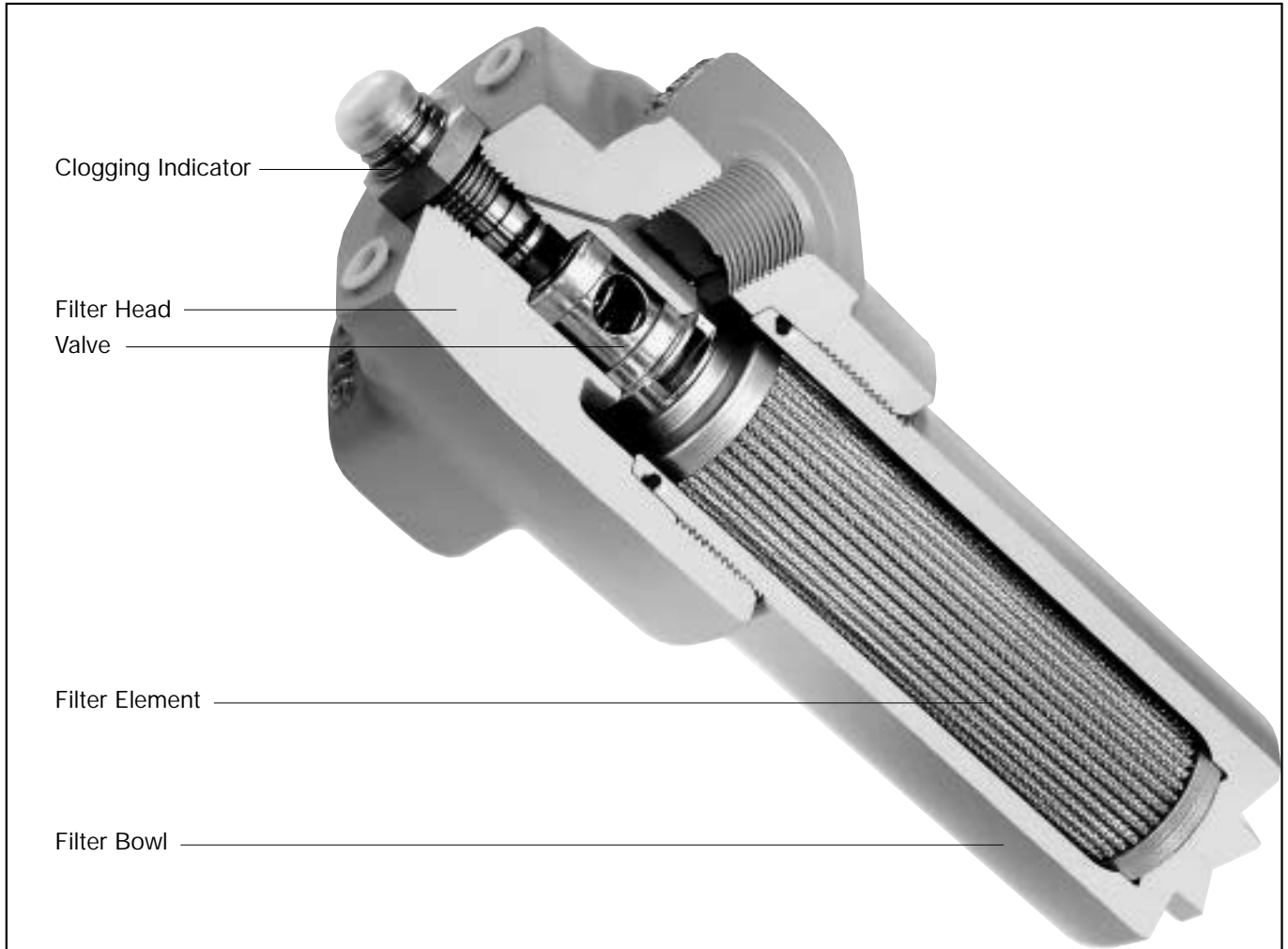


Technical Data

STAUFF high pressure filters are designed for in-line hydraulic applications, with a maximum operating pressure of 420 bar. Used together with STAUFF filter elements, a high efficiency of contaminant removal is assured. The high dirt holding capacity of the elements ensures long service life and, as a result, reduced maintenance.



