Self cleaning filtersystem

SRF

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SRF itenglisch/PM6/rev.01.03by wiLa

Selfcleaning Filter system *SRF*

The self cleaning filter system *SRF* is the consequent alternative for an exonomic and environmental adequate filtration method, which is a perfect for application of hydrous and viscous media. This revolutionary but simple filter system offers many advantages.

> No stillstnd periods during selfcleaning of the filter

> High rentability by minimising the maintenance and oper ation costs

> Eronomic and sturdy design

> Filter rates from 5o to 5000 micron

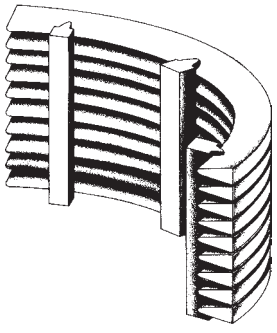
> Special design resp. integration of design to individual requirements

> TÜV/ASME appoval, electrical driven motor (also with ex-protection) or pneumatically driven Material, pressure and temperature design according to individual choice

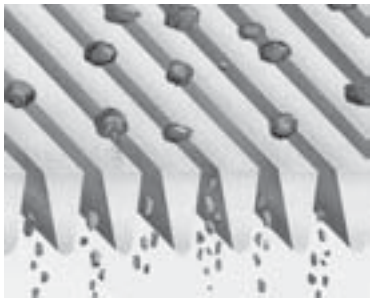
The filter system *SRF* was not only designed at the drawing board and then manufactured. Moreover the system has been improved by many years of experience in practical operation and and adjusted to the pracical requirements and technical innovations.

Essentially the filter system *SRF* consists of a two-part pressure vessel in which a filter element is mounted, which is moved continously by an electric or pneumatic gear (if required also discontinously by controlling with difference pressure or time control unit. Caused by those movements the contamination deposited at the filter element will be separated by the integrated cleaning scraper.

The filter element consists of an edge wire narrowed inside which is wound around a profile wire construction. The edge wire is welded firmly with the prfile wire at the contact points. This construction grants that the winding cannot "coil" in case the edge wire is damaged at one spot.
The density (winding space) of winding determins the filter rate.



This constructions effect a smooth surface at the filter element. The narrowing of the edge wire prevents an obstruction of the filter.
The flow direction is from outside toinside.



Description of procedure method

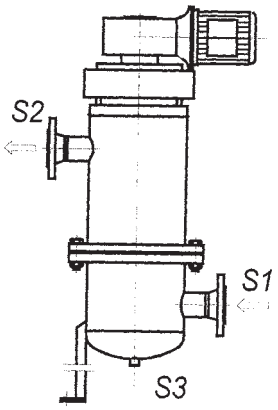
The filter *SRF* consists of a two-part housing, below with a demountable sump, which is mounted to the upper part with a qick closure connectiondepending on the execution either with bolt closure or clamp screws). In the upper part the rotatable filter element with integrated cleaning scraper system is adjusted. The contamination will be directed over the cleaning system into the lower contamination collector and can be discharged manually or automatically via the shutoff devices.

Disposal/Execution of Inlet- Outlet nozzles

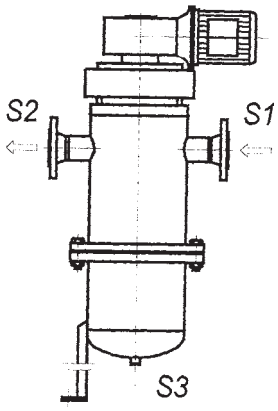
There are two versions "A" and "B".

Version "A" with inlet and outlet nozzle laterally arranged one above the other. We prefer this version as it creates no ergonometical problems. This is especially important for media with high viscosity.

In version "B" inlet- outlet nozzle is located at one level opposite each other. Due to design requirments the required housing diameter is larger compared to version "A".



Version "A"



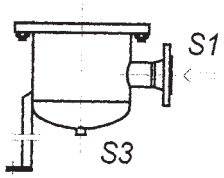
Version "B"

Versions of lower contamination collector

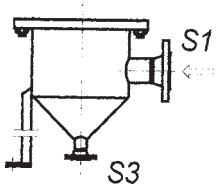
Also here we differ two version, i.e.

Vesion "A" = Head shape

Version "B" = cone shape



version "A"



version "B"

General execution

Material filter housing	:	1.4301,1.4541,1,4571,C-Stahl od. nach Wahl
Material filter elemenent	:	AISI 316(1.4435)
Operating pressure	:	6 bar or acc. to choicel
Operating temp.	:	80°C or acc. to choice
Filter rate	:	Starting from 50 Micron
Gear	:	Three phase motor other driving systems for example pressure air
Voltage	:	230/400V,50Hz/IP54,IP65
Desgin/construction	:	AD-sheets,ASME u.a.
Fixing	:	According to request either claws or feet
Additions	:	Diff.pressure gauge/with or without contact

Dimensions Version "A"(Inlet-outlet nozzle adjusted lateral one above the other)
All technical statements are appoximate dates.
Other sizes and dimensions are possible.
Nozzle position can be determined.Inlet and outlet nozzles can also be provides with pipe thread.

