Data sheet fixed bed filters

Fixed-bed filtration with **sand** is used for particle filtration. When filled with **activated carbon**, chemical contaminants such as pigments or hydrocarbons are also removed by adsorption on the highly porous material. Activated carbon has an enormous porosity. The internal surface area is in the range of 600 to 1,600 m²/g and thus enables adsorption of many substances and materials from gases and liquids.

Applications

- Potable water
- Process water
- Process waste water
- Cooling water
- Seepage water
- Boiler feed water
- And many more

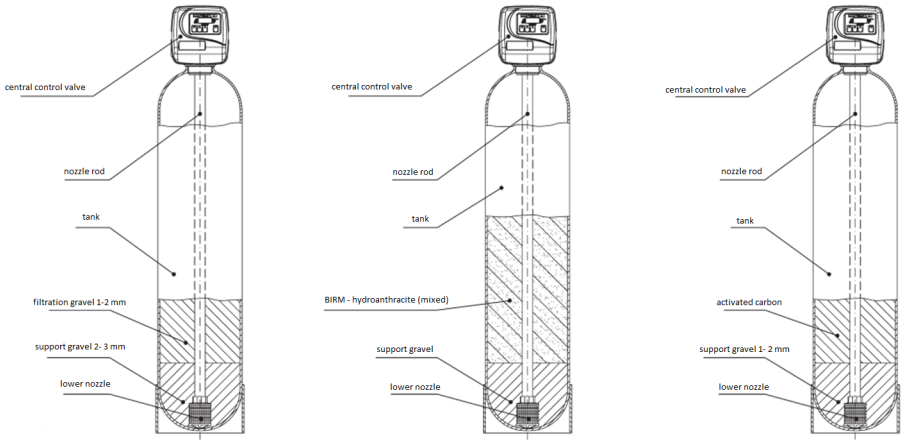

Figure 1: Crosssection of filter tanks

Technical data

Quartz gravel 2 - 3 mm as support layer / Quartz gravel 1 - 2 mm as filtration layer

Model series (Sandfilter)	Volume flowrate [m^3/h] at 20 m/h	Connectors RW/ Filtrate/ WW	Dimensions Length x Height x Width [mm]
FB 1S	0,9	R 1 ½“ / R 1 ½“ / 20 mm grommet	330 x 1.610 x 370
FB 2S	1,6	R 1 ½“ / R 1 ½“ / 20 mm grommet	370 x 1.600 x 390
FB 3S	1,9	R 2“ / R 2“ / 20 mm grommet	380 x 1.890 x 410
FB 4S	2,3	R 2“ / R 2“ / 20 mm grommet	410 x 1.890 x 420
FB 5S	4,5	R 2 ¼“ / R 2 ¼“ / R 2 ¼“	890 x 1.960 x 560
Large-scale systems	On Request		

Quartz gravel 1 - 2 mm as support layer / Activated carbon 0,5 - 2,5 mm as filtration layer

Model series (Carbon filter)	Volume flowrate [m^3/h] at 20 m/h	Connectors RW/ Filtrate/ WW	Dimensions Length x Height x Width [mm]
FB 1A	0,9	R 1 ½“ / R 1 ½“ / 20 mm grommet	330 x 370 x 1.610
FB 2A	1,6	R 1 ½“ / R 1 ½“ / 20 mm grommet	370 x 390 x 1.600
FB 3A	1,9	R 2“ / R 2“ / 20 mm grommet	380 x 410 x 1.890
FB 4A	2,3	R 2“ / R 2“ / 20 mm grommet	410 x 420 x 1.890
FB 5A	4,5	R 2 ¼“ / R 2 ¼“ / R 2 ¼“	890 x 560 x 1.960
Large - scale systems	On Request		

As plants for the removal of small amounts of iron and manganese, the **EM series** is used in the same designs as described above, but with quartz gravel 1 - 2 mm as supporting layer / BIRM and hydroanthracite N as filtration layer.

Your benefits

- **Modular systems with various options - expandable at any time**
- **Robust industrial design**
- **Simple system design**