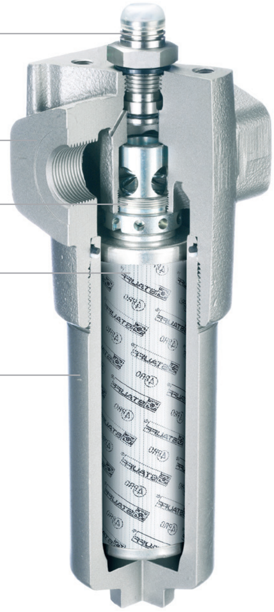
Medium Pressure Filters ▪ Type SFA



Product Description

STAUFF SFA series Medium Pressure Filters are designed for in-line hydraulic applications with a maximum operating pressure of 160 bar / 2320 PSI. Used together with STAUFF SE series Filter Elements, a high efficiency of contamination removal is assured. The dirt-hold capacity of the elements ensures long service life, and as a result, reduced maintenance costs.

Technical Data

Construction
- Designed for in-line assembly, with threaded mounting holes on top of the head.

Materials
- Filter head: Cast Aluminium
- Filter bowl: Aluminium
- O-rings: NBR (Buna-N®)
FKM (Viton®)
EPDM (Ethylene-Propylene-Diene-Monomer-Rubber)
- Support ring: PTFE (Polytetrafluoroethylene)

Port Connections
- BSP
- NPT
- SAE O-ring thread
- SAE 3000 PSI (Code 61) flange

Operating Pressure
- SFA-014/030: Max. 160 bar / 2320 PSI
Max. 190 bar / 2755 PSI (according to ANSI T2.6.1. R2-2001)
- SFA-045/070: Max. 150 bar / 2175 PSI
Max. 171 bar / 2480 PSI (according to ANSI T2.6.1. R2-2001)

Burst Pressure
- Min. 480 bar / 6960 PSI

Temperature Range
- -10 °C ... +100 °C / +14 °F ... +212 °F

Filter Elements
- Specifications see page 52

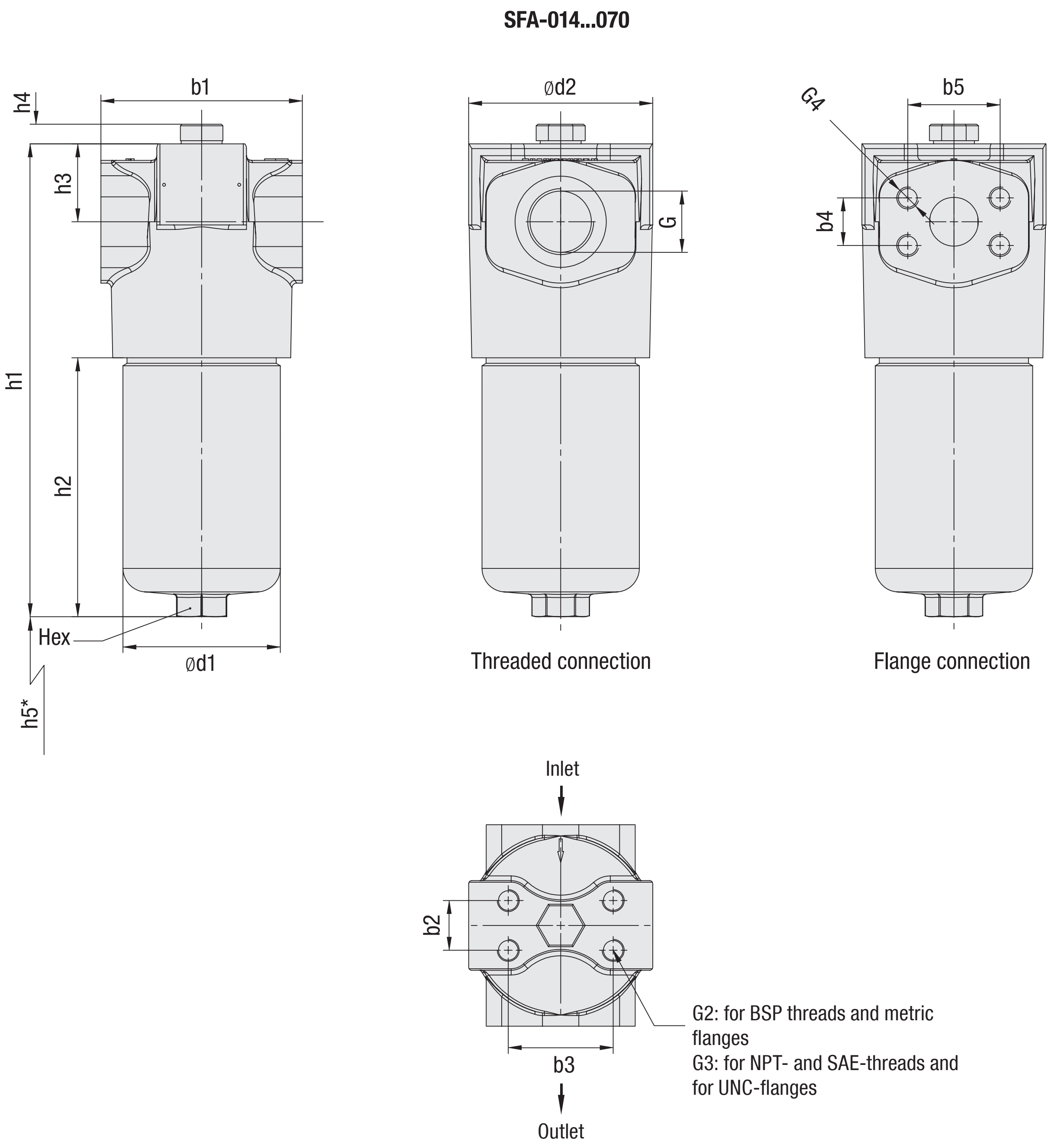
Media Compatibility
- Mineral oils, other fluids on request

