# PRESSURE FILTER

## **GENERAL CHARACTERISTICS**

Pressure filters are used in those cases where solid substances have to be mechanically filtered out of water. These filters help improve the final quality of the effluent after chemical-biological treatment of the waste water, or can complement the process of clarifying surface water for drinking or for industrial use. They remove the suspended solids and, therefore, the phosphorous and BOD associated with these, and eliminate turbidity, unpleasant odours and flavour, and metals such as iron and manganese.

## **CONSTRUCTIONAL CHARACTERISTICS AND OPERATION**

The filter consists of a cylindrical tank made of steel, with three main sections. The water to be filtered flows through a pipe into the filtration chamber where it percolates through the quartz sand or active carbons in the filter bed. The water then flows through plastic nozzles in the collection chamber into the area below and through the outlet pipe for subsequent use.

The backwash process, where a water/air mixture is ejected at high pressure from the base of the filter, occurs automatically at pre-configured times. The frequency of the backwash process can be programmed according to the manometers at filter inlet and outlet which indicate the progressive load loss due to clogging of the filter bed. The plastic nozzles ensure uniform draining of the filtered water as well as uniform distribution of the backwash air/water mixture.

A remote control can be used to automate the cycle.

### **STANDARD CONFIGURATION**

In its standard configuration, the filter is made of thick carbon steel sheeting and profiles with an outer epoxy coating and inner epoxy glaze suited to use with food; one or more inspection covers, supports, eyebolts for lifting, valves, nozzles, manometers and inlet and outlet pipes with fittings.

The metal parts of the filter can also be made of stainless steel.





# **PRESSURE FILTER**



**Main Features** 

PHASE	OPENED VALVES	CLOSED VALVES	
Working	A – E	B – C – D – F	
Backwash	C – B – F	A – D – E	
Wash	A - D	B-C-E-F	

Nozzles in details





The company reserves the right to make modification and improvements without prior notice

Models	V=20 m / h Average Flow (m³/h)	V=30 m / h Average Flow (m <sup>3</sup> /h)	Backwash (m <sup>3</sup> /h)	Diameter (mm)	Height (mm)	Quartz-sand
FP60	5,7	8,5	8,5	600	1950	
FP70	7,7	11,5	11,5	700	2000	
FP80	10,00	15,00	15,00	800	2050	
FP90	12,70	19,00	19,00	900	2100	
FP100	15,70	23,50	23,50	1000	2150	
FP110	19,00	28,50	28,50	1100	2200	
FP120	23,00	34,00	34,00	1200	2300	
FP130	26,50	40,00	40,00	1300	2300	
FP140	30,70	46,00	46,00	1400	2350	
FP150	35,00	53,00	53,00	1500	2400	
FP160	40,00	60,00	60,00	1600	2400	
FP180				1800		
FP200	63,00	94,00	94,00	2000	3400	
FP250	98,00	147,00	147,00	2500	3800	
FP280	123,00	185,00	185,00	2800	4000	
FP300	141,00	212,00	212,00	3000	4200	
FP350	192,00	289,00	289,00	3500	4800	

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