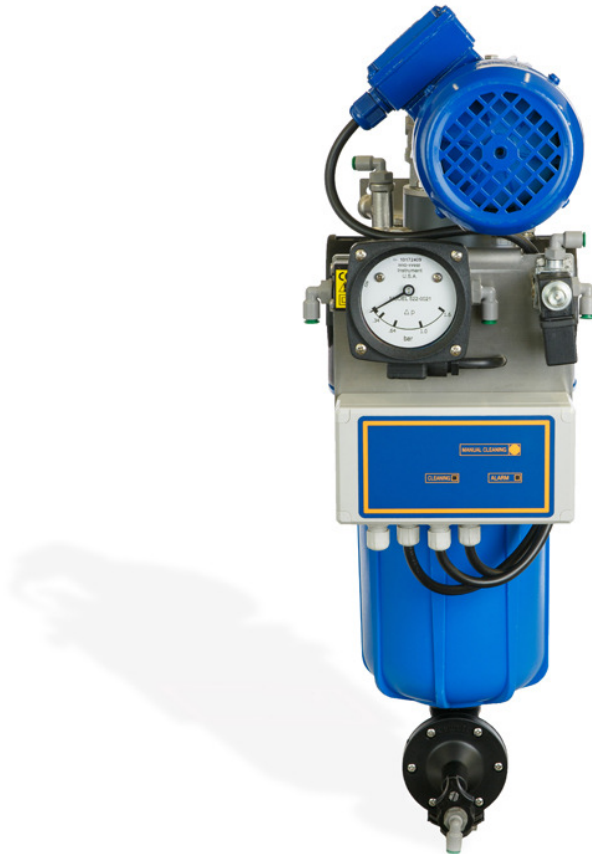




SUCTION SCANNER SELF CLEANING FILTER MSCR – PP



TECNICAL DATA:

- Continuous flow rate during back wash
- Filtration from 300 to 25 micron
- Max flow rate 15 m³/h with a single filter
- Minimum water for cleaning
-

APPLICATION

- Prefiltration for water treatment plants
- Cooling towers
- Heat exchangers
- Irrigation
- Protection of spray nozzle
- Sea water filtration

ELFI srl

Via Scodoncello 41/E 43044 Collecchio (PR)

OPERATION

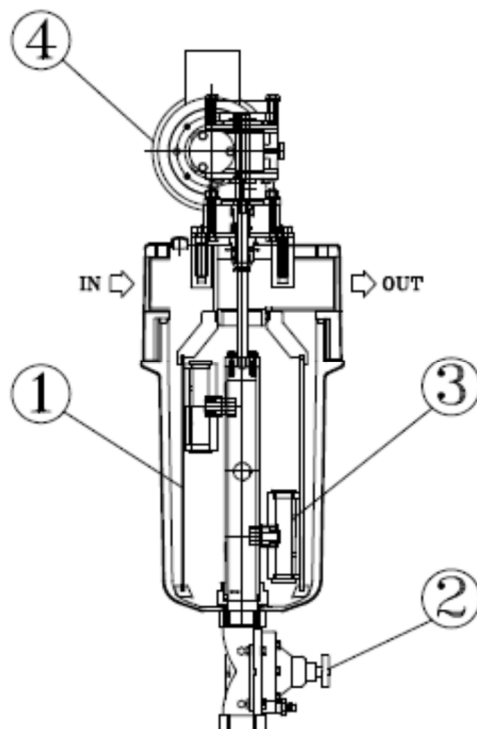
Water enters the filter through the IN inlet and goes through the filtering cylinder from the inside to the outside. This will retain all non-deformable suspended solids that are the same size or bigger than the filtration degree installed. Filtered water leaves through the outlet pipe (OUT).

REGENERATION

The continuous settling of suspended solids inside the filtering cylinder obstructs the passage of water which results in a pressure difference (ΔP). At a preset value of ΔP (range 0.3 ÷ 1 Bar) an automatic cycle will start to clean the filter cylinder, this operation begins with a signal that opens the discharge valve (2) and creates communication between the suction nozzles (3) with the outside environment. At the same time, the electric motor (4) creates a rotating motion which enables the nozzles to inspect the filtering surface. Dirt is ejected through the discharge valve (2). The cleaning cycle lasts approximately 15 seconds.

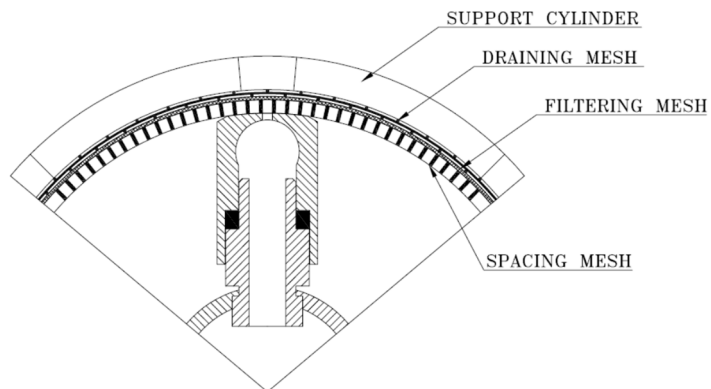
CONTROL

A switchboard controls the washing phases. The signal that starts the cleaning cycle is given by a differential pressure switch. The switchboard gives an "alarm" signal in case of problems in the washing system. These signals can be sent to a pre-existing control center. The washing phase can also be controlled manually. The solenoid controlling the valve is pneumatic.

