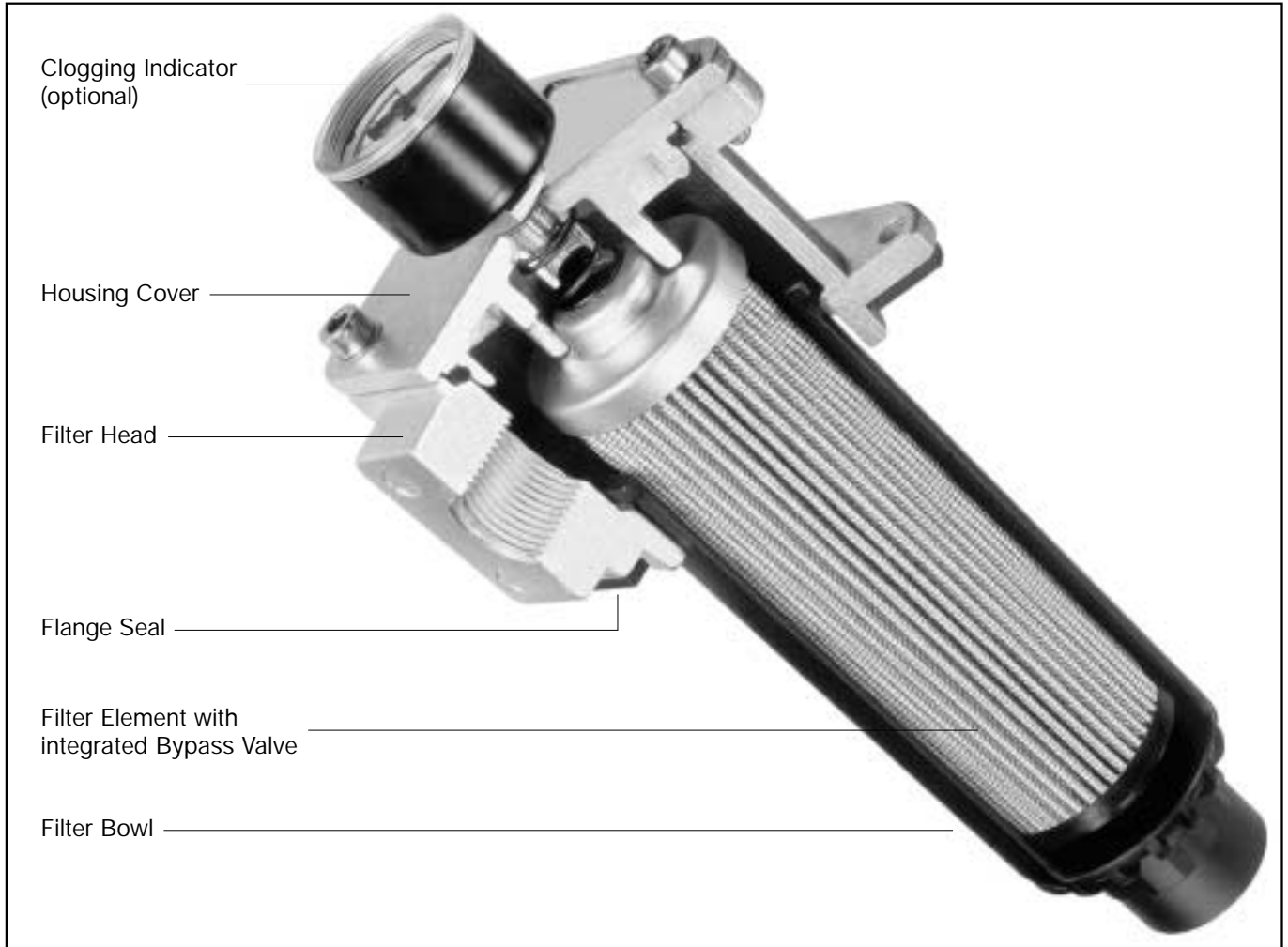


Technical Data

STAUFF RF return line filters are designed as tank top filters. They are mounted directly on the tank top and if 100% of the system oil is filtered, they provide the optimum removal of contaminant from the system. This provides the pump with clean oil thus reducing contaminant generated wear. The filter bowl or funnel is designed to return the oil beneath the surface thus preventing the entrainment of air by the returning oil.



