

General instructions:

This filter is designed and manufactured to meet the highest standards of quality and workmanship.

UDI high-bed (multi)media filters are suitable for various filter media.

When choosing or creating a filter material, pay particular attention to the minimum grain size (support layer) with regard to the slots in the filter plugs.

Do not use any aggressive filter materials, regenerations, or processes which cause corrosion.

The maximum working pressure is 8 bar (standard version). The high-bed (multi)media filter is designed to withstand a maximum pressure of 10 bar. A pressure relief valve must be installed upstream of the filtering installation if the pressure is not sufficiently under control.

Installation:

Place the media filter in a perfect horizontal position on a solid ground so that it is easily accessible for service and maintenance. Check the filter plugs and manholes for proper installation before filling the filter media. Apply a film of grease on the thread of the bolts. Install pressure gauges to monitor the working pressure, and to be able to determine the differential pressure.

Do not open the filter cover and do not tighten it while the filter is being used or under pressure!

Flushing:

Backwashing, flushing, or regeneration depends on the filter material used and the intended process. Consult the installation firm for this.

Replacing the filter material:

These (multi)media filters are provided with enough manholes to allow for easy inspections and changing of the filter material. Close the supply to the filter and relieve the pressure in the filter before opening the filling hatch. Thoroughly clean the inside of the filter with clean water. Inspect the filter plugs and the double bottom of the filter. Check the protective coating and repair any damage immediately.

Maintenance:

Each filter comes with this manual which includes the installation and maintenance instructions. Any damage to the protective coating of the filter must be repaired immediately. Before applying the protective paint, the damaged spot must be cleaned thoroughly using a steel wire brush.

Note:

In view of ongoing improvements, we reserve the right to change specifications at any time without prior notice.



Subject to modifications
No liability accepted for errors or misprints

Type	Unit	K41615	K4202	K4242	K43031	K43631	K44232	K44841	K46042
Connection	inch	1,5"	2"	2"	3"	3"	3"	4"	4"
Diameter	inch	16"	20"	24"	30"	36"	42"	48"	60"
Filter-bed height	mm	900	900	900	900	900	1000	1000	850
Filling material	ltr	110	175	250	400	600	900	1100	1500

Filling the filter:

First inspect the inside of the filter, the filter plugs, and the coating. Introduce the layer of gravel (1.0-2.0 mm) into the filter, hereby limiting the drop height to prevent damage, and spread it over the entire surface. Then introduce the sand bed and also spread it out over the surface. Now introduce the anthracite layer. Fill the filter with water from below, so air and dust particles will be discharged. Backwash for ± 2 minutes with a limited capacity. The reason for this is that the anthracite layer needs one day to become saturated. If the capacity is too high, the anthracite will be flushed out of the filter

Setting the flushing operation:

It is recommended to flush in case of an increase in differential pressure of 1-2 mcw and at least once a week.

Set the backwashing operation to 5 to 10 minutes and set the appropriate capacity.

Too low a speed will lead to insufficient expansion of the filter bed, which results in ineffective cleaning. If the speed is too high, the filter media may be flushed away.

Periodic inspection:

At least once a year. Observe a complete automatic flushing cycle. Pay attention to the flushing time, the flushing capacity, and the soiling of the flushing water. Close the supply to the filter and relieve the pressure in the filter before opening the filling hatch.

1. check the height of the filling.
2. if necessary, remove 1 to 2 cm of sludge.
3. reach deep into the bed and feel the filling; 'Powdery' is good; if necessary, add anthracite and close the filter. If it feels 'sticky/tightly packed', this indicates inadequate flushing and/or growing soiling.

Assess this to see if changing the filter material is necessary.

Type	Unit	M41615	M4202	M4242	M43031	M43631	M44232	M44841	M46042
Service ⁽¹⁾	m ³ /h	1,5	2	3	5	7	9	11	18
Anthracite N 0,8 - 1,6	ltr	40	50	100	100	150	300	350	500
Sand 0,5 - 1 mm	kg	75	125	175	300	450	600	850	1100
Gravel 1 - 2 mm	kg	25	50	50	75	125	175	250	400
Backwashing appr. ⁽²⁾	m ³ /h	4,4	6,7	9,8	15,4	22,0	30,0	39,5	60,0

1) V = 10 m/h

2) V = 35 m/h (depending on the type of filter medium)