 PSI allows the dirty element to be changed before the bypass setting of 6 bar / 87 PSI is reached.



Dimensions in mm / in

### HIM-VE Rated Capacity

Voltage V	Resistive Load A	Inductive Load A
125 V AC	5	5
250 V AC	5	5
15 V AC	10	10
30 V DC	5	5
50 V DC	1	1
125 V DC	0.50	0.06



### Order Code

<div> <div>HIM</div> <div>-</div> <div>V</div> <div>-</div> <div>B</div> <div>-</div> <div>5,0B</div> <div>/</div> <div>X</div> </div>				
1	2	3	4	5
<b>1 Type</b> Clogging Indicator SMPF Series HIM	<b>2 Indicator Type</b> Visual Visual-electrical	<b>3 Sealing Material</b> NBR (Buna®) B	<b>4 Differential Pressure Setting</b> 5,0 bar / 72.5 PSI 5,0B	<b>5 Design Code</b> Only for information X

## Medium Pressure Filters ■ Type SMPF Flow Characteristics

The following characteristics are valid for mineral oils with a density of  $0,85 \text{ kg/dm}^3$  and the kinematic viscosity of  $30 \text{ mm}^2/\text{s}$  (30 cSt). The characteristics have been determined in accordance to ISO 3968. Multipass filter ratings have been obtained in accordance to ISO 16889. Consult STAUFF for details.

