



SELF-CLEANING FILTER SPIROCLEAN SERIES



MAIN TECHNICAL FEATURES:

- Flowrate: uninterrupted even during washing phase
- Filtration degree ranging from 2000 to 50 μm on filtering element in AISI316
- Maximum flow rate 100 m^3/h with a single filter
- Minimum amount discharge water
- All internal and external elements in contact with fluid are MOCA certified

APPLICATIONS

- Dairies
- Oil mills
- Confectionery
- Breweries

Ver.2023 Rev00

ELFI srl

Via Scodoncello 41/E 43044 Collecchio (Parma) - Italy

OPERATION

HOW IT WORKS

The water enters the filter at the inlet (1) and runs through the filtering cylinder with direction in to out.

In this way, all suspended non-deformable suspended solids particles greater than the installed filtration degree are retained on the filtering surface.

The filtered water flows out through the outlet (2) pipe.

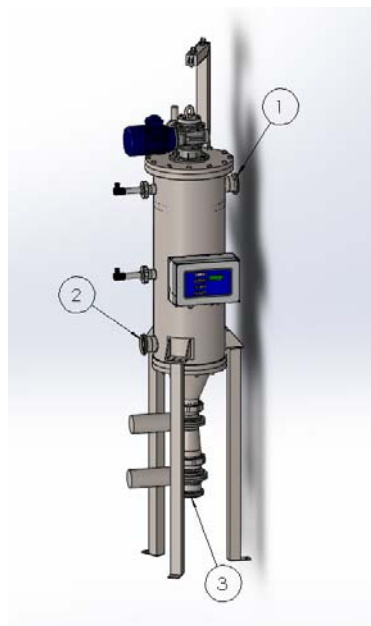
REGENERATION SOLID/LIQUID DISCHARGE

The cleaning phase is performed by blades placed inside the filtering element. They scrape the solids deposited on it and then flush them towards the discharge area (3).

Discharge of the impurities is done through two valves, to compact the particles as much as possible.

The cleaning cycle can be either scheduled or started through pressure differential and can be set based on the quantity of solid particles and the flowrate.

The flow doesn't stop during the washing phase.

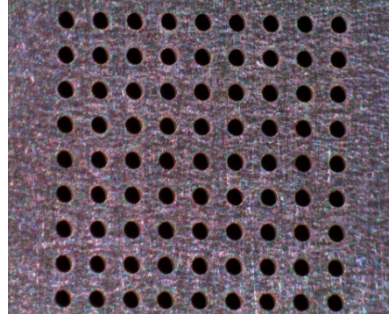


FILTERING ELEMENT

PERFORATED PLATE



MICROPERFORATED PLATE



FILTER CARTRIDGE



SCRAPER BLADES



CONTROL

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An electric panel manages the washing phases.

The cleaning cycle is timed or controlled by differential pressure.

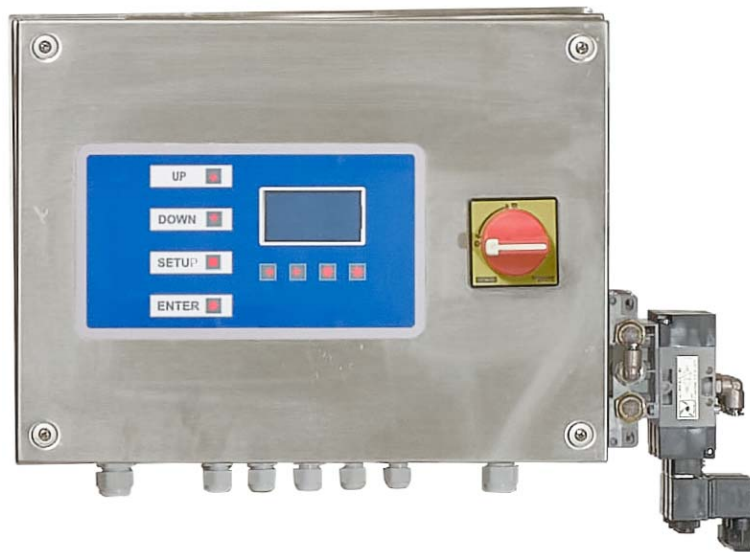
The time span between openings and the discharge valve opening time can be set.

The motor can be controlled manually via push buttons placed on the panel.