Technical Specification

Construction	In-line assembly, with threaded mounting holes on top of head	Reverse flow valve	Allows reverse flow through the filter head without backflushing the element
Filter head	Spheroidal graphite cast iron	Non-return valve	Prevents draining of the delivery line during element change
Filter bowl	Cold drawn steel	Multi-function valve	Forward bypass, reverse flow capability, and non return valve (opening pressure 6 ^{-0.5} bar Δp) all in one valve
Seals	O-Rings NBR (Buna-N), FPM (Viton), EPDM (Ethylene-propylene), Support ring PTFE	Clogging indicators	Visual, 5-0.5 bar Δp actuating pressure Electrical, 5-0.5 bar Δp Visual/electric, 5-0.5 bar Δp (24 V, 110 V, 220 V versions)
Port connection	BSP, NPT, SAE "O"-Ring thread, or SAE Code 62 flange	Filter elements	Specification see page 8.
Operating press. max.	420 bar	Media	Mineral oils; other fluids on request
Proof pressure	630 bar		
Burst pressure	>1260 bar		
Temperature range	-10°C up to +100°C		
Bypass valve	Allows unfiltered oil to bypass the contaminated element once the opening pressure has been reached		

Valves

The optional valves are fitted as an insert in the filter head and incorporate the spigot on which the element seals. The valve is selected to suit the filter application.

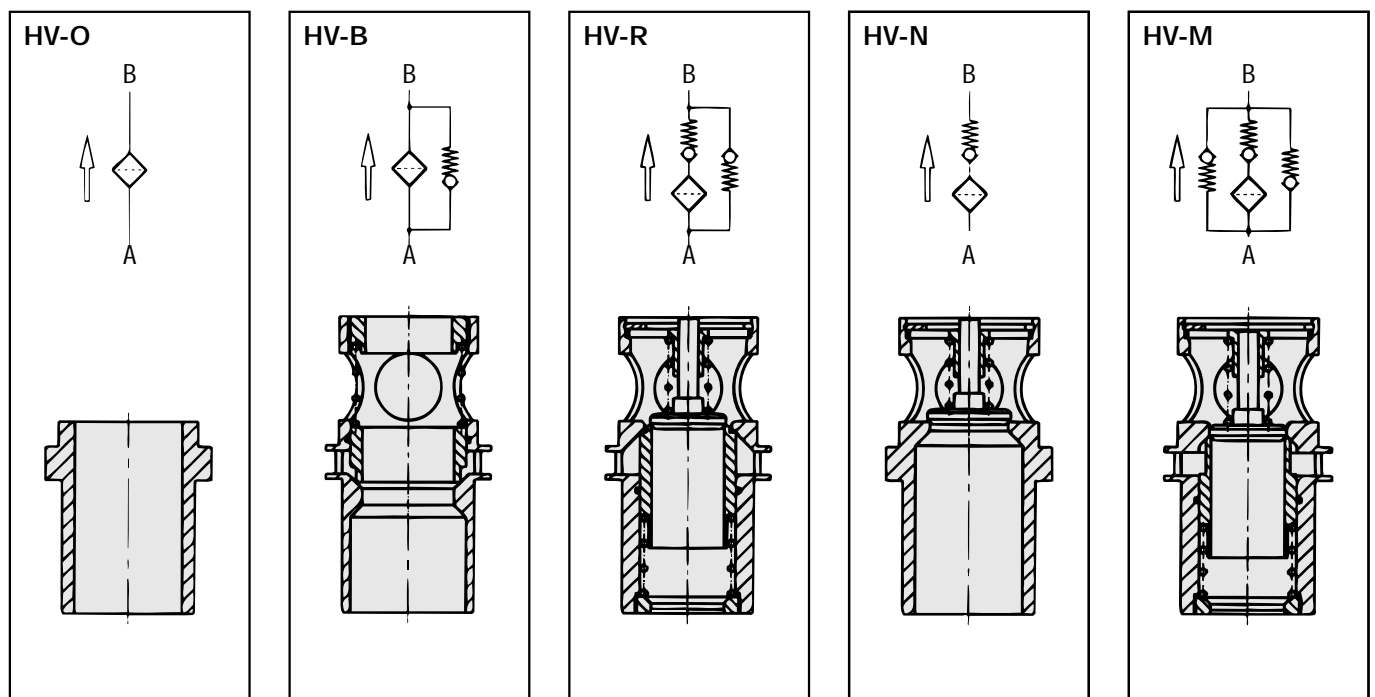
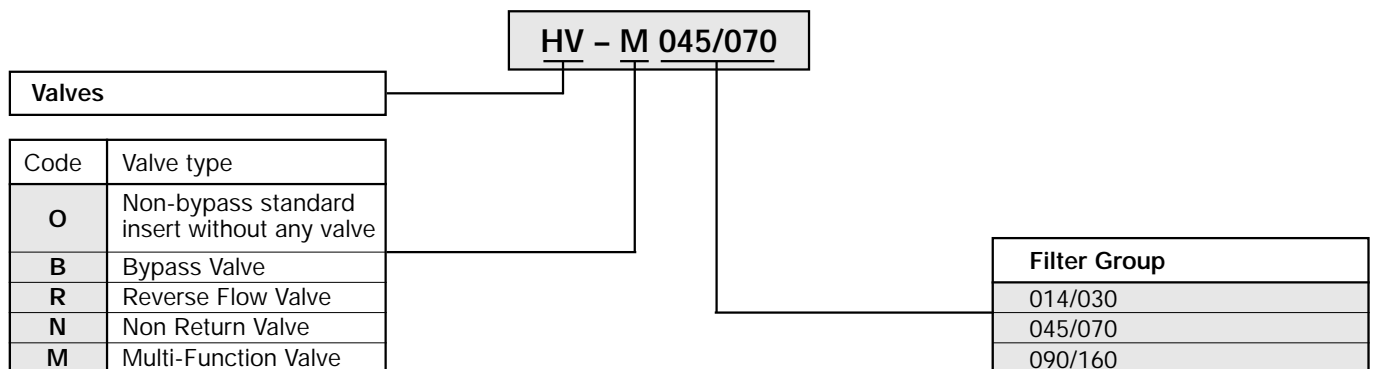
HV - O **Non-bypass standard insert** without any valve function. Element collapse rating should be higher than system pressure.

HV - B **Bypass valve** which allows oil to bypass the element when the differential pressure across the element reaches $6^{+0.5}$ bar. (Other pressure settings available on request). The opening pressure should be higher than the Δp setting of an optional clogging indicator. Low collapse (30 bar Δp) elements are normally used with this valve.

HV - R **Reverse flow valve** is used in systems where there is flow in reverse through the filter. It allows reverse flow without back-flushing the element but does not filter in the reverse direction. High collapse elements (210 bar Δp) are normally used with this valve.

HV - N **Non-return valve**
This valve prevents the oil in the delivery line from draining out while the filter is being serviced. Because there is no by-pass, the element collapse rating should be higher than system pressure.

HV - M **Multi-function valve**
This valve combines the by-pass, the reverse flow, and the non-return functions in one unit. The by-pass opening pressure is $6^{+0.5}$ bar Δp with other opening pressures available on request. The opening pressure should be higher than the Δp setting of an optional clogging indicator.



Clogging Indicators

STAUFF pressure filters have a range of clogging indicators available as an option. If no indicator is specified, the port is sealed by a plug (HI-O). The clogging indicators are actuated by the differential pressure (Δp) across the element and the special piston design minimises the effects of peak pressures in the system. An optional thermostatic lockout (thermostop) is available to prevent false indication under cold start conditions. Fluid temperature must be at least 20°C for the indicator to function.

