

PRESSURE FILTERS, TYPES TF/TFB

- FILTERS SUSPENDED SOLIDS
- REMOVES IRON AND MANGANESE
- NEUTRALIZES AGGRESSIVE CARBON DIOXIDE
- MANUAL OR AUTOMATIC PLANTS
- MODULES WITH DIFFERENT TYPES OF COATINGS
- STANDARD MODULES UP TO FLOW RATES OF 100 M³/H
- SPACE SAVING INSTALLATION
- REQUIRES LESS CIVIL ENGINEERING THAN GRAVITY FILTERING PLANTS



TFB-FILTER

COMPLETE WATER SUPPLY PLANTS

WATER SUPPLY PLANTS

In a complete water supply plant the filter fillings, filter size and ancillary equipment are dimensioned according to the composition of the raw water and the needed flow rate. EUROWATER makes water analysis as well as dimensioning of water supply plants with pressure filters.

DRINKING WATER TREATMENT

The requirements to the quality of drinking water are stipulated in national legislation. The limits for the contents of suspended solids, iron, manganese and aggressive carbon dioxide can be reached through treatment in a EUROWATER pressure filter.

EUROWATER PRESSURE FILTERS

The pressure filters types TF/TFB offer a broad range of variations according to operation, coating and design pressure. Through a similar design of the vessels for manually operated pressure filters, type TF, and automatically operated pressure filters, type TFB, a future automatization of a manual pressure filter is relatively simple.

WORKING PRINCIPLE

By aeration of the raw water iron and manganese precipitate enabling them to be collected on the filter media together with the mechanical impurities. The filter media are rinsed at regular intervals. The interval between the rinses depends on raw water impurity and water consumption.

AERATION UNIT

The aeration equipment consists of a compressor unit with or without pressure tanks.

RINSE PROGRAM

The rinse of the filter is optimized first with an air blow followed by a water rinse. The air blow is performed with an air blower and loosens the collected impurities from the filter media, thus making the subsequent water rinse more efficient. Normally clean water is used as rinse water for the pressure filter. It is supplied from the clean-water reservoir by a rinse pump. When after approximately 20 minutes the rinse program has been completed the plant is ready to go into operation again.