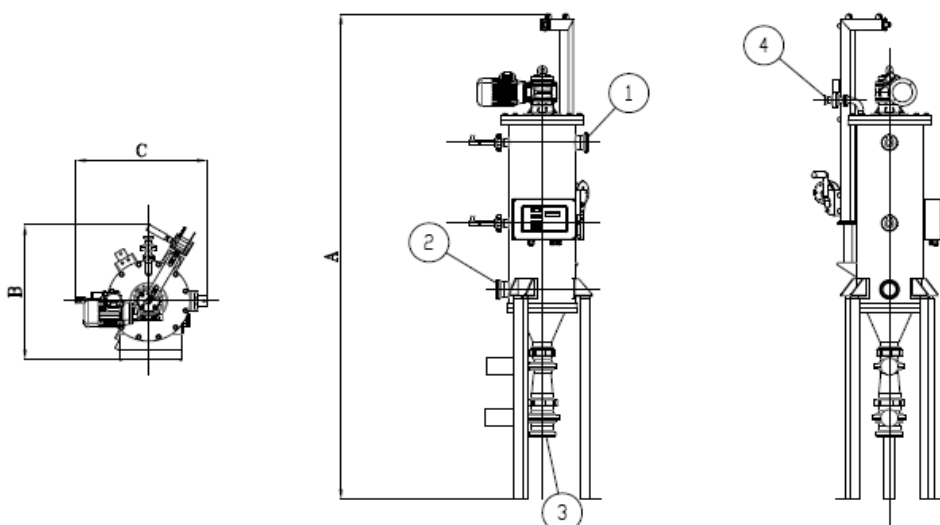
Discharge valves may be opened manually by activating the solenoid.

An alarm signal alerts of electric motor failure to rotate during the washing phase.

The software manage the CIP washing phase



DIMENSIONS AND DATA TECHNICAL



MODELLO	SPIROCLEAN 20	SPIROCLEAN 30	SPIROCLEAN 45	SPIROCLEAN 60	SPIROCLEAN 90
Filtration area (cm ²)	2000	3000	4500	6000	9000
In/Out (1) (2)	DN 50 F	DN 60 F	DN 70 F	DN 70 F	DN 100 F
Discharge/Drain (3)	DN 80 F	DN 100 F	DN 100 F	DN 100 F	DN 100 F
Vent (4)	DN 25 F	DN 25 F	DN 25 F	DN 25 F	DN 25 F
Min - max pressure – Bar	0,5-10	0,5-10	0,5-10	0,5-10	0,5-10
Max temperature - °C	90	90	90	90	90
Max flow rate - m ³ /h	45	45	45	65	100
Power supply – Volt	400 50/60 Hz	400 50/60 Hz	400 50/60 Hz	400 50/60 Hz	400 50/60 Hz
Power required – Watt	180	370	370	550	750
Solenoid valve – Volt / Watt	24 AC / 6	24 AC / 6	24 AC / 6	24 AC / 6	24 AC / 6
Pneumatic supply - Bar	2 - 8	2 - 8	2 - 8	2 - 8	2 – 8
Construction certificates	CE	CE	CE	CE	CE
Vessel rule	EN13445	EN13445	EN13445	EN 13445	EN13445
Volume Liters	28	48	72	95	124
Davit	Incluso	Incluso	Incluso	Incluso	Incluso
Foot	Inclusi	Inclusi	Inclusi	Inclusi	Inclusi
A (mm)	2050	2050	2050	2470	2515
B (mm)	621	621	621	673	705
C (mm)	585	585	585	637	753
D (mm) Estraction cartridge	850	850	850	850	850
Empty weight Kg	44	59	66	89	163
Work weight Kg	72	107	138	184	287

Technical Data are indicative and subject to change without notice
Maximum flowrate 125 micron, 1 CSP, ΔP 0.2 bar

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DESCRIPTION OF PARTS

PART	DESCRIPTION
Body	AISI316
Cover	AISI316
Connection	DIN 11851
Filtration Basket	AISI316
Filtration degree	AISI316 LASER MICRO HOLES :500,300,200,120,80,50, µm AISI316 FLAT SHEET HOLES da 2000-1500-1000 µm
Scrape	PEEK
Scrape support	AISI316
Spring	SAF2205
Internal seal	EPDM PEROX
Reduction unit	Aluminium and carbon steel painted
Electric motor	Hot-painted aluminium
Solenoid valve	Three-way technopolymer
Control panel	IP55 in AISI316
Discharge valve	Butterfly valve with pneumatic actuator
Accessories	AISI316

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