



SIMPLEX Y

Manual cleaning filter for drinking and industrial water

Rev. 0 - 03/24



CHARACTERISTICS

There are various technological sectors where the filtration of significant quantities of water is required in order to remove suspended solids, coarse bodies and sand which could cause problems for hydraulic systems (valves, pumps, equipment). This need becomes particularly pressing when the sources of water supply are: rivers, lakes, canals, wells. In all these cases, the use of filters from the SIMPLEX Y series becomes the ideal solution. These are filters without moving parts where the filtering element is made up of a polyester mesh supported by a steel structure.

Cleaning the SIMPLEX Y filter is particularly simple. By opening the bottom valve, it is possible to remove the dirt accumulated in the filter body. To clean the filter cartridge, it is necessary to disassemble the filter body.

The main areas of application of the SIMPLEX Y series filters are:

agriculture and irrigation, supply of evaporative towers, supplies of power plants for the production of hot water and steam, process water with low content of suspended solids and industrial applications in general.

If there are significant quantities of sand in the water, SIMPLEX Y filters can be used as protection downstream of VORTEX series centrifugal separators.

SIMPLEX Y filters are manually cleaned mesh filters with stainless steel body. The internal cartridge is available with polyester filter fabric fitted inside a mesh support in AISI 316 stainless steel or completely in AISI 316 stainless steel; these solutions offer a very wide filtration range from 800 to 25 µm.

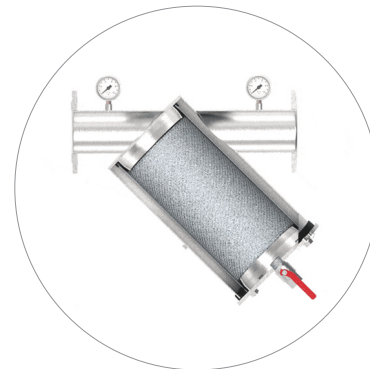
SIMPLEX Y filters are separating filters with no moving parts. The flow passes from the inside to the outside of the filter element which, once clogged, must be cleaned manually.

The standard supply includes pressure gauges, emptying valve and AISI316 tubular item with polyester sock and 120 µm filtration level.

The range of filters is available with connections from 1" up to DN150, being able to process flow rates from 10 m³/h up to 300 m³/h. The filtration degrees available are:

Polyester cartridge and AISI316 support: 25/53/80/120/200/400/580/810 µm.

Cartridge and support in AISI316: 110/200/400/800 µm.



MAX. PRESSURE
10 bar

FILTRATION RATING
25-800 µ

MAX. FLOW RATE
10-300 m³/h

TECHNICAL DATA

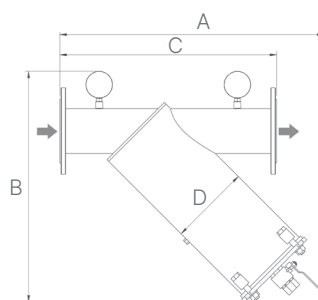
Code		SMPLX0010	SMPLX0020	SMPLX0030	SMPLX0040	SMPLX0050	SMPLX0060
Model		SIMPLEX Y/5	SIMPLEX Y/5	SIMPLEX /10A	SIMPLEX /10A	SIMPLEX Y/20	SIMPLEX Y/20
In/Out connections		1"	1" ½	2"	3"	3"	DN100
Drain connections		1"	1"	1"	1"	1"	1"
Maximum flow rate	m ³ /h	10	15	40	60	80	130
Filtering area	cm ²	600	600	1500	1500	2200	2200
Min./max. fluid temperature to be treated	°C	5 - 60					
Min./max. working pressure	bar	1,5 - 10					
Seals		EPDM					
Body and lid material		AISI304					
Support mesh material		AISI316					
Filter sock		Polyester or AISI316					
Degree of filtration	µm	Standard 120					
Salinity and acidity		< 10.000 ppm TDS, pH 3 ÷ 9					

Code		SMPLX0070	SMPLX0080	SMPLX0090
Model		SIMPLEX Y/35	SIMPLEX Y/35	SIMPLEX Y/40P
In/Out connections		DN100	DN150	DN150
Drain connections		1"	1"	1"
Maximum flow rate	m ³ /h	140	250	300
Filtering area	cm ²	3300	3300	5400
Min./max. fluid temperature to be treated	°C	5 - 60		
Min./max. working pressure	bar	1,5 - 10		
Seals		EPDM		
Body and lid material		AISI304		
Support mesh material		AISI316		
Filter sock		Polyester or AISI316		
Degree of filtration	µm	Standard 120		
Salinity and acidity		< 10.000 ppm TDS, pH 3 ÷ 9		

* The flow rates refer to filters with 120 µm filter mesh and water at 20 °C with NTU < 1.