Options and Accessories

Valves
- Bypass valve: Allows unfiltered oil to bypass the contaminated element once the opening pressure has been reached, a differential pressure of $6^{+0,5}$ bar / $87^{+7.25}$ PSI Δp is the standard setting. Other settings available upon request.
- Reverse flow valve: Allows reverse flow through the filter head without backflushing the element.
- Non-return valve: Prevents draining of the delivery line during element change.
- Multi-function valve: Opening pressure $6^{+0,5}$ bar / $87^{+7.25}$ PSI
Bypass, reverse flow capability and non-return valve combined in one valve.

Clogging Indicators
- Standard actuating pressure: $5_{-0,5}$ bar / $72.5_{-7.25}$ PSI Δp
Other actuating pressure settings are available upon request.
- Available indicators: Visual
Electrical
Visual-electrical (24 V DC, 110 V AC, 230 V AC versions)
Double Visual-electrical (24 V DC)

Medium Pressure Filters ▪ Type SFA



* recommended space for element change

Medium Pressure Filters ▪ Type SFA

Thread Connection G	Filter Size SFA			
	014	030	045	070
BSP	3/4	3/4	1-1/4	1-1/4
NPT	3/4	3/4	1-1/4	1-1/4
SAE O-ring Thread	1-1/6–12	1-1/6–12	1-5/8–12	1-5/8–12
SAE Flange 3000 PSI	3/4	3/4	1-1/4	1-1/4
Weight (kg/lbs)	2,1	2,54	4,6	5,3
	4.7	5.6	10.2	11.8

Dimensions (mm/in)		Filter Size SFA			
		014	030	045	070
b1		92	92	128	128
		3.62	3.62	5.04	5.04
d1		72	72	100	100
		2.83	2.83	3.93	3.93
d2		86	86	117	117
		3.39	3.39	4.61	4.61
h1		187,5	255	241,5	301
		7.38	10.04	9.51	11.85
h2		78	145,5	105	164,5
		3.07	5.73	4.13	6.46
h3		40	40	49,5	49,5
		1.58	1.58	1.95	1.95
h4		12,5	12,5	12,5	12,5
		.49	.49	.49	.49
h5	rec.*	100	170	140	200
		3.94	6.69	5.51	7.87
	min.*	85	85	120	120
		3.35	3.35	4.72	4.72
Hex		27	27	32	32
		1.05	1.05	1.25	1.25
Dimensions SAE Flange 3000 PSI	b4	22,3	22,3	30,2	30,2
		.88	.88	1.19	1.19
	b5	47,6	47,6	58,7	58,7
		1.87	1.87	2.32	2.32
	G4	M10 x 15 or	M10 x 15 or	M10 x 18 or	M10 x 18 or
		3/8–16 UNC	3/8–16 UNC	7/16–14 UNC	7/16–14 UNC

