

**General instructions:**

This filter has been designed and manufactured to meet the highest requirements as to quality and finish. The UdiMatic filter is an automatically self-cleaning filter for use in medium-sized processing, cooling, recirculation and irrigation systems. The automatic cleaning enables a continuous supply of high-quality water.

Allow sufficient room around the filter to facilitate maintenance. Installing valves at the inlet and outlet simplifies filter maintenance. Install a check valve after the filter if a pressure drop or backflow of water is undesirable. Provide the drain valve with a discharge pipe while ensuring minimal back pressure.

**Working:**

The raw water enters the filter through the inlet on the underside. Dirt particles settle on the filter element and create a cake of deposit. The differential pressure increases until it reaches the preset value (usually 0.5 bar) and activates the flushing process. At this command, the drain valve opens, relieving the pressure in the flushing chamber. This causes a rotor to suck dirt parts off the filter screen. With the hydraulic motor, the rotor rotates over the screen. At the same time, a cylinder causes the rotor to move vertically. These two simultaneous processes result in a spiral movement of the rotor over the entire filter screen, which provides a complete and effective cleaning process lasting  $\pm 8$  sec. This self-cleaning process can also be triggered by a timer or manually.

**Putting into operation:**

The inlet valve must open slowly so as to enable the pressure in the filter to build up. Check for leaks and, if found, repair them. Check the inlet pressure which must be at least 1 bar or higher. Release the air from the hydraulic cylinder or valve by detaching the control tube until all air has been eliminated from the cylinder or valve, and reconnect the control tube. Slowly open the outlet valve of the filter. Normal operating conditions are achieved when the differential pressure across a clean filter is less than 0.2 bar (Difference between incoming and outgoing pressure). Manually start a flushing cycle by pressing the push button on the controller box. Follow the flushing phase and check the pressure in the flushing chamber; this must be 0.6-1.5 bar less than the inlet pressure. The flushing frequency is determined by the time needed to reach the maximum differential pressure of 0.5 bar. In order to be assured of a properly operating system, it is advisable to monitor at least one complete cycle.

**Installation:**

Install the filter in a vertical position only. The inlet and outlet are marked by an arrow indicating the direction of flow. The filter is designed to withstand a maximum pressure of 10 bar. A pressure relief valve must be installed before the filter if this pressure is not sufficiently under control. Fix the filter to the wall or a frame using a support, and secure the supply and discharge pipes with clips.

NB. The differential-pressure switch and timer have been preset at the correct values. Do not adjust these values before starting up.

Type	Unit	785191	785192	785193	785194	785196
Connection	Inch	1½"	2"	3"	4"	6"
Capacity *	m³/h	15	25	40	60	150
Working pressure max.	bar	10	10	10	10	10
Flushing pressure min.	bar	1	1	1	1	1
Flushing capacity approx.	m³/h	5	5	5	5	10

\* see our application guidelines for UDI automatic filters.

1) When ordering, state the number of microns required. Choice from: 400, 300, 200, 130, 100 and 75 mic.

2) Available on request: 50 and 30 mic.









