Manual
AZEZ

General instructions:
This filter is designed and manufactured to meet the highest standards of quality and workmanship. The UDI® AZEZ filter is an automatically self-cleaning filter used in process and waste-water purification. The automatic cleaning allows for a continuous supply of high-quality water.

Working:
The pre-filter captures coarse parts to protect the fine filter and to guarantee the cleaning process. A filter cake of captured dirt forms on the fine filter, which is sucked off the filter element during the flushing phase. The flushing cycle is started by a pre-set maximum differential pressure of 0.5 bar, or a timer, whereby the flush valve is opened and the flushing rotor with nozzle moves like a spiral over the entire filter surface. The filtering process is not interrupted during this process.

Installation:
The filter can be installed in any position. To enable easy maintenance and service, the horizontal position is preferred. When installing the filter, ensure the arrow on the body points in the flow direction. The maximum pressure is 10 bar. A pressure relief valve must be installed upstream of the filter if the pressure is not sufficiently under control. The diameter of the pipe from the pressure source to the filter must be larger or equal to the filter inlet. Inlet and outlet service valves may be installed to allow for proper maintenance.

If a constant supply of water is needed during maintenance, install a bypass valve. When installing more than one filter, allow enough room between the units for easy maintenance. Provide each flush valve with a discharge pipe which ensures minimal back pressure. A pressure gauge on the inlet and the outlet will provide quick visual checking of the working pressure and the differential pressure.
In order to prevent damage when putting the filter into service, make sure that the flush motor rotates in the correct direction so it is switched by the proper end contact.

Operation:
The inlet valve must be opened slowly, to allow pressure to build up in the filter. Check for and repair any leaks. If the inlet pressure exceeds 2 bar, the outlet valve may be opened slowly. Manually start a flushing cycle by pressing the corresponding button on the electric control box, and follow the movement of the exhaust system. The minimum flushing time equals the running time of the flush motor from one end contact to the other. The flushing frequency is determined by the amount of time needed to reach a differential pressure of 0.5 bar. Normal operating conditions are achieved when the pressure loss across a clean filter is less than 0.2 bar.

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

Type	Unit	715302	715303	715304	715306	715308	715310	715312	715314
Connection	Inch	2”	3”	4”	6”	8”	10”	12”	14”
Capacity *	m³/h	25	40	80	150	300	400	470	550
Max. pressure	bar	10	10	10	10	10	10	10	10
Working pressure	bar	8	8	8	8	8	8	8	8
Flush. press. min.	bar	2	2	2	2	2	2	2	2
Flushing capacity	m³/h	8	8	10	10	12	12	14	14

* see our application guideline for UDI automatic filters.
1) when ordering, state the desired number of microns. The choices are: 400, 300, 200, 130, 100, and 80 mic.
2) available upon request: 50, 30, 15 and 10 mic.

Maintenance:
Each filter comes with this manual which includes the installation, operating, 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.
Do not open the filter cover and do not tighten it while the filter is being used or under pressure!

Periodic cleaning:
Manually start a flushing cycle and check the proper functioning of the filter. Open the filter once or twice a year, at the beginning or the end of a season, or if the flushing frequency greatly increases due to insufficient cleaning. Stop the flow to the filter. If provided, close the valves at the filter inlet and outlet. Release the pressure in the filter and open the cover by evenly loosening the bolts. Check the inside of the filter and the bearing ring of the flushing rotor. Open the guard (13), detach the shaft extension (15) from the drive shaft (17) by removing the drive pin (22) from the drive shaft. Open the hatch (9) and carefully pull the flushing rotor (2) from the filter body. Now the filter element can be removed from the filter body. The coarse pre-filter, the fine filter, and the centring plate are attached to each other. Check and clean the screen of the coarse filter, thereby also removing coarse materials from the filter body. Thoroughly clean the filter element with clean water, using a brush to remove dirt particles (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.
To facilitate manual cleaning of the element, the centering plate can be detached from the element.
This can be done by carefully removing the O-ring from the filter element. This will uncover the screws with which the centering plate is secured to the filter element.
Make sure the filter element is intact and undamaged, or immediately replace it.
Clean the in-line filter of the ▲P-switch and the valve.

Assembly:
Lubricate the rubber rings on the filter and the flushing-rotor guide with non-aggressive grease. Carefully replace the filter element into the correct position by pressing in the right place, and then replace the flushing rotor. Connect the drive shaft to the flushing rotor. Fit the cover and the flushing-rotor guide. Apply some grease to the bolts and evenly tighten them. Centre the cover using the centering bushes for the bolts. Check the electric/
mechanical drive and apply some grease to the spindle every 3 months. Put the filter back into service (see ‘Operation’).