Technical Specification

Construction	Tank Top flange mounting	Clogging indicator	Gauge type indicator 0...4 bar coloured segments; Electrical switch, setting 2,5 bar
Filter head	Aluminium	Filter elements	Specification see page 12.
Filter bowl	Steel	Media	Mineral oils, other fluids on request
Seals	NBR (Perbunan), FPM (Viton) or EPDM (Ethylene-Propylene)		
Threaded connection	BSP, NPT- and SAE-"O"-Ring thread as well as SAE-flange (3000 psi)		
max. Operating press.	16 bar		
Proof pressure	24 bar		
Temperature Range	-10 up to +100°C		
Bypass valve (integrated in the filter element)	Opening pressure 3 bar ± 0,3 bar other pressures on request		

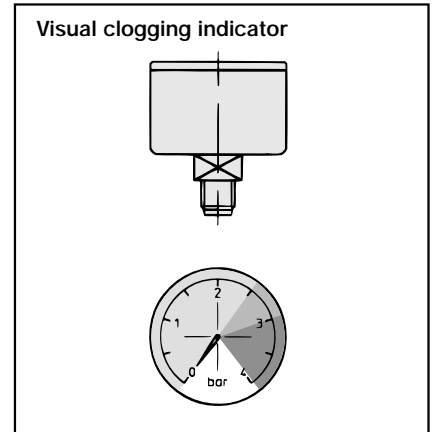
Options

1. Visual clogging indicator

The gauge visually displays the degree of contamination of the element. The coloured segments allow quick visual checking.

green	0...2,5 bar	element has service life left
yellow	2,5...3,0 bar	element is contaminated and should be changed
red	> 3,0 bar	bypass valve open, unfiltered oil passing to tank

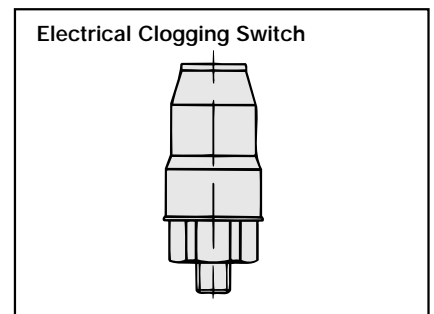
The clogging indicator can be mounted on the top or on the side of the filter head (see drawing on page 10).



2. Electrical clogging switch

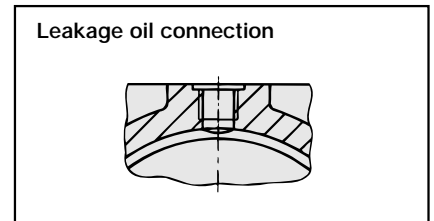
The switch is used where an electrical signal is needed to indicate when the element needs changing. The switch can turn on a light, or shut the machine down, or any other function controlled by an electric signal. The switching pressure is 2,5 bar and this allows the element to be changed before the bypass setting of 3 bar is reached.

Maximum Voltage	Max. Current	Switch Type
42 V		G 42
110 V		G 110
220 V		G 220



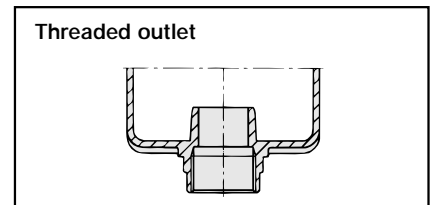
3. Leakage oil connection

Seal or case drain lines can be connected to the filter through either of the clogging indicator ports providing that the leakage oil can accept a pressure of 3 bar. It ensures that no un-filtered oil can return to the reservoir. It may save the cost of a manifold.



4. Filter bowl with threaded connection

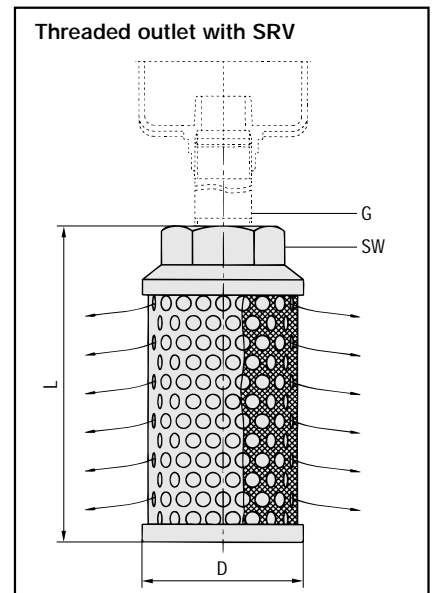
Under some circumstances such as a tall reservoir or one with oil levels which vary greatly during operation, it is necessary to extend the filter bowl so that the returning oil returns beneath the surface and does not entrain air in the process. The optional bowl with a female thread allows an extension to be fitted quite simply.



