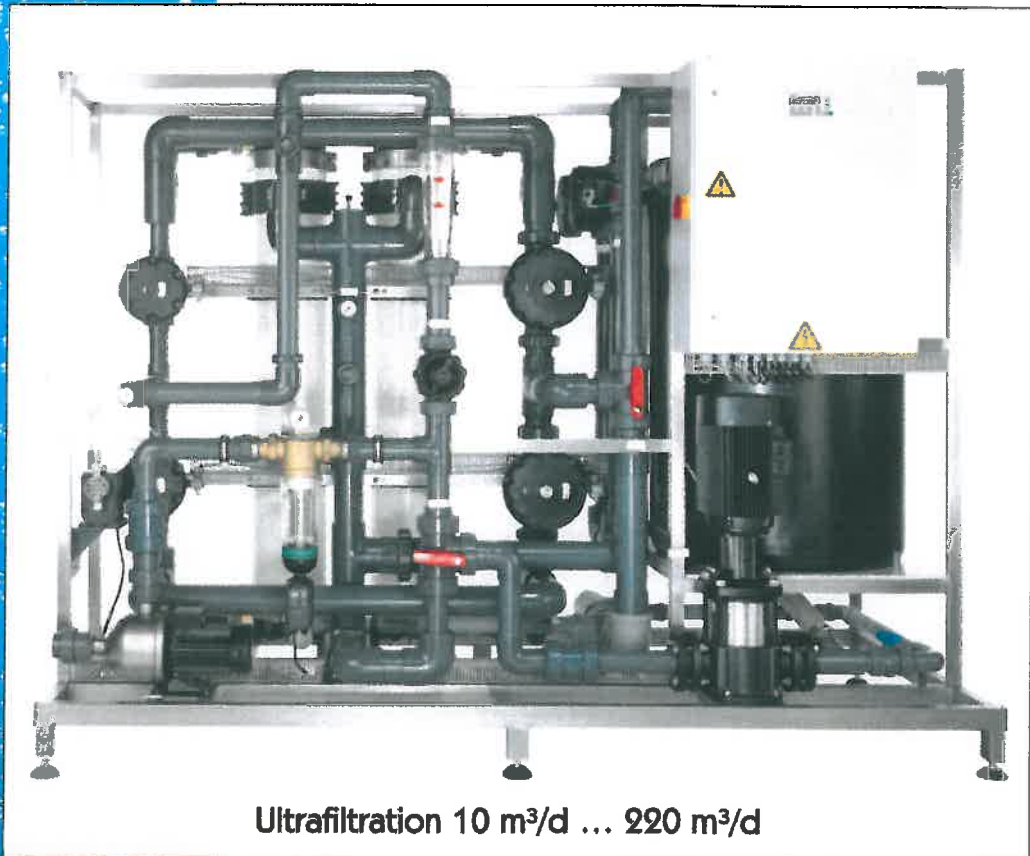


Ultrafiltration

UF 1D1 – UF 2D5



Ultrafiltration UF 1D1 – UF 2D5

Stand-type unit for the filtration of pre-filtered or settled surface- or wellwater, operating on the principle of ultrafiltration.

Unit design

Stainless steel main frame housing the instruments and controls. **Centrifugal pump** with automatic 100 µm backwash-filter, high efficiency **ultrafiltration modules**, vertical mode, housing multi-bore PES-fibres as membranes, **separate tank and pump** for backwash and SIP/CIP-Operation, **closing pump** for the introduction of SIP/CIP-Chemicals and optional filtrate disinfection.

Pneumatic operated valves (air-compressor optional) with solenoid pilot-valves for fully automated filtration, backwash- and SIP/CIP-cycles.

Pressure monitoring gauges for inlet and outlet pressure of the ultrafiltration modules. Pressure switch for detection of malfunction in compressed air supply.

Flow meter for monitoring of Filtrate flow rate.

Control cabinet with lockable main switch, electrical switch gear for control of the pumps, PLC SIEMENS S7-200 control unit for automation of filtration, backwash- and SIP/CIP-procedures.

Unit completely wired, pre-assembled and ready for installation. Electrical equipment in accordance with VDE 0100 part 600, VDE part 1.

System		UF 1D1	UF 2D1	UF 3D1	UF 1D3	UF1D5	UF2D5
Code No.		428001	428011	428021	428031	428041	428051
Control					SPS Siemens S7-200		
Feed water specification							
Feed water pressure min/max	bar				1/4		
Turbidity/Temperature Feed	NTU/°C				5 ... 25 / 5 ... 35		
Connections							
Feed water = Filtrate	DN	20	20	20	65	80	100
Backwash to drain	DN	32	32	32	40	65	80
Power consumption	KW	<1.0	<1.0	<1.0	2.2	2.2	2.2
Power connection	V/Hz				3 x 400/50		
Protection type					IP 54		
Output data							
Filtrate outlet at 70l (m ² xh)	l/h	315	650	965	2,100	3,500	7,000
Filtrate outlet at 100l (m ² xh)	l/h	450	900	1,350	3,000	5,000	10,000
Filtrate outlet at 200l (m ² xh)	l/h	900	1,800	2,700	6,000	10,000	20,000
Trans/MembranePressure max	bar				1.0		
Permeate counterpressure	bar				0.1 ... 0.2		
Recovery	%				95		
Particle size exclusion	µm				0.2		
Dimension and weights							
Dimensions (H x W x D)	mm	1,700 x 2,000 x 800			2,000 x 3,000 x 800		
Weight approx.	kg	150	170	190	210	220	250
Environmental data							
Max. ambient temp.	°C				40		
Relative humidity (air)					<95%, non condensing		

Subject to modification. 01-07