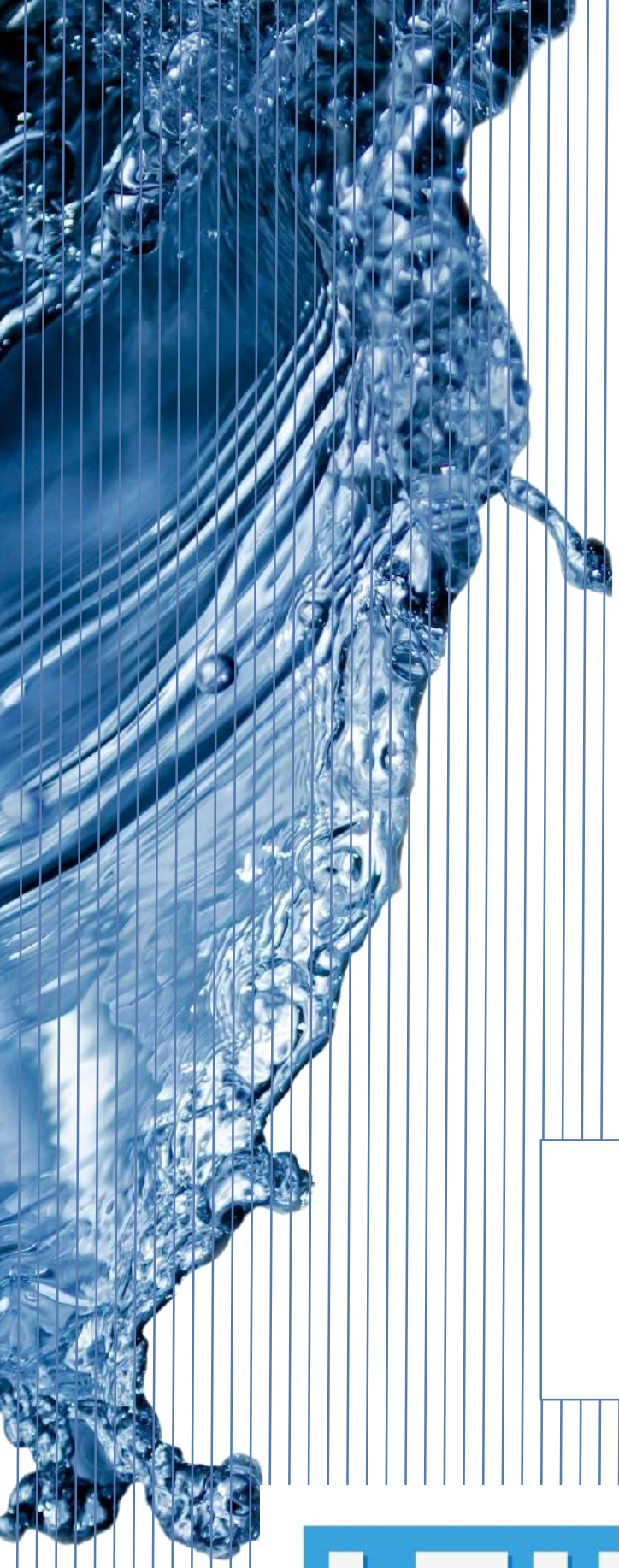


STAUFF
PRESSURE FILTERS
SMPF

LTH

HYDRAULIC
COMPONENTS
& FLUID CONTAMINATION
CONTROL

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 62

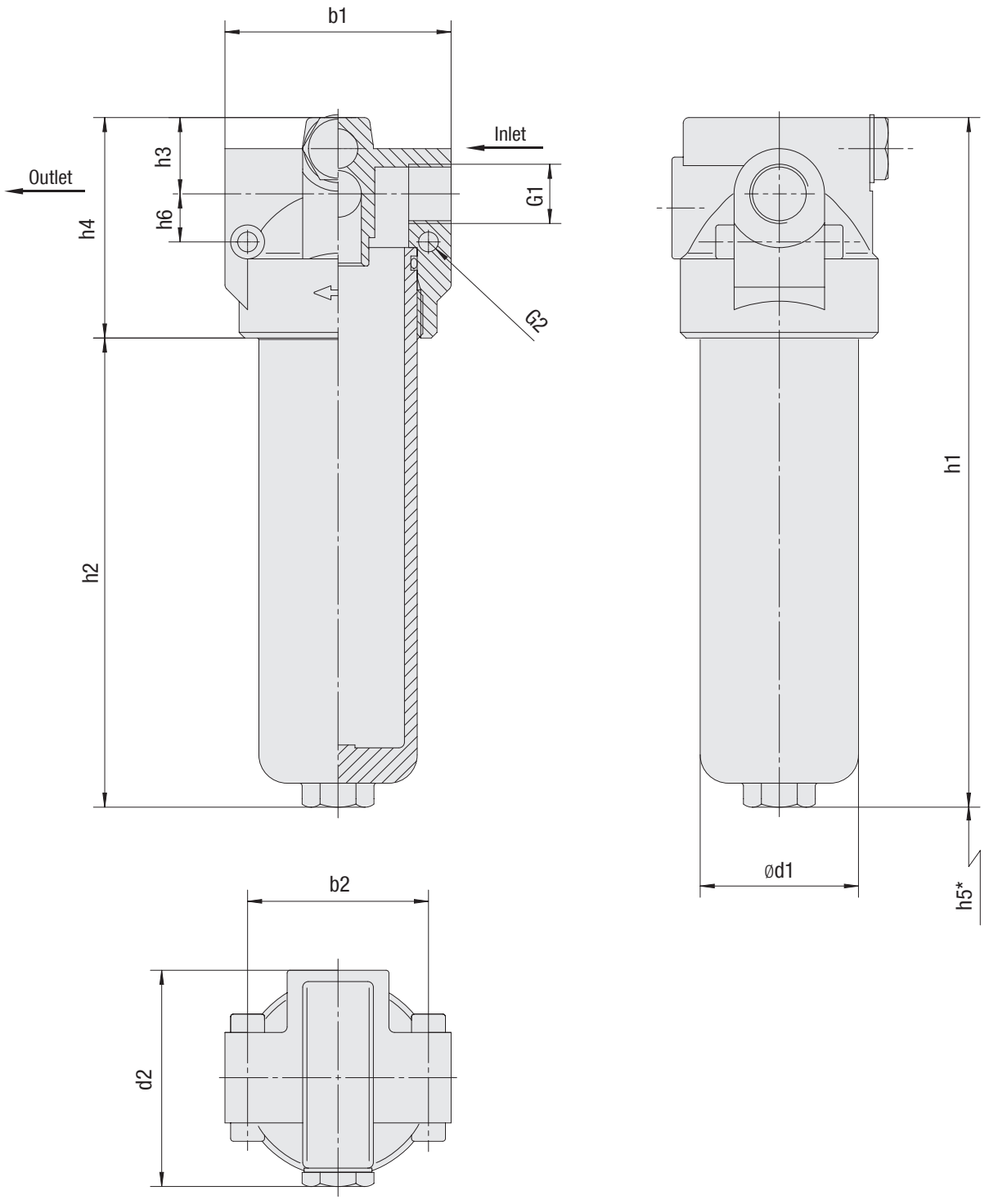
Media Compatibility
- Mineral oils, other fluids on request

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 ±10% is the standard actuating pressure

Clogging Indicators
- Standard actuating pressure: 5 bar / 72.5 PSI ±10%
- Available indicators: Visual
  Visual-electrical

Medium Pressure Filters ▪ Type SMPF



* recommended space for element change

Medium Pressure Filters ▪ Type SMPF

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

C

Medium Pressure Filter Housings / Complete Filters ▪ Type SMPF

SMPF	-	015	-	E	-	03	-	B	-	T	-	G08	-	B	-	VE	/	X
①		②		③		④		⑤		⑥		⑦		⑧		⑨		⑩

① Type

Medium Pressure Filter	**SMPF**

② Group

Flow	Size
60 l/min / 15 US GPM	**015**
90 l/min / 25 US GPM	**025**

Note: Exact flow will depend on filter element selected
For technical data please see page 64.