5. Filter bowl with threaded connection and diffuser

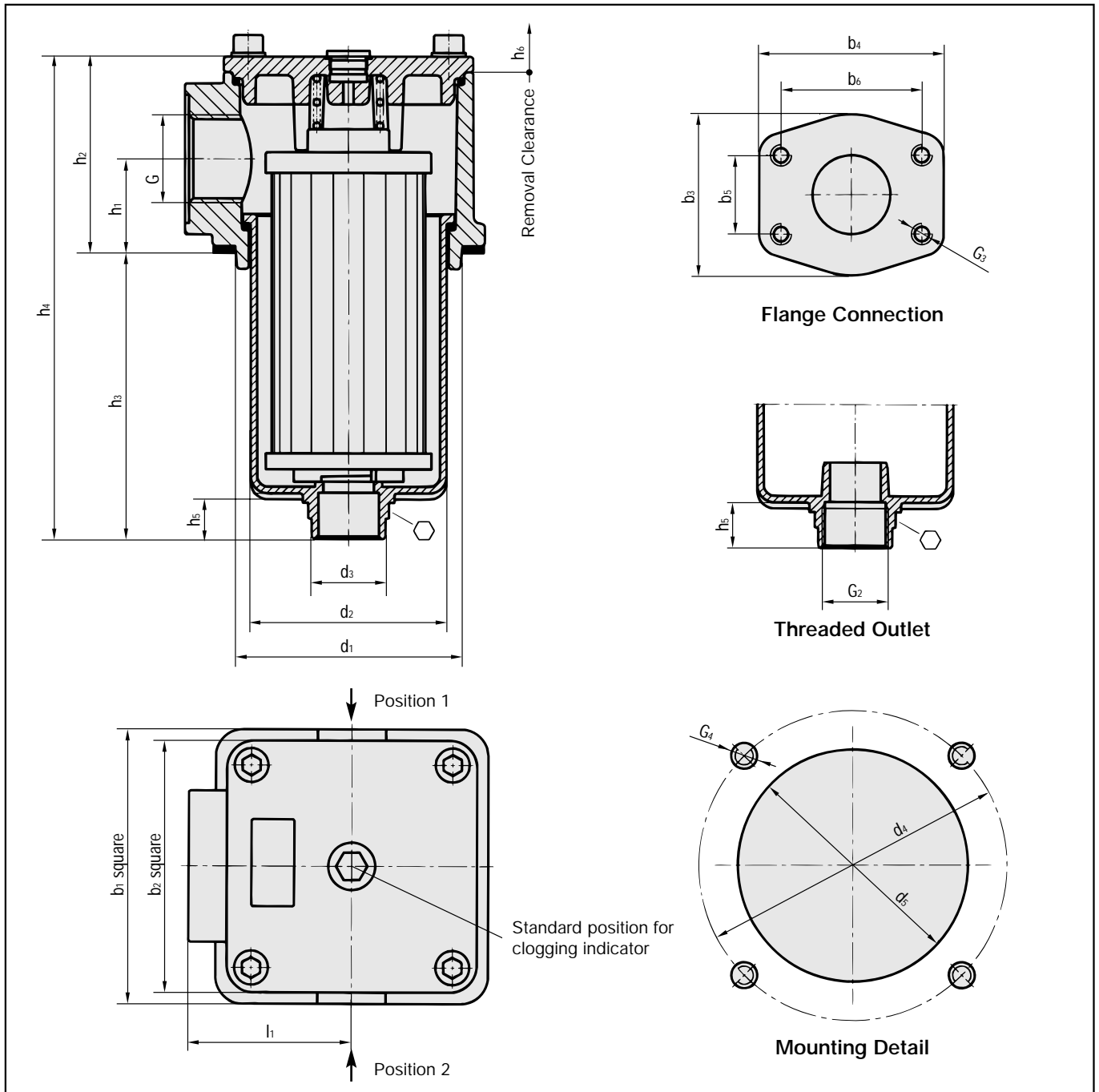
Diffusers mounted to the filter bowl minimize foaming and reduce noise of backstreaming fluids. For further details on STAUFF diffusers please refer to our catalogue "Hydraulic Accessories".