OVERALL DIMENSIONS



Code	A	B	C	D	Weight
	mm	mm	mm	mm	Kg
SMPLX0010	225	520	200	114	7,0
SMPLX0020	225	520	200	114	8,0
SMPLX0030	500	450	400	206	15,0
SMPLX0040	520	465	450	206	17,0
SMPLX0050	630	570	450	206	20,0
SMPLX0060	670	590	555	206	25,0
SMPLX0070	670	610	600	273	34,0
SMPLX0080	750	640	750	273	45,0
SMPLX0090	960	860	750	273	43,0



EQUIPMENT AND SUPPLY SPECIFICATIONS

SIMPLEX Y is supplied complete with filter cartridge; instruction - maintenance manual in Italian (including declaration of conformity).

Shipping managed on pallets.



MAINTENANCE

The filters must be monitored, in particular with regard to the pressure drop value through the basket. Once the maximum allowable pressure drop has been reached, it is necessary to clean the basket. The filters are not provided with anti-flooding devices capable of detecting and intervening in the event of breakages or blockages of the device and, therefore, avoiding possible flooding or uncontrolled water consumption. The frequency of maintenance depends on the conditions of the environment in which the filter is installed and the severity of the work to which it is subjected. Respect all the instructions given in the Use and Maintenance Manual.



REFERENCE STANDARDS

Art. 4 Par. 3 of Directive 2014/68/EU (PED).



PRECAUTIONS AND WARNINGS

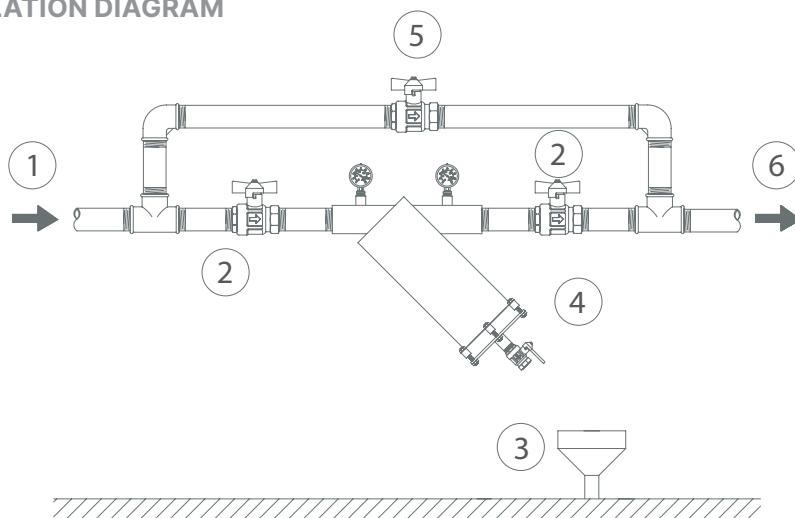
It is necessary to protect the filter from the direct action of sunlight and away from frost. Do not exceed the maximum working pressure indicated. If the supply pressure is higher, install a pressure reducer upstream of the filter. Periodically check the operation of the filter.



INSTALLAZIONE

The installation of the filter must be carried out exclusively by qualified personnel in full compliance with current regulations. The filter must be installed upstream of the circuit to be protected. Install an adequate valve system that allows you to exclude the filter in the event of a malfunction without preventing the water supply (by-pass). Provide an adequate visible drain under the filter. It is advisable to install sampling taps upstream and downstream of the filter. Respect all the instructions given in the Use and Maintenance Manual.

INDICATIVE INSTALLATION DIAGRAM



1. Raw water inlet; 2. Shut-off valve; 3. Drain; 4. Filter; 5. By-pass valve; 6. Filtered water outlet.



SPARE PARTS

Spare parts for the equipment are available on request in the dedicated price list.

AVERAGE DELIVERY TIMES

2-3 weeks

GENERAL EXCLUSIONS

- Special dedicated packaging, where required
- Equipment start-up and final testing: management not necessary by an Authorized Assistance Center See the manual for correct installation of the product
- Lifting and handling means
- Hydraulic and electrical connections to our plant and to our utilities
- Masonry, carpentry and foundation works
- Chemical analyses
- Structural calculations
- Anything not expressly mentioned in the offer