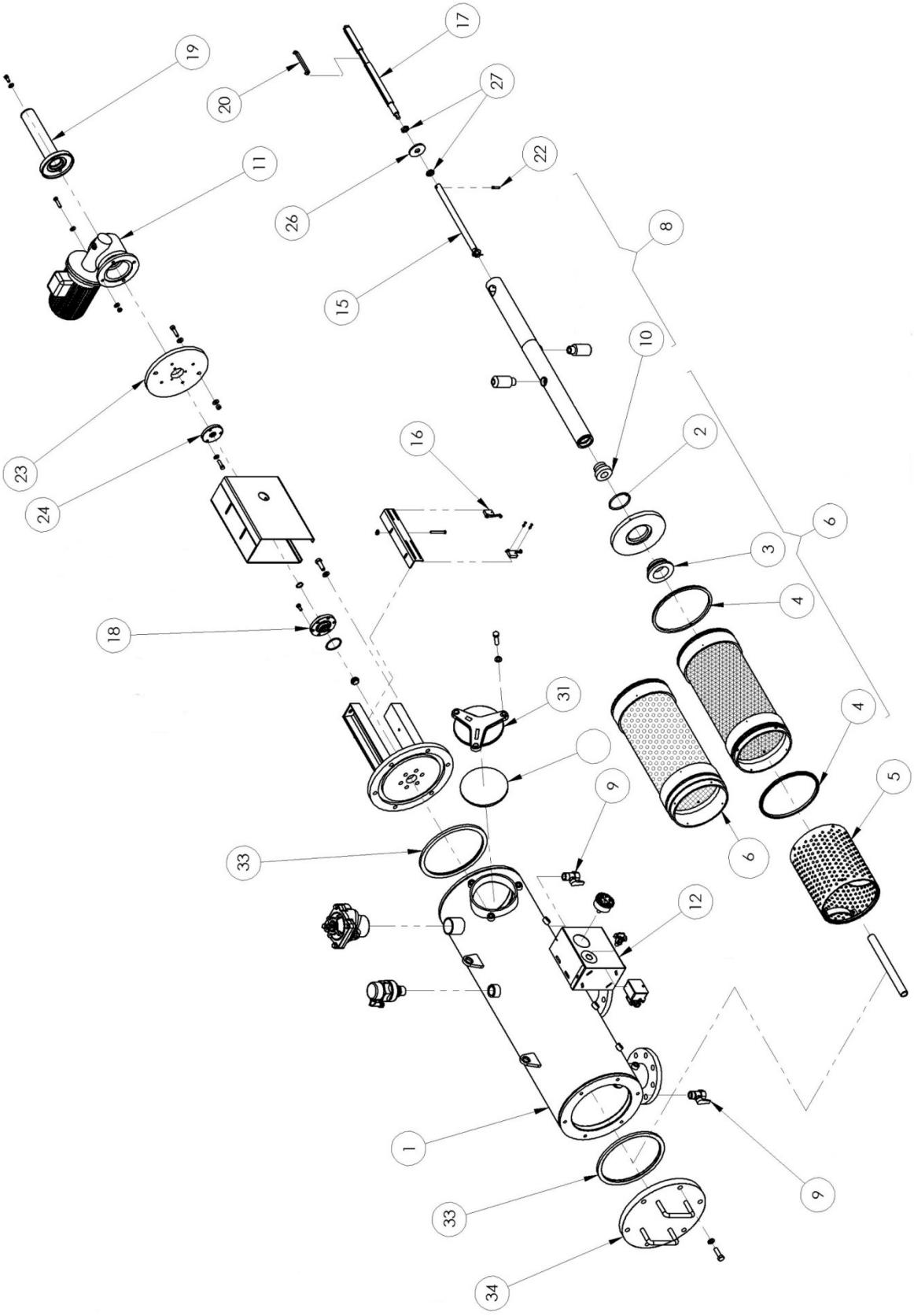
Requirements & control AZEZ:
A recommended working/flushing pressure of at least 3 bar.

Electric terminals:
- Flushing motor: 220/380 V – 3 phase – 0.25 KW
- 2x end contact
- 1x drain valve 24V AC
- 1x deltaP-switch (potential free contact)
- if necessary, a pump starter

Operation requirements:
The DeltaP-switch switches on when the set differential pressure is reached. After ± 10 seconds steady, then continue.
Start the flushing motor, both to the left and to the right between the end contacts. (From end contact to end contact is one cleaning cycle).
Simultaneously activate the 24 V AC drain valve and, if available, hold the pump starter.
The filter will now flush for ± 20 seconds, and the filter is clean!

Option: It is also possible to use another command to interrupt, control, or influence the process as desired.