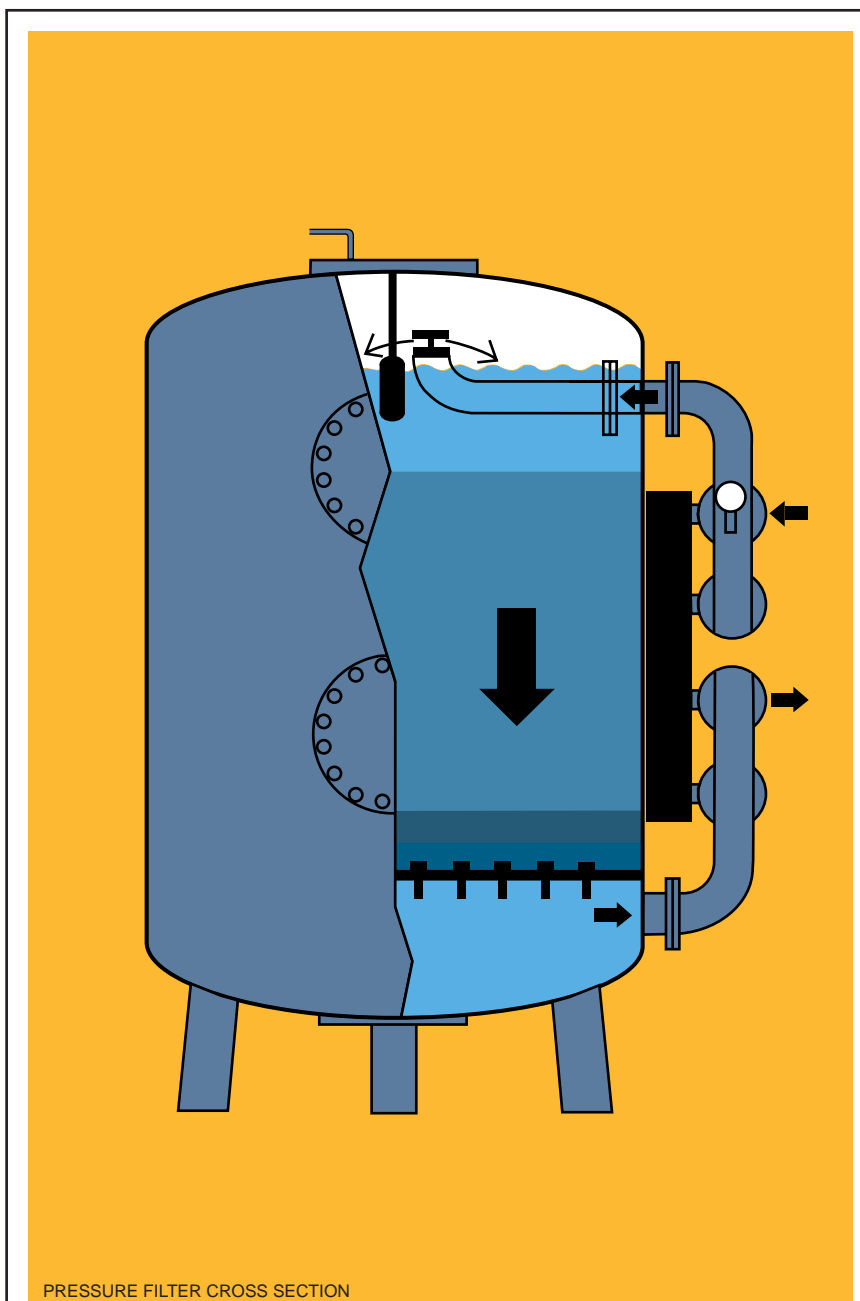
IRON AND MANGANESE REMOVAL

The filter media for iron removal have an excellent filtering efficiency. The filter media are easy to rinse and last for many years. For manganese removal a manganese treated catalytic filter medium is used.

NEUTRALIZATION

For neutralization a special filter medium that neutralizes the aggressive carbon dioxide in the raw water is used. Resulting from the neutralization, a protective layer is established on the inner surfaces of the plumbing system, protecting against chemical corrosion. Filter media are consumed during removal of carbon dioxide, thus making refilling necessary at regular intervals.

- FOR INDUSTRIAL WATER SUPPLIES
- FOR MUNICIPAL AND PRIVATE WATERWORKS
- MORE THAN FIFTY YEARS OF EXPERIENCE WITH MANUFACTURE, CONSULTANCY, AND PROJECTING



PRESSURE FILTER CROSS SECTION

AUTOMATIC PRESSURE FILTER TYPE TFB

PRESSURE FILTER

The pressure filter consists of a filter tank with valve system and necessary armature. At the inside the filter is equipped with an automatic air vent and a distributor plate with corrosion-resistant distributors. The standard version of the tank is outside sandblasted and coated effectively with primer and plastic enamel.

PIPE SYSTEM

The pipe system is equipped with pneumatically regulated valves and is adjusted to the filter size and the installation conditions.

CONTROL PANEL

The control panel of the system is a fully electronic, 12 V, control unit. It comprises a rinse program section and a time control unit. The panel is designed to control up to four filter tanks.

PANEL SETTING

The control panel can be set to rinse at the days and hours at which it is desirable to backwash the filter. Potential free signals are available from the control panel. In case of increased water consumption or increased raw water impurity, the plant is easily reprogrammed without application of tools.



TF 5 CONTROL PANEL

An advanced control panel with a large number of built-in control functions. Among other things the panel has adjustable programs for both air blow and water rinse. The panel can control raw water pump, compressor, air blower and rinse water pump.

SPECIFICATIONS

Module TF/TFB	Dimensions ¹⁾ One-tank unit			Dimensions ¹⁾ Two-tank unit			Pipe system DN	Weight ²⁾ approx. kg
	Width mm	Depth mm	Height mm	Width mm	Depth mm	Height mm		
10	1900	2200	3000	3300	2200	3000	65	3030
12	2000	2300	3000	3500	2300	3000	65	3475
14	2100	2400	3000	3700	2400	3000	65	4230
17	2200	2500	3100	4000	2500	3100	80	5180
20	2300	2600	3100	4200	2600	3100	80	6080
25	2500	2800	3100	4600	2800	3100	80	7950
30	2600	2900	3200	4800	2900	3200	100	9080
35	2700	3000	3200	5000	3000	3200	100	10200
40	2800	3100	3200	5200	3100	3200	100	11435
50	3200	3400	3300	5900	3400	3300	125	16030
60	3400	3600	3400	6300	3600	3400	125	19255
75	3600	3800	3500	6800	3800	3500	150	22940
100	4000	4200	3600	7600	4200	3600	150	31855

1) required space for installation inclusive of normal free space.

2) weight inclusive of filter media and water.

SPECIAL APPLICATIONS

OTHER APPLICATIONS

EUROWATER pressure filters, types TF/TFB, have many possible applications and can be supplied in special versions for many different tasks. Our technicians are at your service with advice and dimensioning.

SURFACE TREATMENT

Many filtering projects imply heavy demands on the resistance to corrosion. EUROWATER offers a range of coatings that can stand aggressive media and high temperatures. This makes our pressure filter program applicable to a vast number of tasks.

MULTI-LAYER FILTER

A pressure filter with hydroanthracite and sand filling. Hydroanthracite has a large receptivity and the underlying sand layer functions as secondary filter. The filter is especially suited to collect flocculated and mucous particles.

CARBON FILTER

A pressure filter with activated carbon for removal of chlorine and collection of organic substances.

- FILTRATION IN COOLING AND HOT-WATER SYSTEMS
- FINAL FILTRATION OF INDUSTRIAL AND MUNICIPAL WASTE WATER
- RECYCLING OF PROCESS WATER
- DECHLORINATION OF WATER
- FILTRATION OF SEA WATER
- OTHER SPECIAL APPLICATIONS



EUROWATER pressure filter built into a container.