③ Filter Material

Material	Max. Δp*collapse	Micron ratings available	Code
Without filter element	-	-	**0**
Inorg. glass fibre	20 bar / 290 PSI	03,05,10,20	**E**
Stainless mesh	20 bar / 290 PSI	60	**S**

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

④ Micron Rating

3 µm	**03**
5 µm	**05**
10 µm	**10**
20 µm	**20**
60 µm	**60**

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	**G08**
SAE O-ring thread	3/4 –16	**U08**

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. Δp*collapse	Micron ratings available	Code
Inorg. glass fibre	20 bar / 290 PSI	03,05,10,20	**E**
Stainless mesh	20 bar / 290 PSI	60	**S**

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

④ Micron Rating

3 µm	**03**
5 µm	**05**
10 µm	**10**
20 µm	**20**
60 µm	**60**

Note: Other micron ratings on request.

⑤ Sealing Material

NBR (Buna®)	**B**

Note: Other sealing materials on request.

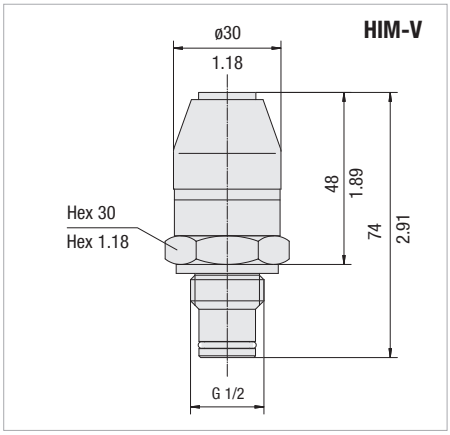
⑥ Design Code

Only for information	**X**

Medium Pressure Filters ▪ Type SMPF

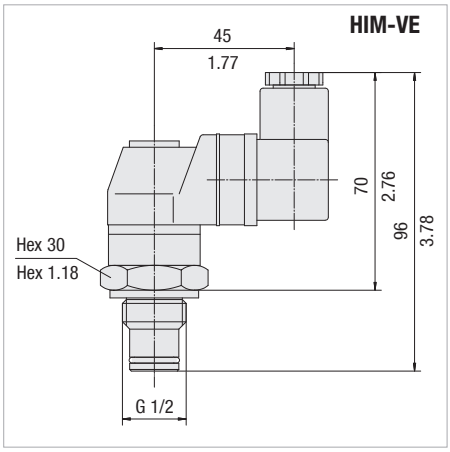
Visual Clogging Indicator

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 clogged 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 clogged element to be changed before the bypass setting of 6 bar / 87 PSI is reached.



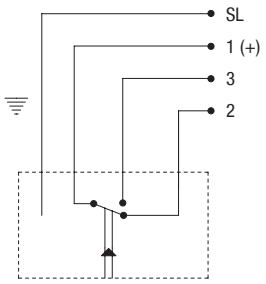
Dimensions in mm / in

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

Note: The customer / user carries the responsibility for the electrical connection.