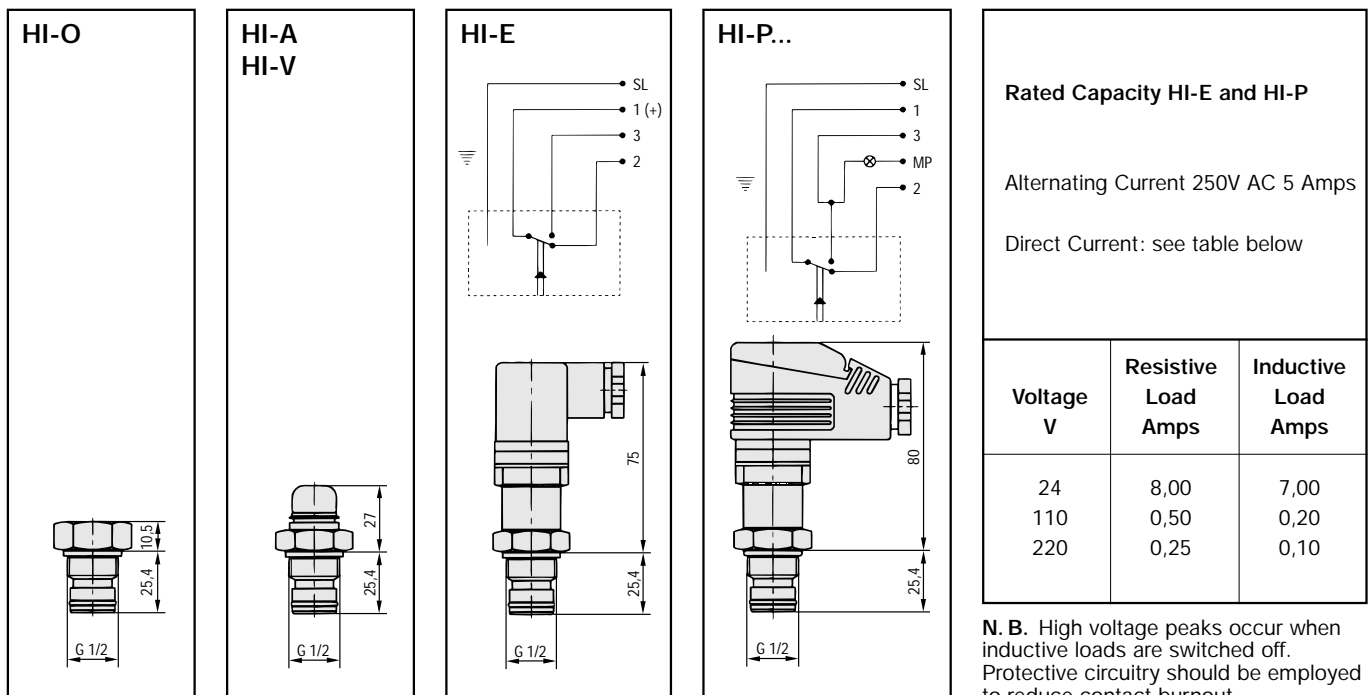
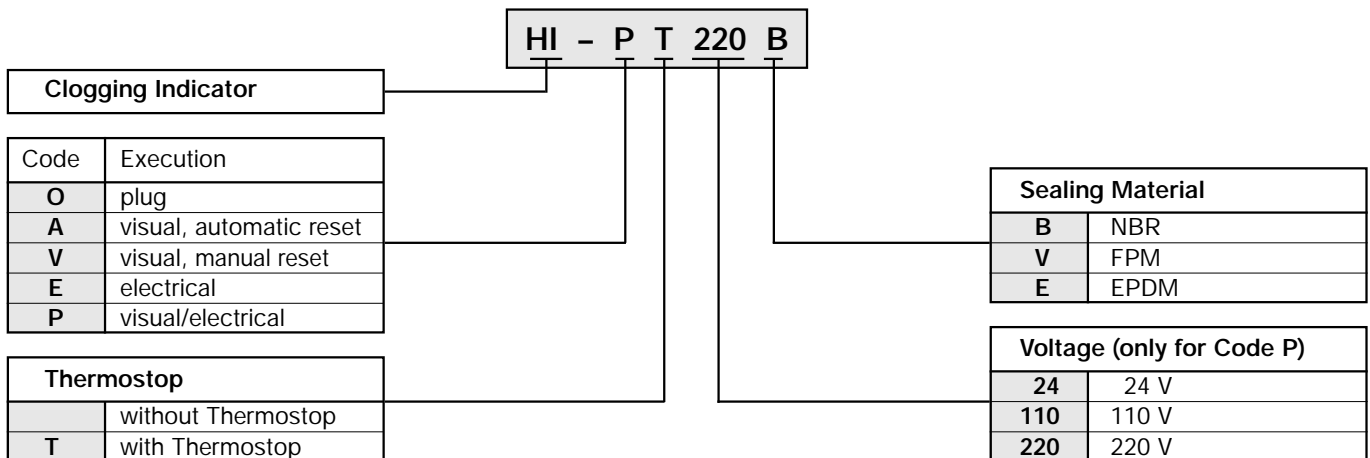
Technical Specification

Body	Stainless steel
Seals	NBR, FPM, EPDM Seal 18,5 x 23,9 x 2 mm O-Ring 15,5 x 1,5 mm
Thread	1/2" BSP
Differential pressure setting	5-0.5 bar (other settings on request)
Electrical	Standard DIN appliance plug Screwed cable gland PG 11 Protection rating (DIN 40050) IP65 Both NO and NC contacts are available in the switch Rated capacity: see chart

