



# LSS 1 & LSS 1 RF Strainer Filters

1 - 8 mm / 63 - 5280 m<sup>3</sup>/h  
0,5 - 8 mm / 63 - 5280 m<sup>3</sup>/h (RF)

HiFlux LSS 1 Strainer Filters have been developed especially for use as protection filters for distribution and transmission systems in the energy sector.

The filters are used to protect pumps, heat exchangers, valves, boilers, pipes, etc.

In the filter design importance has been attached to optimising the flow conditions in such a way that maximum capacity is achieved with minimum loss of pressure throughout the period of operation. This has been achieved by means of a special filter strainer design which ensures that retained dirt is not kept in or on the filter surface, but is deposited either in the filter strainer or the filter housing. This leaves an active and open filter area throughout the period of operation, resulting in extremely low energy consumption and longer intervals between the need for manual cleaning.

The energy consumption for operation of the LSS 1 filter is typically 70 to 80% lower than conventional filters and dirt collectors. In a simple cycle of a DN 100 size this can lead to savings of up to 22,000 kWh in reduced energy consumption.

The filter is supplied in two standard versions, with the dirt either being retained in the strainer insert: Type LSS 1, or deposited in the filter housing: Type LSS 1 RF. The version with depositing in the filter housing makes it possible to remove the sludge through a drain in the bottom without interrupting the flow through the filter.

The type with sludge removal in the bottom is often used in systems with high sludge loads. Sludge removal may be carried out via a valve lock, thereby preventing large pressure surges in the system.

The filter housing is manufactured in welded certified steel and designed for compact installation in systems with high pressure and temperature. The production process is covered by strict quality control, which includes material tests with full traceability, continuous process tests, welding tests in accordance with production and design norms and hydraulic pressure testing according to EN 13445, material certificates EN 10204 3.1, NDT report from welding tests and EC Declaration of conformity according to PED directive 97/23/EC.

The filter strainer has been developed to resist powerful impacts from large foreign bodies which could be carried through the system at high speed. LSS 1 and LSS 1 RF are supplied as standard with 1 mm, 3 mm, 6 mm and 8 mm filtration. LSS 1 RF can also be supplied with 0.5 mm filtration.

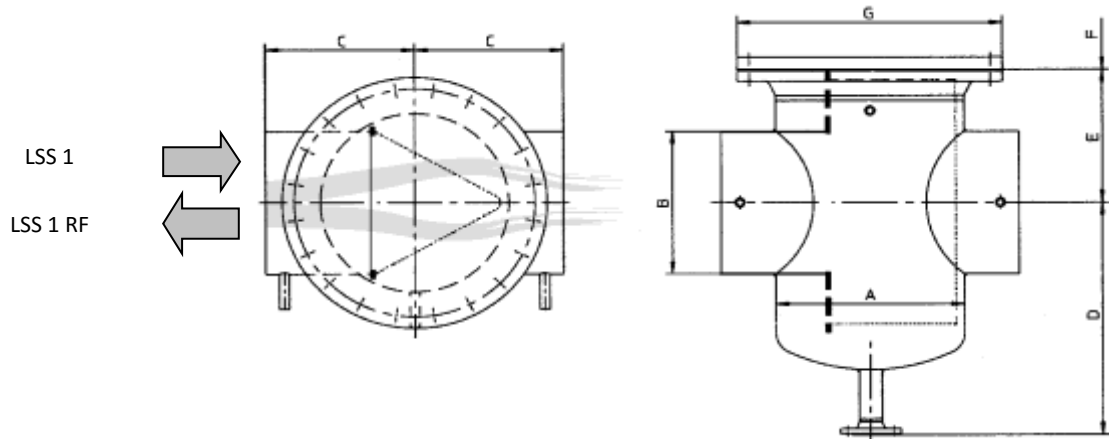
The air vent is built into the side of the filter housing and makes it possible to connect it to a vent circuit which does not need to be disassembled when the filter is cleaned as the cover can be removed freely.

Special versions with regard to building-in, capacity, temperature and pressure can be made in co-operation with our design department. The filter is as standard manufactured according to PED 97/23/EC.





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Type	A mm	B mm	C mm	D mm	E mm	F mm	G		Drain DN	Air vent Plug
							TN 16 mm	TN 25 mm		
LSS 1-80	139,7	88,9	155	270	140	260	250	270	25	G½B
LSS 1-100	168,3	114,3	175	300	160	290	285	300	25	G½B
LSS 1-125	219,1	139,7	200	320	175	330	340	360	25	G½B
LSS 1-150	273	168,3	240	365	200	440	405	425	25	G½B
LSS 1-200	323,9	219,1	300	415	230	510	460	485	25	G½B
LSS 1-250	355,6	273	365	480	285	580	520	555	25	G½B
LSS 1-300	406,4	323,9	425	515	320	650	580	620	50	G½B
LSS 1-350	457,2	355,6	490	555	350	700	640	670	50	G½B
LSS 1-400	508	406,4	550	660	380	830	715	730	50	G½B
LSS 1-500	610	508	590	770	525	1100	840	845	50	G1B
LSS 1-600	711	610	600	850	600	1150	910	960	50	G1B
LSS 1-700	914	711	700	900	650	1200	1125	1185	50	G1B
LSS 1-800	1016	813	700	1000	700	1300	1255	1320	50	G1B

Design pressure: 16 bar or 25 bar  
 Test pressure: According to EN 13445  
 Max. differential pressure: 1,0 bar  
 Max. working temperature: 110° C (water) or according to customer requirements  
 Connection: Weld ends (also comes with flanges), 2 pressure outlets G½B

Capacity:  
 (as a pressure filter at a differential pressure of 0.1 bar and a viscosity of 1 cSt)

Type	Strainer area cm <sup>2</sup>	Capacity m <sup>3</sup> /h	Type	Strainer area cm <sup>2</sup>	Capacity m <sup>3</sup> /h
LSS 1-80	270	63	LSS 1-350	3800	980
LSS 1-100	400	98	LSS 1-400	5020	1280
LSS 1-125	680	147	LSS 1-500	8150	1980
LSS 1-150	1150	215	LSS 1-600	11880	2940
LSS 1-200	1730	360	LSS 1-700	15000	4030
LSS 1-250	2220	580	LSS 1-800	18375	5280
LSS 1-300	3000	820			

NB. For LSS 1 RF capacity must be reduced by 10% in the above table.