HIM-VE Wiring Diagram



Order Code

HIM - V - B - B5.0 / X

① ② ③ ④ ⑤

① Type

Clogging Indicator SMPF Series	**HIM**

② Indicator Type

Visual	**V**
Visual-electrical	**VE**

③ Sealing Material

NBR (Buna®)	**B**

④ Differential Pressure Setting

5,0 bar / 72.5 PSI	**B5.0**

⑤ Design Code

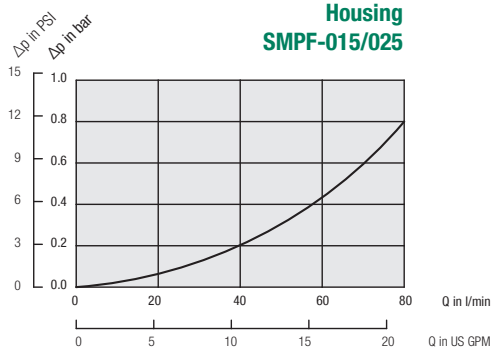
Only for information	**X**

C

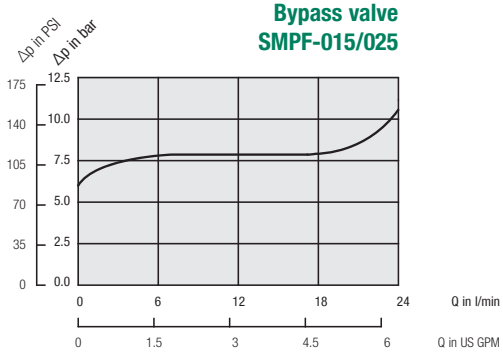
Medium Pressure Filters ▪ Type SMPF Flow Characteristics

The following characteristics are valid for mineral oils with a density of 0,85 kg/dm³ and the kinematic viscosity of 30 mm²/s (30 cSt). The characteristics have been determined in accordance to ISO 3968. Multipass filter ratings have been obtained in accordance to ISO 16889. Contact STAUFF for details.

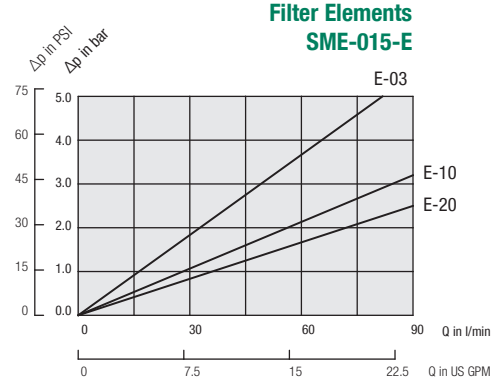
Housing SMPF-015/025



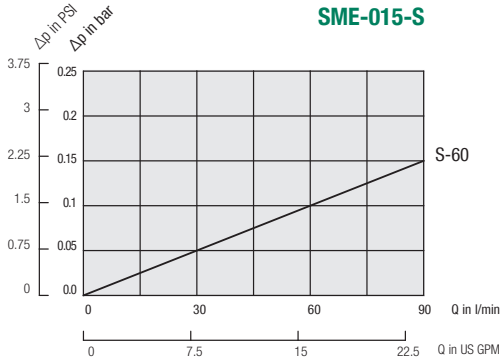
Bypass valve SMPF-015/025



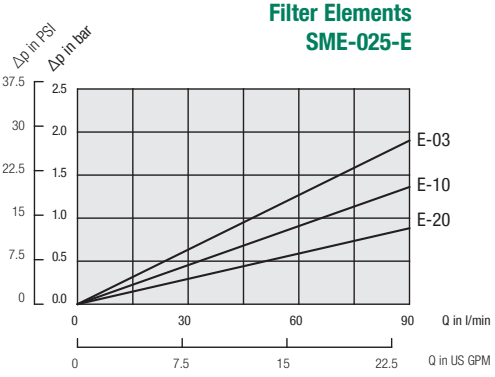
Filter Elements SME-015-E



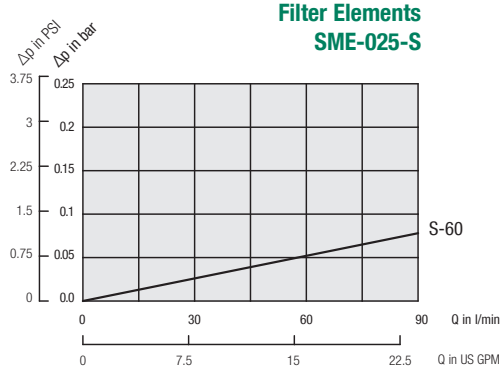
Filter Elements SME-015-S



Filter Elements SME-025-E



Filter Elements SME-025-S



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 info@lubeteam.it

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

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