N. B.: Adaption tubes are not included in the range of items delivered!



Size SRV	Dimensions			
	ø D	L	Thread G	SW
for RF 014/030	60	139	G 1	46
for RF 045/070	82	200	G 1 1/4	60
for RF 090/130	82	200	G 1 1/2	60

Dimensions



Dimensions Return Line Filters

Filter Size	Thread connection G				Dimensions																					
	BSP	NPT	SAE-"O" Ring thread	SAE- flange 3000 psi	b ₁	b ₂	b ₃	b ₄	b ₅	b ₆	d ₁	d ₂	d ₃	d ₄	d ₅	h ₁	h ₂	h ₃	h ₄	h ₅	h ₆	l ₁	G ₂	G ₃	G ₄	
RF 014	G 3/4	3/4"	1 1/16-12 UN	-	89	80					73	57,5	36	100	78	33	66	91,5	157,5	23,5	140	48	G 1			M 6
RF 030	G 1	1"	1 5/16-12 UN	-														159,5	225,5		210					
RF 045	G 1 1/4	1 1/4"	1 5/8-12 UN	-	120	110					100	84	48	135	105	41	86	119	206	24	180	66	G 1 1/4			M 8
RF 070	G 1 1/2	1 1/2"	1 7/8-12 UN	-														180	267		240					
RF 090	G 2	2"	1 7/8-12 UN	2"	150	135	88	102	42,9	77,8	126	112,5	54,5	170	131	47	98	172,5	273,5	27	235	85	G 1 1/2	1/2 UNC 15 deep		M 10
RF 130	G 2	2"	1 7/8-12 UN	2"														252,5	353,5		315					

Ordering Code Filter Housings

RF 090 ... B / B M2 G L1

Filter type	RF		
Group			
Size	Flow		
	l/min	GPM	
014	60	14	
030	110	30	
045	160	45	
070	240	70	
090	330	90	
130	500	130	
for complete filters:			
identification filter material + micron rating code (see ordering code filter elements below)			
Seal material			
B	NBR		
V	FPM		
E	EPDM		
other seal material on request			

Additional Features		Pos.*	
L	Leakage oil connection	1	2
*) position of leakage oil connection see page 10 without any code: assembly in the middle of the filter cover			

Outlet Style	
O	Standard outlet (without thread)
G	Filter bowl with threaded outlet

Clogging indicator see page 10		Pos.*	
M	Pressure gauge	1	2
G 42	Electrical switch 42 V		
G 110	Electrical switch 110 V		
G 220	Electrical switch 220 V		
*) position of clogging indicator see page 11 without any code: assembly in the middle of the filter cover			

Connection style		Group					
Code	Connection style	014	030	045	070	090	130
B	BSP	G ³ / ₄	G1	G1 ¹ / ₄	G1 ¹ / ₂	G2	G2
B 1	BSP	G ¹ / ₂	G ¹ / ₂	G1 ¹ / ₂	G1 ¹ / ₄	G1 ¹ / ₄	G1 ¹ / ₄
B 2	BSP	G1	G ³ / ₄	–	–	G1 ¹ / ₂	G1 ¹ / ₂
N	NPT	³ / ₄ "	1"	1 ¹ / ₄ "	1 ¹ / ₂ "	2"	2"
N 1	NPT	1"	³ / ₄ "	1 ¹ / ₂ "	1 ¹ / ₄ "	1 ¹ / ₂ "	1 ¹ / ₂ "
U	SAE-"O"-Ring thread	1 ¹ / ₁₆	1 ⁵ / ₁₆	1 ⁵ / ₈	1 ⁷ / ₈	1 ⁷ / ₈	1 ⁷ / ₈
U 1	SAE-"O"-Ring thread	1 ⁵ / ₁₆	1 ¹ / ₁₆	1 ⁷ / ₈	1 ⁵ / ₈	1 ⁵ / ₈	1 ⁵ / ₈
F	SAE-flange (3000 psi)	–	–	–	–	2"	2"
Flanges do not belong to the scope of supply!							

Ordering Code Filter Elements

RE 090 G 10 B

Series	RE		
Group			
according to filter housing			
Filter material			Micron ratings available
Code	Material	max. Δp*	
A	Stainless fiber	30 bar	03, 05, 10, 20
N, D	Paper	16 bar	
G, E	Inorganic glass fiber	30 bar	
S, B	Stainless mesh	30 bar	25, 40, 60, 100
*) collapse / burst resistance as per ISO 2941			

Seal material	
B	NBR
V	FPM
E	EPDM
other seal materials on request	

Micron rating	
03	3 µm
05	5 µm
10	10 µm
20	20 µm
25	25 µm
40	40 µm
60	60 µm
100	100 µm
other micron ratings on request	