

## HYDRO FIL®

### Activated carbon filter cartridge

#### Type: AKF

#### Application

Activated carbon filter cartridges are used for dechlorination of drinking water and for pre-treatment prior to a reverse osmosis unit.

The water to be filtered should preferably be free of mechanical pollutions.

Due to the surface reaction of the activated carbon with the still free activated chlorine into the drinking water, chloride is produced that does not charge the activated carbon. The chloride is discharged with the water. The surface reaction is subsequently reduced by the dirt particles in the water.

#### Design

Activated carbon filter consisting of stainless steel filter housing, equipped with cartridges, to be used for water treatment. The activated carbon filter cartridges are characterized by a low pressure drop, high dirt absorption capacity and a large activated carbon contact surface.

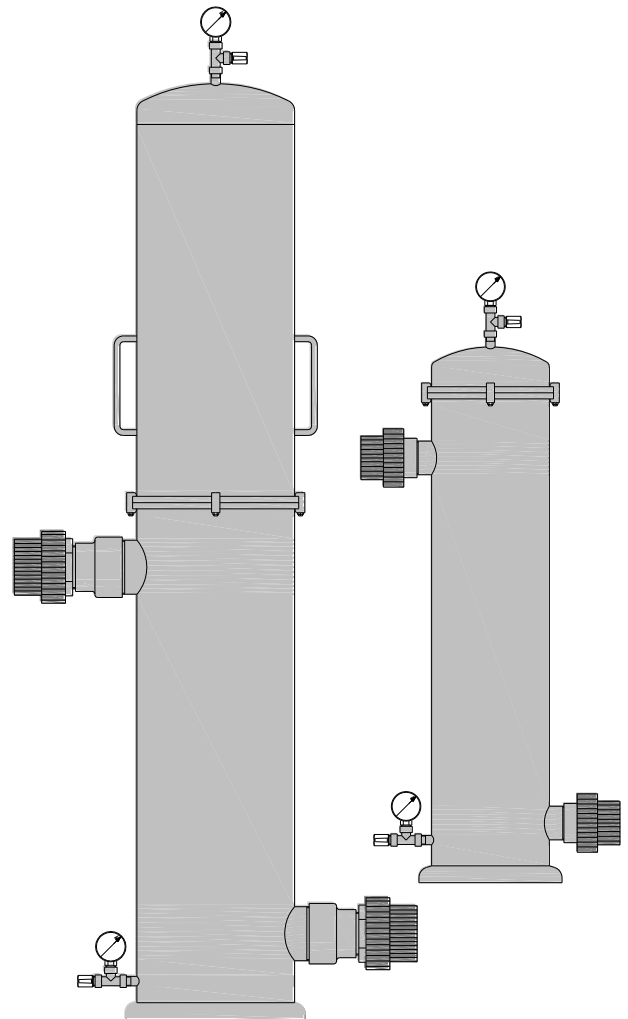
The water to be filtered gets inside the casing passing the input nozzle and flows through the cartridges from outside to inside, leaving the filter purified through the outlet. Foreign particles are kept back on the outside of the filter cartridge.

The filter is equipped with a removable filter head, to replace cartridges easily. The local mains water supply can be connected easily to the in- and outlet of the filter. Ventilation valves support a service friendly replacement of filter cartridges and enable an optimal commissioning.

The filter has to be installed upright in the local pipe. The connections on in- and outlet of the filter are designed as screwing with adhesive union.

The pressure conditions can be controlled at the pressure gauges in the in- and outlet.

Should the residual chlorine contents exceed 0.05 mg/l after the activated carbon filter, the activated carbon cartridge must be replaced. Such replacement is necessary after 6 months at the latest.



#### Scope of delivery

HYDRO FIL® activated carbon filter cartridge consisting of:

- 1 x Stainless steel filter housing
- 1 x Ventilation valve on filter head
- 1 x Drain valve
- 2 x Pressure gauge (inlet / outlet)
- 2 x Stainless steel screw connection (inlet / outlet)
- 2 x Connection (for local pipe) with PVC-adhesive union  
(see table for nominal width)

Filter cartridges – size quantity according to filter size ( see table technical data)

1 x Manual

### Note / Installation conditions

- Technical data and general technical standards as well as the local installation conditions are to be observed
- Installation of filter cartridge according to DIN 1988 part 2.
- The ambient temperature and possibly the radiation heat may not exceed 40°C.
- The place of installation has to be frost free.
- The installation site has to be free from solvent, color, lacquer, and chemical fumes.
- To avoid flushing of unwanted coarse materials, there has to be installed a fine filter generally.
- There may not act any tensile-, pressure-, or torsional forces to the in- or outlet connections.
- Free access to the unit must be ensured.

### Technical data

HYDRO <b>FIL</b> <sup>®</sup>		<b>AKF 1.5</b>	<b>AKF 3.0</b>	<b>AKF 5.0</b>	<b>AKF 7.0</b>	<b>AKF 9.0</b>	<b>AKF 13.0</b>
Connection input / output (adhesive union)		DN 40	DN 40	DN 50	DN 50	DN 50	DN 50
Nominal pressure		PN 10					
Operating pressure	bar	2,5 - 8					
Water-/ ambient temperature	°C	30 / 40					
Mesh size	µm	10	5	5	5	5	5
Flow capacity	l/h	1500	3000	5000	7000	9000	13000
Activated carbon filter cartridge (height)		20"	40"	40"	40"	40"	40"
Number ac filter cartridges	pieces	3	3	5	7	9	13
Height H maximum	mm	870	1375	1343	1410	1420	1445
Height H1	mm	605	605	598	630	270	280
Height H2	mm	85	85	78	120	120	130
Height H2	mm	520	520	520	510	150	150
Width B	mm	370 ± 10	370 ± 10	440 ± 10	560 ± 10	620 ± 10	730 ± 10
Depth T max.	mm	210	210	260	260	305	410
Operating weight ca.	kg	35	54	87	89	125	205

**Dimensions activated carbon filter cartridge HYDRO FIL® AKF**

Example: HYDRO FIL® AKF 1.5  
(height of filter cartridge 20")

HYDRO FIL® AKF 3.0 - 13.0  
(height of filter cartridge 40")

