

STAINLESS STEEL CENTRIFUGAL SEPARATOR FILTERS - FCV

FCVs are centrifugal separator filters (hydrocyclones) with a stainless steel body. They are particularly suitable for use with water containing sand or solids with a specific weight greater than water ($PS \geq 1$).

FCVs are capable of removing up to 99% of solids larger than 75 μm and up to 65% separation on solids as small as 50 μm .

Designed to minimise pressure drops while maintaining excellent separation efficiencies, FCV filters operate continuously, with no moving mechanical parts or filter elements within.

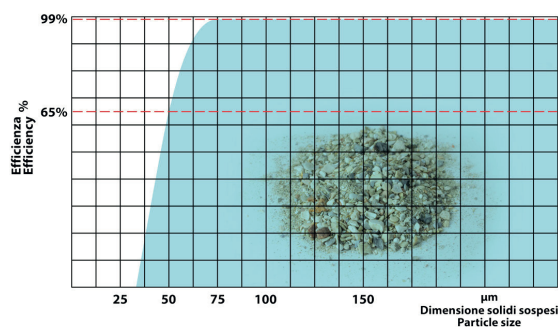
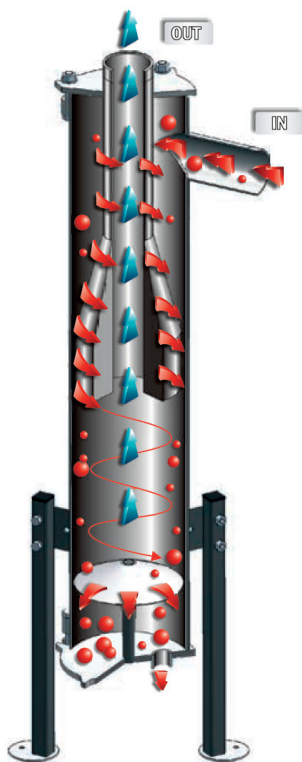
They can be inspected and the bottom outlet can be fitted with a manual or automatic valve, which is supplied as an optional kit.

SPECIFICATIONS

- Construction in Stainless Steel AISI 304 (M1) or 316 (M2)
- Filtration range 50 to 1000 μm
- 3/4" to 3" threaded connections (B)
- Flanged couplings (F) ISO PN16 from DN100 to DN150
- Compliant with PED Directive 2014/68/EU (Pressure Equipment)
- Compliant with Directive 2006/37/EC (applicable to installation if filter is connected to a PLC system)

Technical data

- Max. operating pressure: 10 bar
- Max temperature: 60°C
- Salinity and Acidity: <10000 ppm TDS, pH 3-9
- Connections: ISO PN16/10 – BSP
ANSI 150 -NPT



The FCV filter is capable of removing up to 99% of sand larger than 75 microns and up to 65% of sand larger than 50 microns.

Operation

Water is channelled through the inlet fitting in such a way as to create a downward swirling motion within the filter.

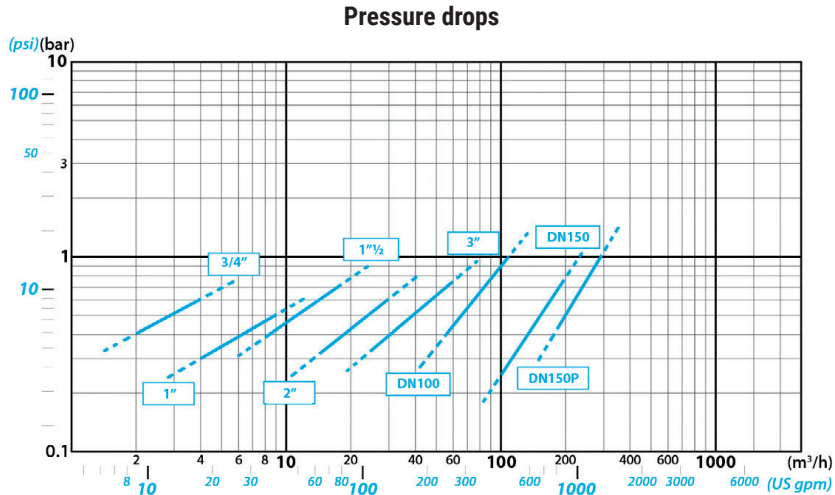
The specially designed inner cone creates an acceleration that generates the centrifugal force needed to separate undesirable solids.

Filtered water flows back to the outlet, while the separated solids fall to the bottom of the reservoir, into a collection chamber beneath the baffle, and are then discharged externally.

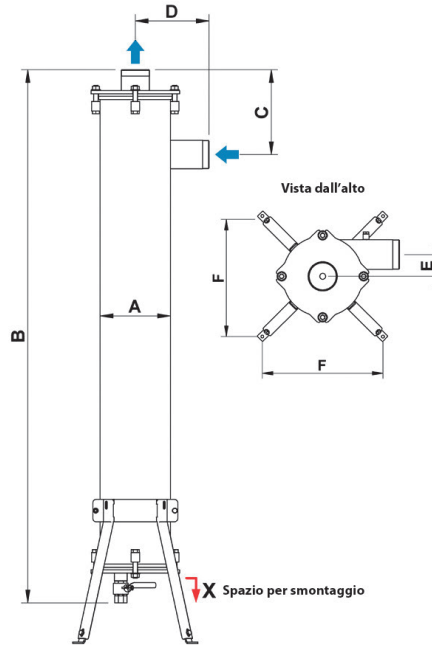
Automatic drain valve **Optional**

A kit to automate filter discharge is available on request. It can be supplied pneumatically, hydraulically or motorised and includes all the necessary elements for installation and operation.

The kit can be equipped with an electronic control unit to control and manage cleaning cycles, or with no control unit so that cycles can be managed using your own controller or an existing control panel.



Pressure drops refer to filters with 120 µm filter mesh and clean water



Model	Min. flow rate	Max. flow rate*	Connections		Dimensions (mm)							Weight
	m³/h	m³/h	In/Out	Drain	A	B	C	D	E	F	X	kg
FCV 3/4"	2	4	3/4"	1/2"	89	575	155	110	30	355	220	9
FCV 1"	4	9	1"	3/4"	114	910	155	120	40	310	220	15
FCV 1 1/2"	8	18	1 1/2"	1"	140	1130	195	160	45	310	220	23
FCV 2"	15	30	2"	1"	168	1270	205	190	55	325	220	30
FCV 3"	25	60	3"	1"	219	1670	265	230	65	360	220	51
FCV 100	54	105	DN100	1 1/2"	273	1940	315	300	80	385	250	85
FCV 150	95	190	DN150	1 1/2"	324	2250	335	400	80	465	300	105
FCV 150P	180	300	DN150	2"	406	2400	505	405	125	525	300	130

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