PUROTAP
by ELYSATOR™

Operating instructions
PUROTAP profi .1

Installation
Function
Operation



ELYSATOR
engineering water

swiss made

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1. Safety instructions



Must be supervised



Please note!



Flow rate max. 25 l / min



Not drinking water



Maximum 4 bar pressure up to 60 °C



Maximum 6 bar pressure up to 25 °C

2. Function

The PUROTAP® profi 25.1 / 50.1 treats water for technical applications in closed systems according to the latest standards (VDI 2035, SWKI BT 102-01, Ö-Norm H5195). One the one hand, it removes particulates from the water with a particle and magnetic flow filter and on the other hand it demineralises water using a mixing bed ion exchange resin. The device has integral meters that constantly measure and display fill volume, throughput and water quality. There is no need for an external power supply and no chemicals are released into the water. The device is suitable both for filling with demineralised water and for subsequent demineralisation in circulation.

3. Standard delivery

- Device
- Funnel
- Label «demineralised»
- Operating instructions
- Replacement O-ring for aluminium head

Recycling & Resin quality

We recycle for you!

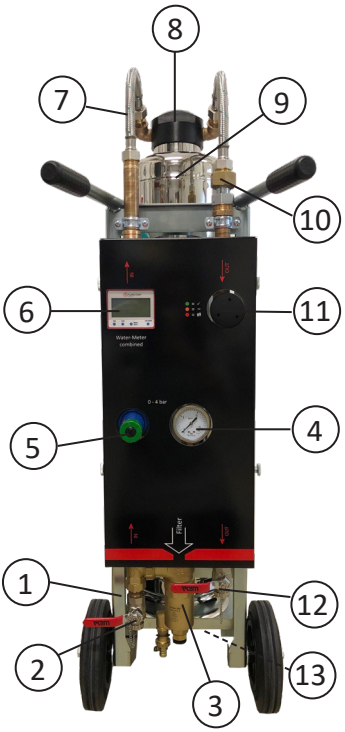


Certified quality resin



4. Specification

4.1. Device description



1 Trolley/frame
2 Raw water input (3/4") with shut-off valve
3 Particle and magnetic flow filter with drain
4 Pressure gauge
5 Pressure reducing valve 0 - 4 bar
6 Combined meter for supply throughput and water quality
7 Reinforced hose (2x)
8 Head with immersion pipe (not shown)
9 Resin canister
10 Fine mesh filter
11 Fill water quality indicator
12 Fill water output (3/4") with shut-off valve
13 Drain valve with mesh filter (not shown)
14 Funnel (not shown)

4.2. Dimensions

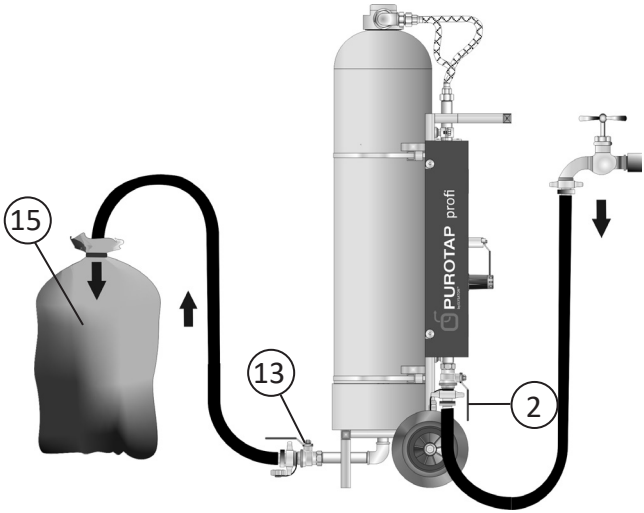
Dimensions	**PUROTAP® profi 25.1**	**PUROTAP® profi 50.1**
Height	1220 mm	1420 mm
Width	370 mm	370 mm
Depth	400 mm	400 mm
Weight (empty)	31 kg	34.5 kg