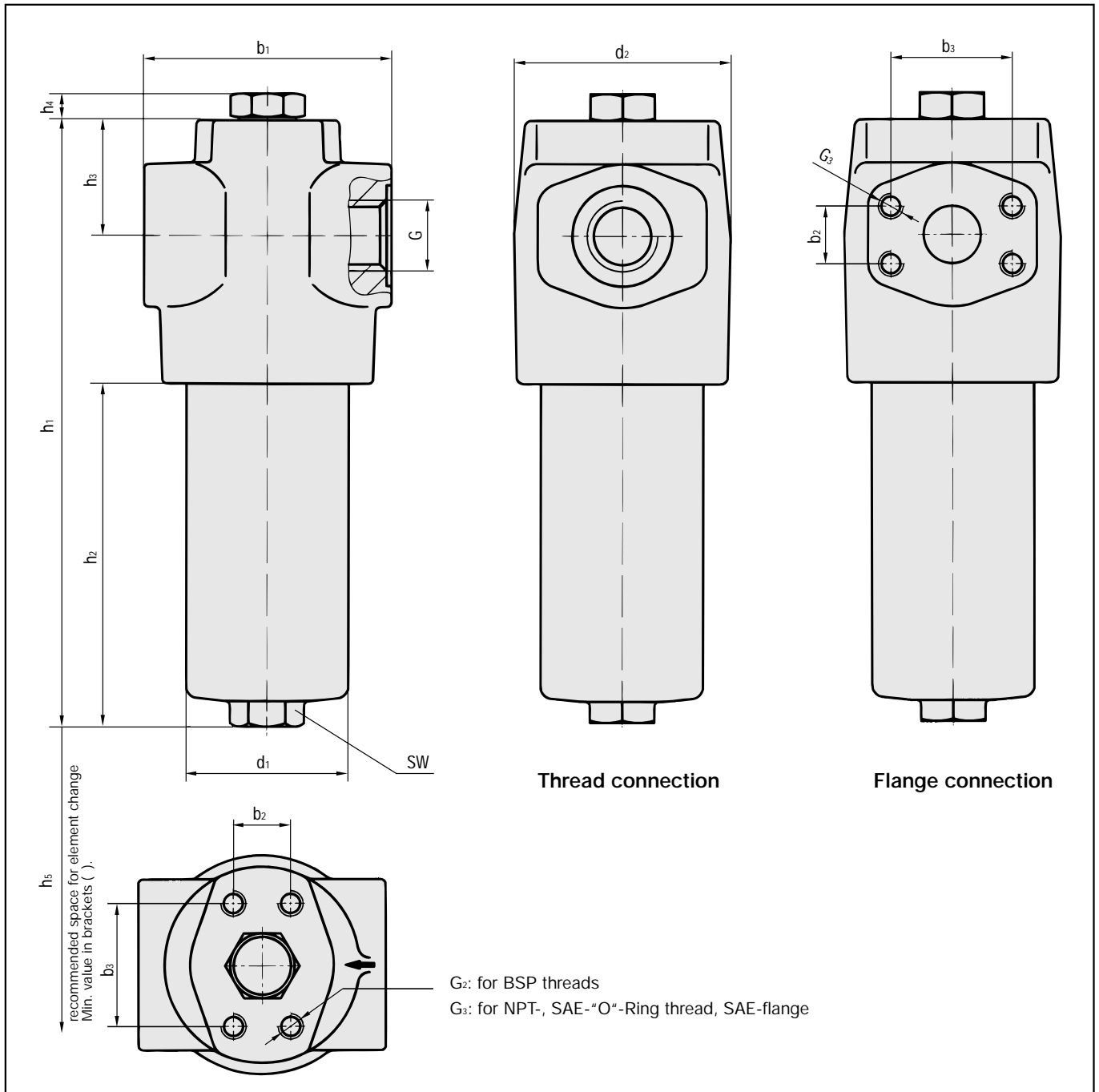
The visual clogging indicators are available in the following configurations:

- Manual reset** The indicator continues to display the clogged signal even through the Δp may have fallen. Pressing the plastic cover down will reset the indicator.
- Automatic reset** The clogged signal will disappear when the Δp drops below the setting for the indicator.

Electrical and visual-electrical clogging indicators are only available with automatic reset.