Reference: rec.*: Recommended | min.*: Minimum

Dimensions (mm/in)		Filter Size SFA			
		014	030	045	070
T	b2	23,8	23,8	31,6	31,6
		.94	.94	1.24	1.24
	b3	50,8	50,8	66,7	66,7
		2.00	2.00	2.63	2.63
	G2	M10 x 15	M10 x 15	M14 x 17	M14 x 17
	G3	3/8–16 UNC x .59	3/8–16 UNC x .59	1/2–13 UNC x .59	1/2–13 UNC x .59

C

Medium Pressure Filter Housings / Complete Filters ▪ Type SFA

SFA - 014 - G - 10 - V - T - G12 - B - P T 230 / X

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫

① Type

Medium Pressure Filter	**SFA**

② Group

Flow	Size
60 l/min / 14 US GPM	**014**
110 l/min / 30 US GPM	**030**
160 l/min / 45 US GPM	**045**
240 l/min / 70 US GPM	**070**

Note: Exact flow will depend on the selected filter element.
For technical data please see pages 57 / 58.

③ Filter Material

Material	max. Δp*collapse	Micron ratings available	Code
Without filter element	-	-	**0**
Inorg. glass fibre	25 bar / 363 PSI		**G**
Inorg. glass fibre	210 bar / 3045 PSI	3, 5, 10, 20	**H**
Stainless fibre	210 bar / 3045 PSI		**A**
Stainless mesh	30 bar / 435 PSI	25, 50, 100, 200	**S**

Note: * Collapse/burst resistance as per ISO 2941.

④ Micron Rating

3 µm	**03**
5 µm	**05**
10 µm	**10**
20 µm	**20**
25 µm	**25**
50 µm	**50**
100 µm	**100**
200 µm	**200**

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 Connection Flange

Type T	**T**

⑦ Connection Style

Connection Style	Thread Style	Group 014	030	Code	Group 045	070	Code
BSP	metric	3/4		**G12**	1-1/4		**G20**
BSP	metric	1		G16	1-1/2		G24
NPT	UNC	3/4		N12	1-1/4		N20
SAE O-ring Thread	UNC	1-1/16-12		U12	1-5/8-12		U20
SAE Flange 3000 PSI	metric	3/4		C312M	1-1/4		C320M
SAE Flange 3000 PSI	UNC	3/4		C312U	1-1/4		C320U
SAE Flange 3000 PSI	metric	1		C316M	-		-
SAE Flange 3000 PSI	UNC	1		C316U	-		-

Note: Other port connections on request. Bold types identify preferred connection styles.

⑧ Valve

Without valve	**0**
Bypass valve	**B**
Reverse flow valve	**R**
Non-return valve	**N**
Multi-function valve	**M**

⑨ Clogging Indicator

Without clogging indicator	**0**
Visual, with automatic reset	**A**
Visual, with manual reset	**V**
Electrical	**E**
Electrical, Deutsch plug	**ED**
Visual-electrical	**P**
Double Visual-electrical	**D024**

⑩ Thermostop

Without thermostop	**none**
With thermostop	**T**

⑪ Voltage (only for Code P)

24 V DC	**024**
110 V AC	**110**
230 V AC	**230**

⑫ Design Code

Only for information	**X**

Filter Elements ▪ Type SE

SE - 014 - G - 10 - B / X

① ② ③ ④ ⑤ ⑥

① Type

Filter Element Series	**SE**

② Group

According to filter housing

③ Filter Material

Material	max. Δp*collapse	Micron ratings available	Code
Inorganic glass fibre	25 bar / 363 PSI		**G**
Inorganic glass fibre	210 bar / 3045 PSI	3, 5, 10, 20	**H**
Stainless fibre	210 bar / 3045 PSI		**A**
Stainless mesh	30 bar / 435 PSI	25, 50, 100, 200	**S**

Note: Collapse/burst resistance as per ISO 2941.

④ Micron Rating

3 µm	**03**
5 µm	**05**
10 µm	**10**
20 µm	**20**
25 µm	**25**
50 µm	**50**
100 µm	**100**
200 µm	**200**

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**