4.3. Performance data

	PUROTAP® profi 25.1	PUROTAP® profi 50.1
Max. throughput	25 l / min	25 l / min
Pmax - Tmax	6 bar up to 25 °C	6 bar up to 25 °C
Pmax - Tmax	4 bar up to 60 °C	4 bar up to 60 °C

5. Operation

5.1.1. Replacing/filling the resin

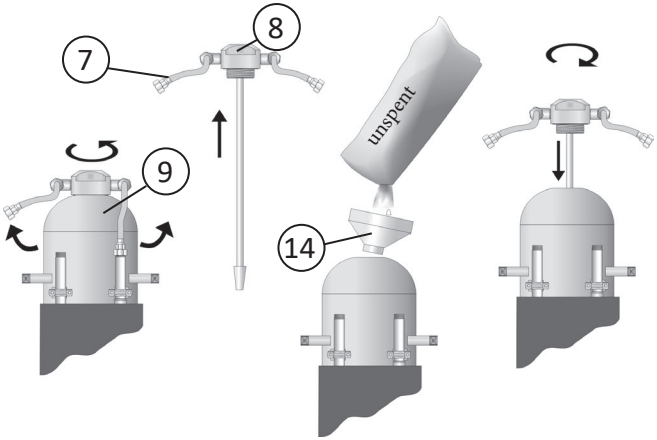


1. Close the ball valves on input (2) and output (12).
2. Remove the mesh filter at drain valve (13).
3. Connect a hose to drain valve (13) and secure collection bag (15) supplied with the replacement resin to the hose, e.g. with a cable tie.
4. Open drain valve (13).
5. Open the ball valve at input (2).

6. Let the resin run into the collection bag, let any water drip out and than recycle or dispose of the bag with household waste.
7. Close the ball valve at input (2).
8. Remove the hose from drain valve (13) and replace the mesh filter.

The hose on the drain valve must not be connected to a water-filled system.

5.1.2. Filling the resin canister



1. Undo the couplings on reinforced hoses (7) at the lower end, i.e. on the device (not the head).
2. Grip head (8) with both hands and unscrew it from resin canister (9).
3. Remove the head with immersion pipe (8) from the resin canister.
4. Use the funnel to fill PUROTAP® HF highpower or PUROTAP® HF nexion resin into the resin canister (PUROTAP® profi 25.1 - 2 bags @ 12.5 l, PUROTAP® profi 50.1 - 4 bags @ 12.5 l).
5. Clean the threads with water. Insert the head with the immersion pipe centrally aligned into the resin canister, and screw it down by hand (floating resin will make centring the pipe much easier).

6. Screw the two reinforced hoses (7) back onto the device.
   The device is ready for use.

- Ensure that any spilled resin is cleaned up thoroughly. Risk of slipping!
- Check the mesh on the immersion pipe for damage every time the resin is replaced.

5.2.1. Connection for system filling

Connect the device to the raw water at input connection (2) using an adequately sized hose. Connect output connection (12) to the system to be filled, also using a hose. The device is fitted with a non-return valve that prevents any flow in the wrong direction.

- Where DIN EN 1717 is applicable (Germany), additionally install a pipe separator upstream of the filling station. Observe the water utilities' regulations.
- PUROTAP® profi may only be pressurised for the duration of the filling process. Permanent connection under pressure is not permitted.

5.2.2. Connection for system flushing

Connect the input connection (2) to the system flow using a sufficiently sized hose. Connect the output connection (12) to the system return to be demineralised, also using a hose. The device is fitted with a non-return valve that prevents any throughput in the wrong direction.

- If the device has no throughput, install a pump between the flow and the PUROTAP® profi.

5.3.1. Commissioning
Prior to commissioning, close the drain valves at the filter (3) and at the resin canister (9).
Then open the shut-off valves at the input and output (2, 12). Throughput may not exceed 25 l / min and can be monitored on combined meter (6).

