

Pipeline Ancillaries

Strainers and Filters SF 2.001

Sieve Basket Strainer for Large Diameters



Technical Data

Connection DN	50 - 1000
Nominal Pressure PN	16 - 40
Temperature	50 °C (optional 450 °C)
Medium	liquids, gases and steam

Description

Strainers protect plant and equipment such as regulators, valves, measuring equipment against damage or operational failure caused by contamination. They are essential for start-up as well as continuous operation.

SF 2.001 is a welded construction made of steel, optionally of stainless steel or special materials such as Duplex, Hastelloy® or Monel. The basket strainer is equipped with a ventilation sleeve in the cover and with a drain plug in the bottom of the body. Owing to the basket posed perpendicularly to the direction of flow and the straight throughflow, pressure loss in the dirt collecting chamber is relatively small.

For larger nominal diameters, the installation of a strainer with the cover pointing upwards is recommended.

Various versions, materials and accessories are available (see options).

Cleaning is extremely simple and quick. Only the cover has to be removed for dismantelling.

Standard

- » Body of welded steel
- » Basket of stainless steel
- » Ventilation sleeve in the cover
- » Drain plug in the bottom of the body
- » Primed and varnished as per RAL 5010 blue

Options

- » Completely made of stainless steel (pickled and passivated)
- » Strainer mesh sizes 0.1 - 10 mm
- » Differential pressure display
- » Quick-lock mechanism
- » Supporting feet
- » Cover lifting and pivoting device
- » Special materials such as Duplex, Hastelloy® or Monel
- » Various seal materials suitable for your medium
- » Special connections: ANSI or JIS flanges, welding spigots; other connections on request
- » Special versions on request

Operating instructions, know how and safety instructions must be observed. All the pressure has always been indicated as overpressure. We reserve the right to alter technical specifications without notice.



The figure shows optional accessories

Sieve Inlet

nominal diameter DN	mesh size	filter area [cm ²]	open screen area	volume
50	0.5 mm	225	22%	2.2 l
65	0.5 mm	350	22 %	4 l
80	0.5 mm	500	22 %	6 l
100	0.5 mm	825	22 %	14 l
125	0.5 mm	1262	22 %	16 l
150	0.5 mm	1916	22 %	26 l
200	1 mm	2970	23 %	60 l
250	1 mm	4704	23 %	90 l
300	1 mm	6834	23 %	165 l
350	1 mm	8156	23 %	265 l
400	1 mm	10775	23 %	410 l
500	1 mm	17013	23 %	780 l

Calculation of flow resistance

$$\Delta p = \zeta \cdot w^2 / 2 \cdot \rho \cdot 10^{-5} \text{ [bar]}$$

ζ = Coefficient of flow resistance

w [m/s] = Flow velocity

ρ = [kg/m³]: Density of medium

Exact calculation considering the operating conditions by request.

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Materials

Temperature	50 °C
Body	St 35.8
Cover	C 22.8
Body Seal	Graphit
Screen	stainless steel
Siebkorb	CrNi-steel

Dimensions [mm] PN 16*

size	nominal diameter DN					
	50	65	80	100	125	150
A	230	290	310	350	400	480
B	145	164	188	237.5	280	333
C	228	280	328	423	502	602
øD	114.3	139.7	168.3	219.1	273	323.9
G*	G 1/2	G 1/2	G 1/2	G 1/2	G 1/2	G 1/2
H*	G 1/2	G 1/2	G 1/2	G 1/2	G 1/2	G 3/4

Weights [kg] PN 16*

nominal diameter DN						
50	65	80	100	125	150	
23	28	38	55	62	90	

Dimensions [mm] PN 16*

size	nominal diameter DN					
	200	250	300	350	400	500
A*	600	730	850	980	1100	1250
B	401	508	601.5	662	756	939.5
C	732	932	1111	1214	1386	1731
øD	355.6	457	508	610	711	813
G	G 1/2	G 1/2	G 1/2	G 3/4	G 3/4	G 3/4
H	G 3/4	G 1	G 1	G 1 1/2	G 1 1/2	G 1 1/2

* Overall length tolerances in acc. with DIN EN 558

Weights [kg] PN 16*

nominal diameter DN					
200	250	300	350	400	500
185	230	425	660	920	1550

* DN 600 - 1000 and other pressure rates on request

Customs Tariff Number

84818099

Special designs on request.

The pressure has always been indicated as overpressure.

Mankenberg reserves the right to alter or improve the designs or specifications of the products described herein without notice.

Dimensional Drawing

