

MSCR-PP

SELF CLEANING FILTER SERIES



MAIN TECHNICAL CHARACTERISTICS

- Continuous flow rate during back wash
- Filtration from 25 to 300 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



FILTERING MESH FLOW RATE TABLE (M³/H)

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

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



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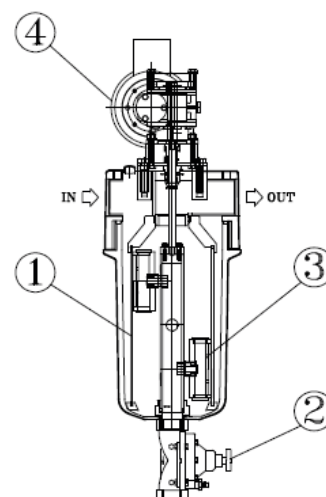
OPERATION

Service

Water enters the filter through the IN inlet and goes through the filtering cylinder (1) from inside to the outside. This will retain all non-deformable suspended solids that are the same size or bigger than the filtration screen installed. Filtered water leaves through the outlet pipe (OUT).

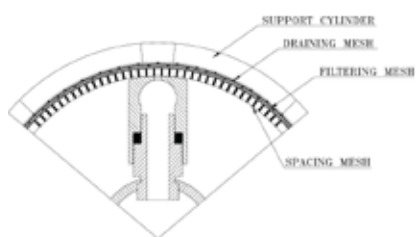
Cleaning cycle

The continuous settling of suspended solids inside the filtering cylinder (1) causes blockage which results in a pressure difference (ΔP). At a preset value of ΔP (range $0.3 \div 1$ Bar) an automatic cycle will start to clean the filter cylinder (1). This operation begins with a signal that opens the discharge valve (2) and creates communication between the suction nozzles (3) the electric motor (4) creates a rotating motion which enables the nozzles to inspect the filtering surface. The filtered solids are ejected through the discharge valve (2). The cleaning cycle lasts approximately 15 seconds.

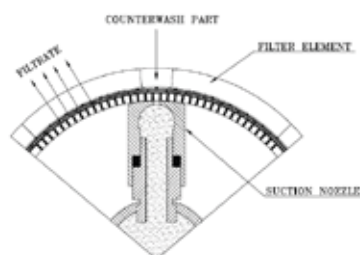


FILTER ELEMENT AND CLEANING SYSTEM

Filtration phase



Washing phase



Filter interior



Controller

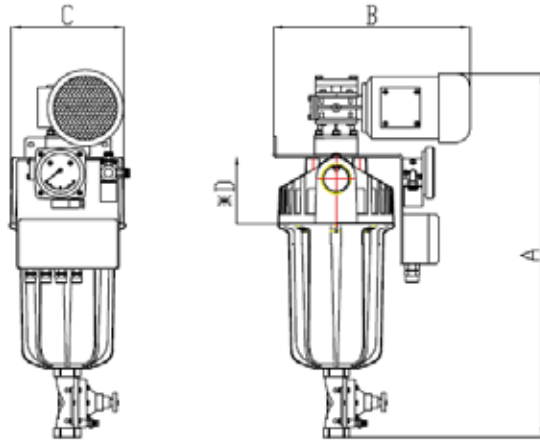
A controller operates the washing phase. The cleaning cycle is started by a differential pressure switch or by a time signal. The controller will give an „alarm“ signal in case of problems in the washing system. The washing phase can also be controlled manually. The solenoid controlling the valve is pneumatic as standard but can be changed to hydraulic if air is not present.



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DIMENSIONS AND TECHNICAL DATA MSCR PP



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.



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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

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FILTER CODING TABLE

1. Shape / installation filter	Code
L / vertical	SCRL
2. Application	Code
Industrial	I
3. Body / cover material	Code
Polypropylene	PP
4. Connection in/out	Code
1"1/2	112
5. Filter element size	Code
7	07
15	15
6. Basket material	Code
PVC-U	1
7. Filtering fabric material	Code
POLYESTER	1
AISI316	2

8. Nozzle support material	Code
Pneumatic	1
Hydraulic	2
9. Nozzle pipe material	Code
300	0300
200	0200
120	0120
80	0080
50	0050
25	0025
10. Pilot discharge valve	Code
Control panel + diff. Switch	C
Nessuna	0

Standard version

