

## General instructions:

This filter is designed and manufactured to meet the highest standards of quality and workmanship. This filter is mainly used as a control filter, and is adapted to filtering a small amount of contamination.

## Installation:

The HandiMatic filter can be installed in any position. (Allow enough room for easy operation of the handle (1)).  
The water inlet and outlet are clearly indicated by arrows.  
When installing more than one filter, allow enough room between the units for easy maintenance.  
A pressure relief valve must be installed upstream of the filtering installation if the pressure is not sufficiently under control.

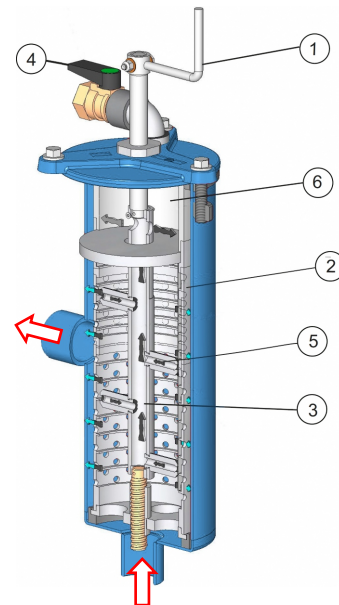
## Operation:

Perform a flushing cycle when the differential pressure indicator starts extracting out or is already out. **Note: the pump should keep the filter pressurised while flushing!** The flushing cycle is carried out manually by opening the flush valve (4). After this, slowly turn the handle (1) all the way, and then turn it all the way back. Now close the flush valve. If the indicator has not yet returned to its normal position (inside the indicator body), the flush cycle must be repeated. The maximum working pressure is up to 8 bar. The filter is designed to withstand a maximum pressure of 10 bar.

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

## Filtration:

Dirty water enters the filter inlet, passes through the filter element (2), and flows out of the filter through the outlet. When the water flows through the filter element, the dirt particles remain behind and form a filter cake. This filter cake improves filtration efficiency as it performs a finer filtration than the filter element itself. It also creates a differential pressure across the element.



## Flushing:

The pressure difference is indicated by a mechanical indicator, which shows whether the filter is becoming soiled. Flushing is carried out manually by opening the flush valve (4). This causes the pressure to drop in the flushing chamber (6) and in the rotor (3), resulting in the water being sucked through the nozzles (5) along with the dirt particles on the filter screen. By rotating the handle (1), the nozzles will move along the filter screen, thereby removing the collected dirt particles. The flushing water is discharged through the flush valve on top of the filter.

## Periodic cleaning:

Stop the flow to the filter.

Open the flush valve (4) to release pressure and drain water.

Disconnect the tubing on top of the cover of the indicator. Open the cover by unscrewing the bolts. Carefully remove the filter element (2) and the rotor (3) as a whole. Unscrew the rotor from the filter element.

Thoroughly clean the element with clean water, using a brush to remove dirt particles from the mesh (never use a steel wire brush).

If the dirt particles cannot be removed from the element with a hair brush, dip the element into an acid/alkaline solution. Wait a few minutes for the solution to have its effect and then thoroughly clean the element.

**Acid injection:**

The filter is suitable for water with pH values 5 to 9. In the case of acid injection into the system, it is recommended to inject the acid after the filter to prevent acid accumulation in case of system failure.

It is also advisable to install a check valve after the filter before the acid injection point.

**Assembly:**

Check the filter element for any damage. Turn the rotor (3) in the centring plate, so the filter element is well-centred and flush. Ensure that the inner rubber is properly positioned. Carefully place the filter element with the rotor and the cover (5) back into the filter body. Check if the cover is flush against the filter body. Fit the bolts and tighten them gradually to apply pressure evenly on the cover. Reconnect the tubing on top of the cover to the indicator.

**Note:**

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

Each filter comes with this manual which includes installation, operating and maintenance instructions.

**Maintenance:**

Apply a film of grease on the thread of the spindle each year.

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.

Type angled	Unit	4U784102F	4U784103F	4U784104F
Connection	inch	2"	3"	4"
Capacity	m <sup>3</sup> /h	25	40	80

Type in-line	Unit	4U784202F	4U784203F
Connection	inch	2"	3"
Capacity	m <sup>3</sup> /h	25	40

Type parallel	Unit	4U784306F
Connection	inch	6"
Capacity	m <sup>3</sup> /h	150