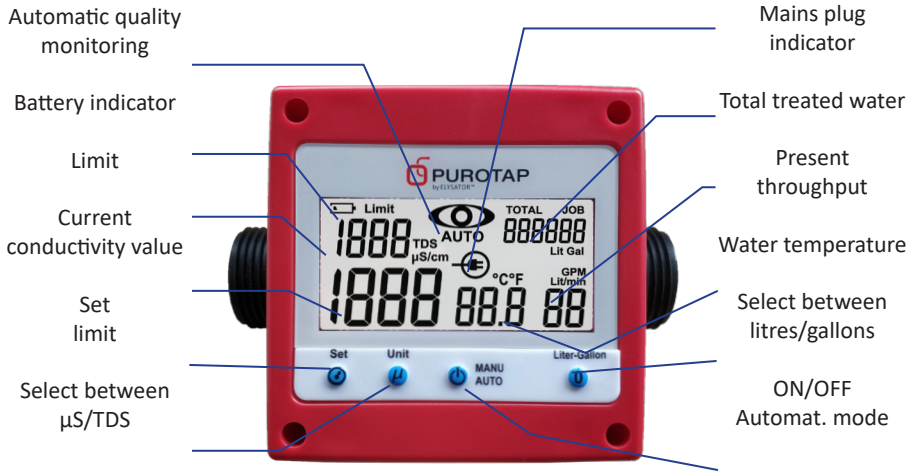
5.3.2. Pressure reducing valve (5)
Rotate the valve head by hand. Anti-clockwise to reduce the pressure. Clockwise to increase the pressure. The higher the pressure, the quicker water flows through the filling station. Use the pressure gauge to check the set pressure. The filling pressure is displayed on pressure gauge (4).



- Adjust the pressure reducing valve to ensure that the system is not damaged during filling.
- The maximum operating pressure of PUROTAP® profi devices is 6 bar.

5.4. Combined meter (6)
The combined meter measures the raw water quality and the throughput (l / min and total throughput).

Set key
Each time the set key is pressed, the limit is increased by 10 µS / cm or 6 TDS. Hold the key for 3 seconds to reset the limit to zero. If the set limit is exceeded, the backlight flashes red and an acoustic alarm sounds. In addition, the floating contact is switched over (only when using the optional power supply unit).



Unit key

Use this key at any time to switch between electrical conductivity (µS / cm) and TDS (total dissolved solids) as well as between °C and °F. The first two are units of measurement for the amount of minerals dissolved in the water. Most European component manufacturers use the unit of measurement µS / cm (microsiemens per centimetre). Water hardness at the output of the refill device can be determined using the following rule of thumb: 1 °fH corresponds to approx. 20 µS/cm or 1 °dH corresponds to approx. 35 µS/cm. Sequence of units: µS/cm -- °C | µS/cm -- °F | TDS -- °C | TDS -- °F

ON/OFF key (MANU/AUTO)

Press the ⏻ key once to switch on the combined meter. The water quality is measured for 10 seconds and compared to the set limit. During measuring, the screen backlighting is blue and the conductivity value is displayed. If the measured value is below the set limit, everything is OK. If the measured value exceeds the limit, the display flashes red, an alarm signal sounds and the floating contact switches over (only when using the optional power supply unit). The current throughput and the water temperature, as well as the total water throughput, are continuously displayed. Press the key for approx. 3 seconds to switch off the device. If the combined meter is switched on and

measures no throughput for about one hour, it automatically switches off. During operation with the optional power supply unit, the combined meter does not automatically switch off and cannot be switched off manually. If the combined meter has switched off automatically, it will automatically restart once the throughput (> 2 l / min) resumes. If the combined meter is switched off using the ON/OFF key, it will not restart automatically.