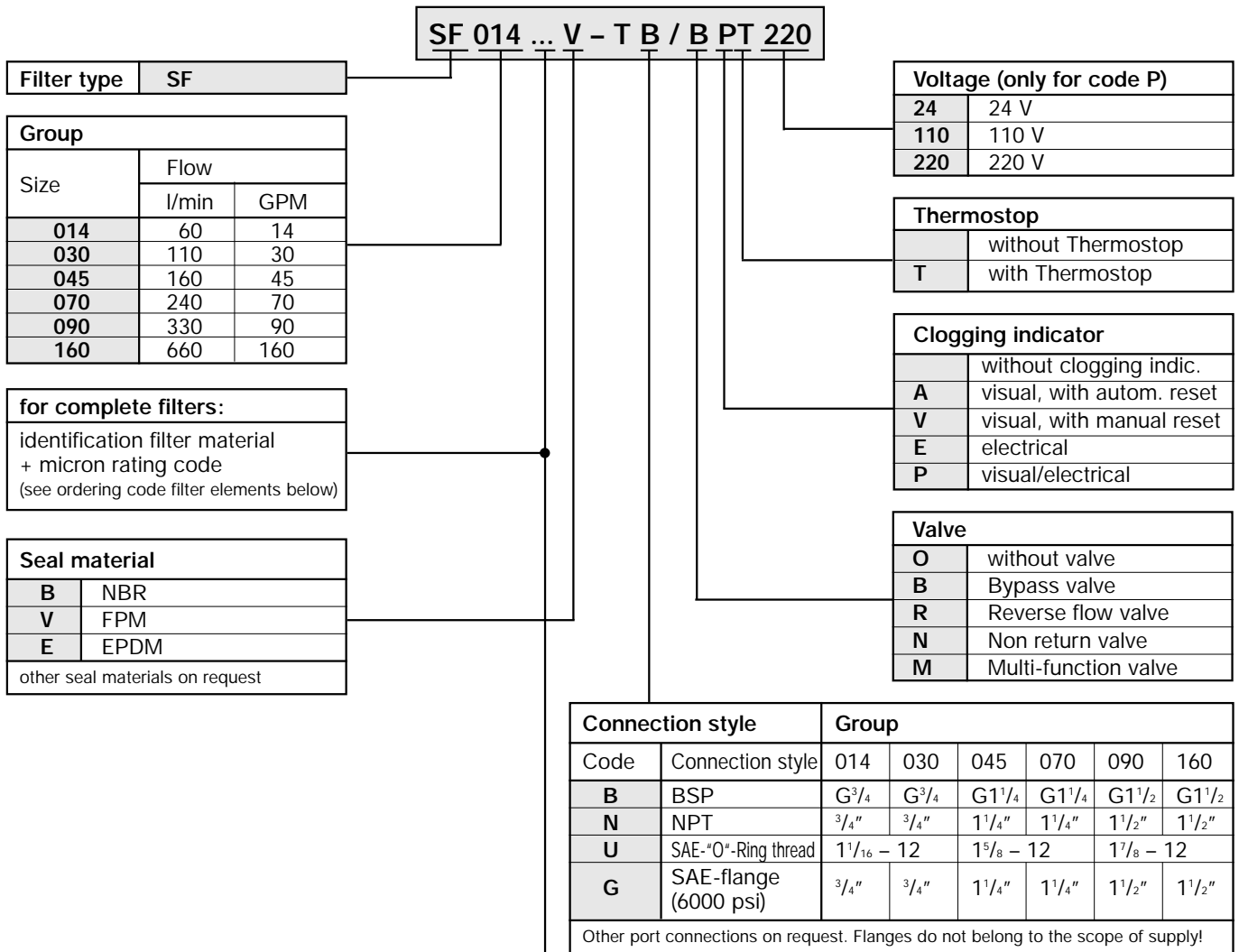
Dimensions



Dimensions Pressure Filters

Filter Size	Thread connection G				Dimensions													Weight including elements
	BSP	NPT	SAE-"O"-Ring thread	SAE-flange 6000 psi	b_1	b_2	b_3	d_1	d_2	h_1	h_2	h_3	h_4	h_5	G_2	G_3	SW	
SF 014	G 3/4"	3/4"	1 1/16"-12 UN	3/4"	104	23,8	50,8	68	83	188	78	48	12,5	100	M 10 x 14	3/8 UNC x 15	27	5 kg
SF 030										254	144			170				6 kg
SF 045	G 1 1/4"	1 1/4"	1 5/8"-12 UN	1 1/4"	140	31,6	66,7	95	116	239	103	49,5	12,5	140	M 14 x 20	1/2 UNC x 20	32	12 kg
SF 070										298	161			200				13 kg
SF 090	G 1 1/2"	1 1/2"	1 7/8"-12 UN	1 1/2"	178	36,7	79,4	130	159	323	148	72	12,5	190	M 16 x 20	5/8 UNC x 20	36	29,5 kg
SF 160										494	319			360 (225)				37 kg

Ordering Code Filter Housings



Ordering Code Filter Elements