AZEZ - Parts drawing



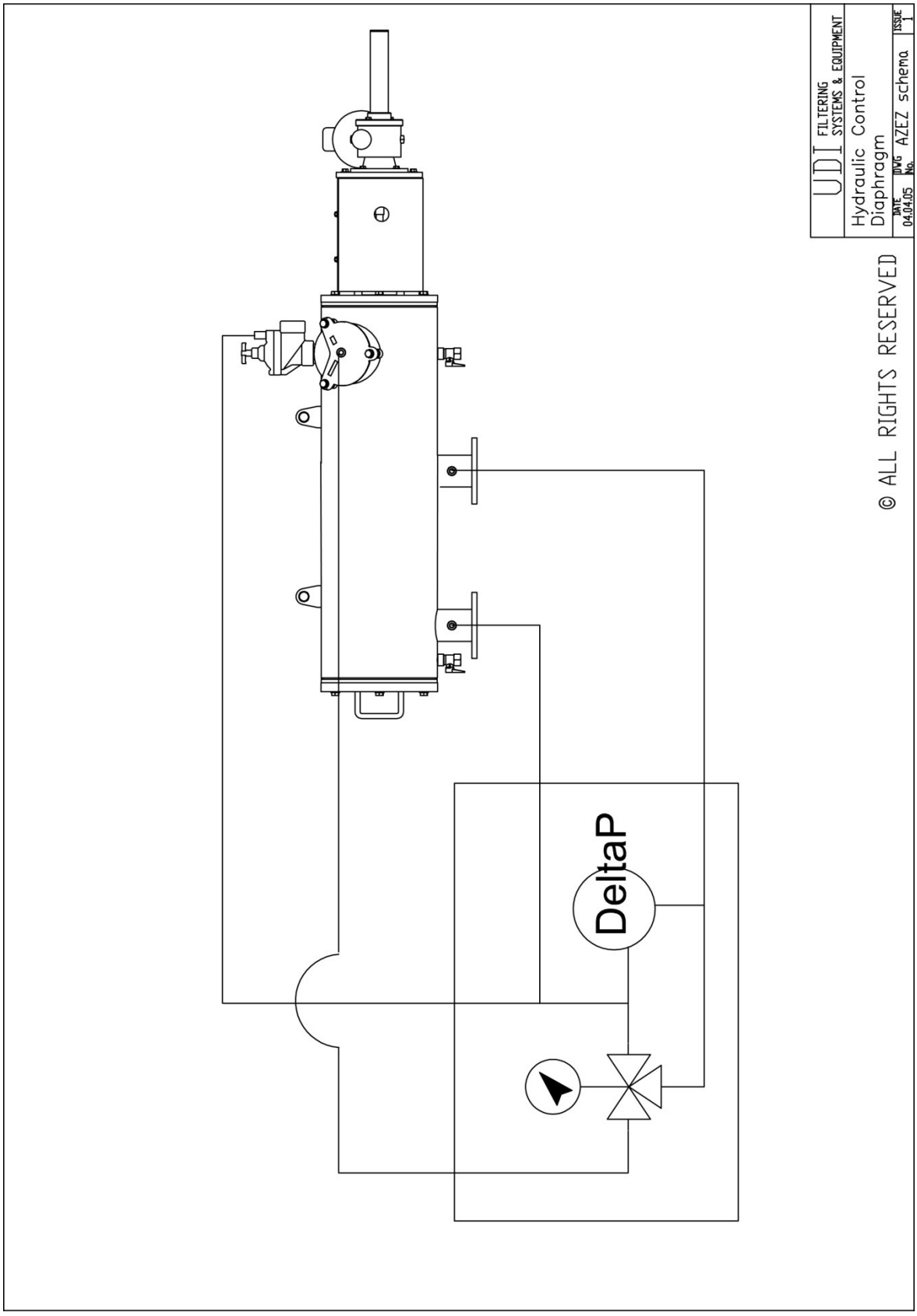
Application guideline for UDI Automatic Filter AZEZ

For the selection of the correct automatic filter, it is imperative to take a number of variables into account. What is the origin of the water used, is it relatively clean – rainwater - or is it soiled – drain water? Next, the application of the filtered water is of importance: is it a pre-filtration for a disinfectant, or is it used for outside irrigation? The table below can be used as a guideline for the choice of the correct AZEZ filter. This selection is based on the average dirt load, which will determine the flushing frequency.
For questions, please consult your supplier!

All our recommendations are without obligation and we cannot be held liable for any adverse consequences resulting from these recommendations.

AZEZ - Maximum flow in m³/h					
Filter mic.	80	100	130	200	300
Application>> Filter	Stock of Disinfectant	Capillary Drip Irrigation	Drip Irrigation Sprinkl.<1.3mm	Sprinkling 1.3 – 1.8 mm	Outside sprinkl.>1.8 Flushing water
2”	20	22	23	25	25
	15	17	18	20	22
3”	35	36	38	40	40
	25	28	32	35	40
4”	70	75	78	80	80
	50	55	60	70	80
6”	110	130	140	150	150
	80	90	100	110	120
8”	180	230	250	300	300
	100	120	140	160	200

AZEZ – Hydraulics diagram



Manual
AZEZ – Electrical diagram