Auto mode
Press the ⏻ key twice in quick succession to start automatic monitoring by the combined meter. The 👁 symbol is shown to indicate that monitoring has been enabled. In auto mode, the meter only takes measurements when water is actually passing over it. If the throughput is interrupted, the meter continues to show the last captured value. When a throughput is present, the meter takes a new reading of the conductivity value after every 10 litres and displays it. If the limit is exceeded in two successive measurements, the display continuously flashes red and an acoustic alarm sounds. In addition, the floating contact is switched over. If the ⏻ key is pressed for a third time, the meter exits auto mode.

Litre-gallon key
Briefly press this key once to select the throughput indication in litres per minute (l / min) or gallons per minute (GPM).
Press the key for approx. 3 seconds to reset the total throughput volume ("JOB") to 0. We recommend resetting the "JOB" to 0 after every resin change so that the residual capacity of the ion exchange resin can be estimated and compared. The TOTAL litres cannot be reset to 0!

5.5. Fill water quality indicator (11)
The fill water quality is indicated using the traffic light principle.

Green	=	Resin is ready for operation
Amber	=	Resin will soon be spent
Red	=	Resin must be replaced

6. Maintenance

6.1. Changing the batteries on the combined meter

When the battery symbol ( ) appears, the batteries need replacing. Undo the 4 screws in the red cover, lift off the cover and replace the three 1.5 V AAA (LR03) batteries with new ones. Make sure the cover seal is seated properly. Refit the cover and secure with the screws. Check the device is working correctly.

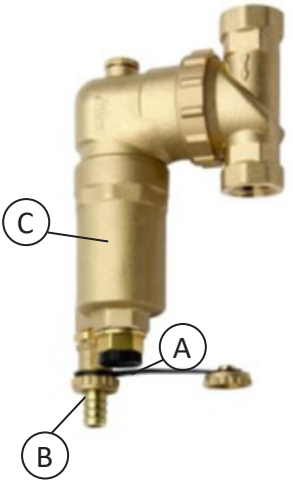
For detailed information about the combined meter, see the PUROTAP® LFM-20 product page on our website.

6.2. Changing the batteries on the fill water quality indicator

The battery life is about 2-3 years. After this period, the batteries have to be replaced. The battery compartment is located at the side of the indicator head and can be opened using a coin. Rotate the battery compartment cover anti-clockwise by about 1/8 of a turn. Then pull out the two button cells (CR2450) and replace them with new ones. Refit the battery compartment cover.

- Observe the polarity
- Prior to fitting the battery compartment cover, ensure the seal is properly seated in the meter.

6.3. Particle and magnetic flow filter (3)



1. The particle and magnetic flow filter requires cleaning at least once a year, when necessary or when throughput is inadequate.
2. Close the ball valves on input (2) and output (12)
3. Unscrew black magnet (A) from the filter and pull it out
4. Open dirty water drain valve (B)
5. Unscrew filter casing (C)
6. Remove the filter
7. Clean the filter and casing with water
8. Check the seal
9. Replace the filter in filter casing (C) and refit it
10. Screw in magnet (A)
11. Close dirty water drain valve (B)

6.4. Fine mesh filter

Fine mesh filter (10) requires cleaning once a year or when throughput is inadequate.

1. Disconnect reinforced hose (7) on the right-hand side of the device (not on the head)
2. Undo the brass coupling
3. Clean the fine mesh filter with water
4. Refit the fine mesh filter and brass coupling
5. Reconnect reinforced hose (7)

7. Spare parts list

Designation	PUROTAP® profi 25.1	PUROTAP® profi 50.1
EEAG funnel for profi	100 872	
PUROTAP® profi .1, immersion pipe	100 968	100 739
PUROTAP® profi .1, complete head	100 741	
PUROTAP® LFM-20, combined meter	102 278	
PUROTAP® profi .1, head O-ring	100 255	
PUROTAP® i-control for PUROTAP® profi	102 215	
Sludge removal bag (included with filling)	1 × 100 537	2 × 100 537
PUROTAP® i-control, replacement batteries	2 × 101733	
PUROTAP® label, heating system demineralised	100 750	
PUROTAP® LFM-20, device batteries	3 × 100 280	

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