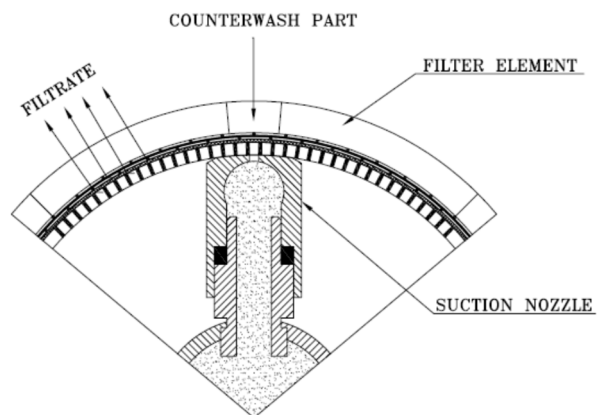


FILTER ELEMENT AND CLEANING SYSTEM

FILTRATION PHASE



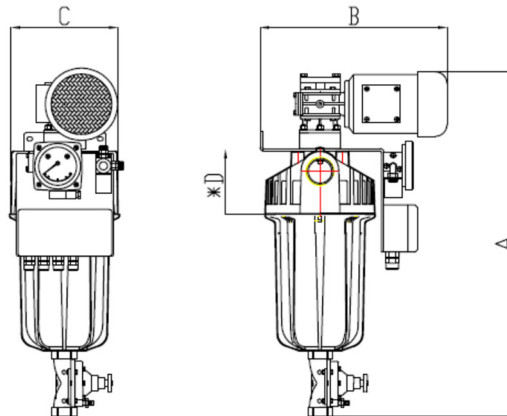
WASHING PHASE



PICTURE OF FILTER INTERIOR



DIMENSIONS AND TECHNICAL DATA



MODEL	MSCR PP -1"1/2 - 7	MSCR PP -1"1/2 - 15
Filtration area (cm^2)	700	1450
Flow rate max – m^3/h (ΔP 0,2 Bar)	15	15
Connection In/Out	1"1/2F	1"1/2F
Discharge	1" F	1" F
1 Bar washing flow rate with mesh 125 micron - m^3/h	2	5
Wash duration - Sec	15	15
Pressure min-max – Bar	0,5-6	0,5-6
Temperature max - °C	40	40
Power supply - Volt	220 50Hz	220 50Hz
Power required - Watt	90	180
Construction certificates	CE	CE
Maximum size of inlet particles* - mm (filtration from 300 to 25 μm) – mm	3	3
Max total suspended solids at inlet mg/l (filtration from 300 to 80 μm) – mg/l	100	100
Max total suspended solids at inlet mg/l (filtration from 50 to 25 μm) – mg/l	50	50
A (mm)	610	855
B (mm)	320	320
C (mm)	190	190
D* Cartridge extraction	250	500
WEIGHT Kg	7	12

These technical data are indicative and subject to changing without notice.

The max suspended solids at inlet is an important factor, because depending on their size distribution and their specific weight they can clog up the filter in a different way.

DESCRIPTION OF PARTS

PART	DESCRIPTION
Body	PP
Cover	PP
Connection threading	Cylindrical GAS UNI338-66
Mesh support strainer	PVC
Filtering mesh	PES From 125 micron and 300,200,80,50,25
Protection mesh	PP
Suction nozzle	PE
Nozzle support	PVC
Nozzle pipe	PVC
Internal seals	EPDM
Reduction unit	Aluminium and carbon steel
Electric motor	Hot-painted aluminium
Solenoid valve	Three-way aluminium
Switchboard	ABS IP55 with front display
Differential pressure switch	Aluminium with parts in contact with liquid made of AISI 316
Discharge valve	PP diaphragm with flow rate regulation
Pressure gauges	Stainless steel with 2"1/2 dial, radial connection and 0-10 Bar indication
Accessories (Plugs and adapters)	PP – PVC – AISI316

FILTERING MESH FLOW RATE TABLE FOR SCR L FILTERS (m³/h)

MODEL	300 µm PES	200 µm PES	125 µm PES	80 µm PES	50 µm PES	25 µm PES
MSCR PP 1"1/2 - 7	15	15	15	13	11	8
MSCR PP 1"1/2 - 15	15	15	15	15	15	15

The flow rates indicated refer to a load loss of 0.2 Bar with clean, filtered water.

FILTER CODING TABLE

1 SHAPE / INSTALLATION FILTER	CODE
L / VERTICAL	MSCR

3 CONNECTION IN/OUT	CODE
1"1/2	112

5 BASKET MATERIAL	CODE
PVC-U	1

10 PILOT DISCHARGE VALVE	CODE
PNEUMATIC	1
HYDRAULIC	2

9 AUTOMATION	CODE
CONTROL PANEL + DIFF. SWITCH	C
NESSUNA	0

STANDARD VERSION

2 APPLICATION	CODE
INDUSTRIAL	I

4 MATERIAL BODY AND COVER	CODE
POLYPROPYLENE	PP

6 FILTER ELEMENT SIZE	CODE
7	07
15	15

8 FILTERING FABRIC MATERIAL	CODE
POLYESTERE	1
AISI316	2

10 FILTRATION DEGREE	CODE
300	0300
200	0200
120	0120
80	0080
50	0050
25	0025