Type Filter-	S1/S2 DN	S3 DN	A	B	C	D	E	F	Number of Filterelement	appr. filter area
SRF 1-70/200(325*)	50-80	25-50	900	600	550	168	380	400	1	400/715
SRF 1-137-325(500*)	50-100	25-50	1100	800	550	219	420	400	1	1400/2150
SRF 2-137-325(500*)	80-150	25-50	1100	800	600	368	680	400	2	2800/4300
SRF 3-137-325(500*)	80-150	25-80	1100	800	600	406	700	400	3	4200/6450
SRF 4-137-325(500*)	100-150	25-80	1100	800	600	450	750	400	4	5600/8600
SRF 5-137-325(500*)	100-200	25-100	1100	800	600	600	900	400	5	7000/10750
SRF 1-190-500(800*)	100-200	25-100	1400	1200	800	273	550	500	1	3000/4770
SRF 2-190-500(800*)	100-250	25-100	1400	1200	800	406	700	500	2	6000/9540
SRF 3-190-500(800*)	100-250	25-100	1400	1200	800	450	750	500	3	9000/14310
SRF4-190-500(800*)	100-250	25-100	1400	1200	800	600	900	500	4	12000/19100
SRF5-190-500(800*)	100-300	25-100	1400	1200	800	7	1000	500	5	15000/23850

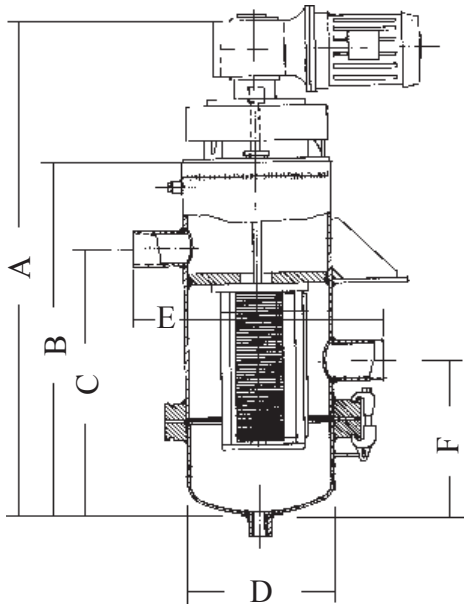
All diamension are appr. !

Example for ordering

SRF 1 - 137/325/ ** - A - B

- 1 — piece of filterelementa
- 137 — diameter filterelement
- 325 — lenght of filterelement
- ** — filterfeinheit
- A — position of nozzles
- B — Execution odrain collector

Remark:
Acc. to requirement claws or feet.
Inlet outlet range, operating pressure and temperature acc. to requirements.



Dimensions Version "B"(Inlet outlet nozzles opposite each other)

AQll technical statements are appoximate values.

Other sizes and dimensions are posible.

Position of nozzle can be determined. Inlet and ourlet nozzle of smaller filter types also with pipe thread or other connection methods.

Type	S1/S2 DN	S3 DN	A	B	C	D	E	F	Number of Filterelement	appr. filter-area cm2
SRF 1-70/200(325*)			900	600	550	219	380	550	1	400/715
SRF 1-137-325(500*)			1100	800	550	273	420	550	1	1400/2150
SRF 2-137-325(500*)			1100	800	600	450	680	600	2	2800/4300
SRF 3-137-325(500*)			1100	800	600	550	700	600	3	4200/6450
SRF 4-137-325(500*)			1100	800	600	700	750	600	4	5600/8600
SRF 5-137-325(500*)			1100	800	600	900	900	600	5	7000/10750
SRF 1-190-500(800*)			1400	1200	800	368	550	800	1	3000/4770
SRF 2-190-500(800*)			1400	1200	800	450	700	800	2	6000/9540
SRF 3-190-500(800*)			1400	1200	800	600	750	800	3	9000/14310
SRF4-190-500(800*)			1400	1200	800	750	900	800	4	12000/19100
SRF5-190-500(800*)			1400	1200		900	1000	800	5	15000/23850

all diamension are appr. !

Example for ordering

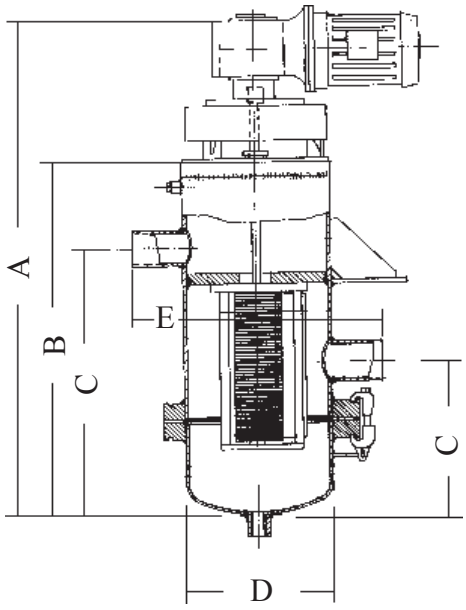
SRF 1 - 137/325/ ** - B - B

- 1 — Number of filter elements
- 137 — Diameter filter element
- 325 — Length of filter element
- ** — Filter rate
- B — Position of nozzles
- B — Version contamination collector

Remark:

Claws or feet acc. to requirement

Inlet outlet, operating pressure and temperature acc. to request.



Telefax an:

L&Z Verfahrenstechnik GmbH
Fax Nr. 06122/16916

Firm : .....

Postbox/Street :.....

PLZ : ..... City...: .....

Phone :..... Fax : .....

Name of person to be contacted : .....
Dept.....
.

RE: Self cleaning filter system *SRF*
We require a technical quotation for the application case listed below*:
1.Medium : .....

2. Flow rate in l/min, m³/h : .....

3. Viscosity : ..... 4.Spec.-weight : ..... 5.PH-value:.....
.
6.Operating temperature in °C : ..... 7.Design temperature in °C : .....

8.Operating pressure in bar : ..... 9.Design pressure in bar :
.....
..
10.Filter rate in my : ..... 11.contamination in my : .....

12.kind of contamination : .....

13.part of contamination in % weight :
.....

14.Required housing material : .....

15.Kind of drive motor : ..... Tension :..... Kind of protection:
.....

16.Additional: