

# FCA

Activated carbon water filter

The water filters are equipment used for the primary water and sewage filtration for civil and industrial application. They are used in the event it is necessary to obtain an effluent to be reused, therefore particularly limpid and with a reduced presence of organic matters.

The FCA type filter uses the activated carbon as filtering medium; its operation combines the mechanical filtration by means of the filtering bed to the adsorption power of the activated carbon.

In fact, the carbon, thanks to its considerable porosity and therefore wide specific surface of contact with the water, adsorbs the particles suspended in the water to be treated. On request, it is possible to use multi media filtering layers (FSD). The filter consists of a vertical cylindrical container complete with drain at the bottom, support feet, manhole, lifting

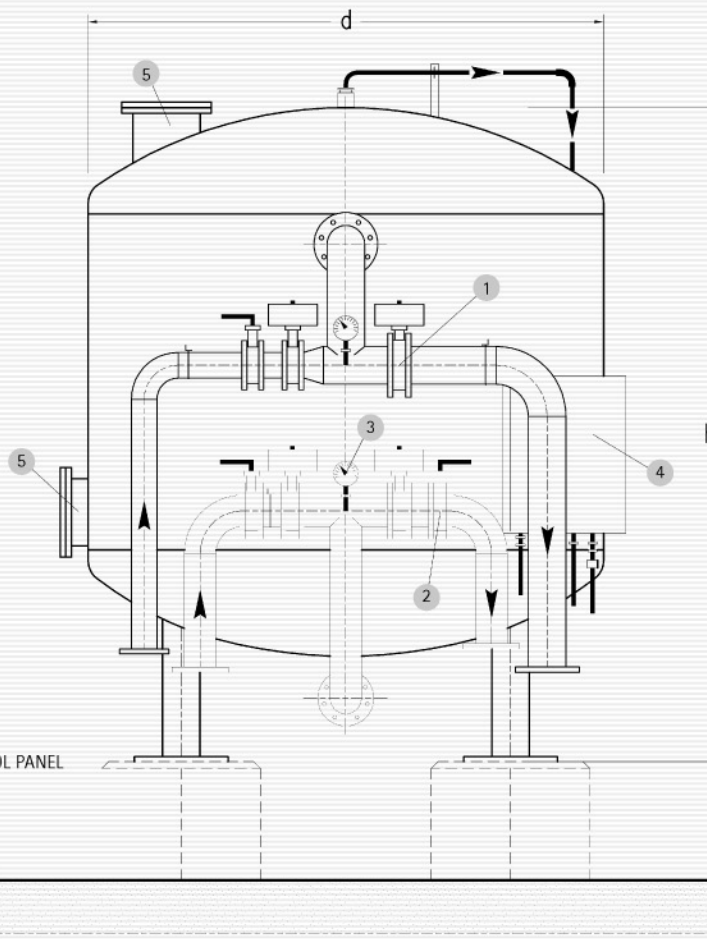
eyebolts, flanged inlet and outlet piping, nozzles, diffusers, valves, pressure gauges and electro-pneumatic panel. The filtration is carried out according to a discontinuous cyclic process: a differential pressure gauge stops the flow of water to be filtered as soon as the pressure difference reaches an established limit value; at the same instant the filter back washing cycle is automatically activated and a water and air flow put in from the bottom.

The standard execution provides for a base plate as support for the filtering bed, on which the nozzles for back washing are seated. On request, a system for the filter emptying and filling, required for the periodical activated carbon regeneration can be supplied. The standard construction is in carbon steel protected by hot dip galvanization. On request it is possible the construction in of stainless steel.

## Strengths

- PRESSURIZED FILTRATION WITH HIGH RESIDUAL PRESSURE.
- ACTIVATED CARBON FILTERING BED.
- COMPLETELY AUTOMATIC OPERATION.
- VERY SHORT BACK WASHING TIME.
- MINIMUM MAINTENANCE REQUIREMENTS.





Legend

- 1 PNEUMATIC VALVE
- 2 HAND OPERATED VALVE
- 3 MANOMETER
- 4 ELECTROPNEUMATIC CONTROL PANEL
- 5 MANHOLE

**SERECO**

TYPE	MAIN FEATURES	UNIT	DIMENSIONAL DATA									
			05	10	15	20	25	30	38	45	70	96
FCA	MODEL		05	10	15	20	25	30	38	45	70	96
	DIAMETER (d)	mm	800	1200	1400	1600	1800	2000	2200	2400	3000	3500
	HEIGHT (h)	mm	1900	2000	2200	2600	2800	3000	3900	4100	4500	4700
	INLET / OUTLET PIPING PN 10	DN	50	65	80	100	125	150	150	150	200	250
	FILTERING BED SURFACE	m <sup>2</sup>	0,50	1,13	1,54	2,01	2,54	3,14	3,80	4,52	7,07	9,62
	EMPTY WEIGHT	daN	486	872	1043	1389	1713	2072	2767	3220	4661	5964
	WORKING WEIGHT	daN	1140	2456	3506	5410	7312	9611	15311	19053	32228	45411

