

Operating instructions
PUROTAP® mini +

Installation
Function
Operation
Maintenance



ELYSATOR 
engineering water

swiss made 

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1. Safety instructions



Not drinking water



Maximum 60 °C



Maximum pressure 4 bar @ 20 °C (not constantly)



Throughput 10 l/min



Operation under supervision



Cartridge: Recyclable or



Household waste



Device: Recyclable

2. Function

The PUROTAP® mini ⁺ filters lime and aggressive substances, such as sulphates, nitrates and chlorides, out of the fill water. The device uses a mixed bed ion exchanger to provide demineralised, fully desalinated water.



Thanks to PUROTAP® nexion ion exchange resin, carbon dioxide is also removed, increasing the pH value right from the start. This ensures filling in accordance with VDI 2035 (increased anion concentration).

This method does not transfer any chemical additives to the water. The device operates without an external power connection.

3. Standard delivery

- Device, complete with PUROTAP® 750 nexion and PUROTAP® LFM-20
- Ball valve
- PUROTAP® mini ⁺, PVC polyflex hose 4 m
- Mounting set (2 screws, 2 washers, 2 wall plugs)
- Operating instructions

4. Specification

4.1. Device description



- 1 Hose bracket
- 2 Hose (4 m)
- 3 PUROTAP® LFM-20 combined meter
- 4 Replaceable disposable cartridge
PUROTAP® 750 nexion or
PUROTAP® 1000
- 5 Two-part casing
- 6 Ball valve

4.2. Dimensions

Dimension		PUROTAP® mini ⁺
A	Overall height	1095 mm
B	Width	148 mm
C	Depth	132 mm
	Weight	7.8 kg



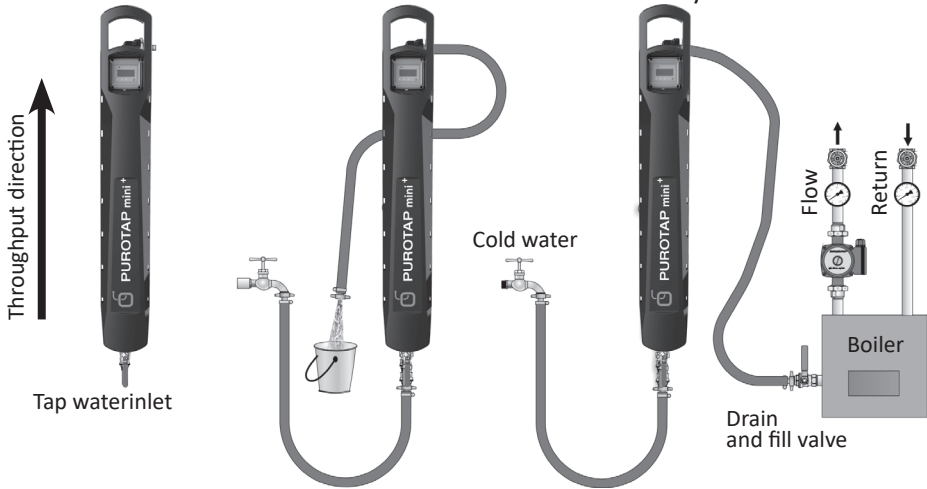
4.3. Performance data

	PUROTAP® mini ⁺
Max. throughput	10 l/min
Pmax	4 bar @ 20 °C
Tmax	60 °C
Demineralisation performance	12,000 l / 1 °fH 600 l / 20 °fH (PUROTAP® 750 nexion) 15,000 l / 1 °fH 750 l / 20 °fH (PUROTAP® 1000 highpower)

5. Operation

5.1. Connection

1. Device positioning
2. Flushing the cartridge
3. Refilling the heating system



- Where DIN EN 1717 is applicable (Germany), a pipe separator must also be installed for filling.
- The cartridge does not contain an automatic shut-off mechanism. Work with the cartridge may only be carried out under constant supervision. The cartridge may be pressurised for the duration of the filling process. The cartridge must not be constantly subject to pressure.



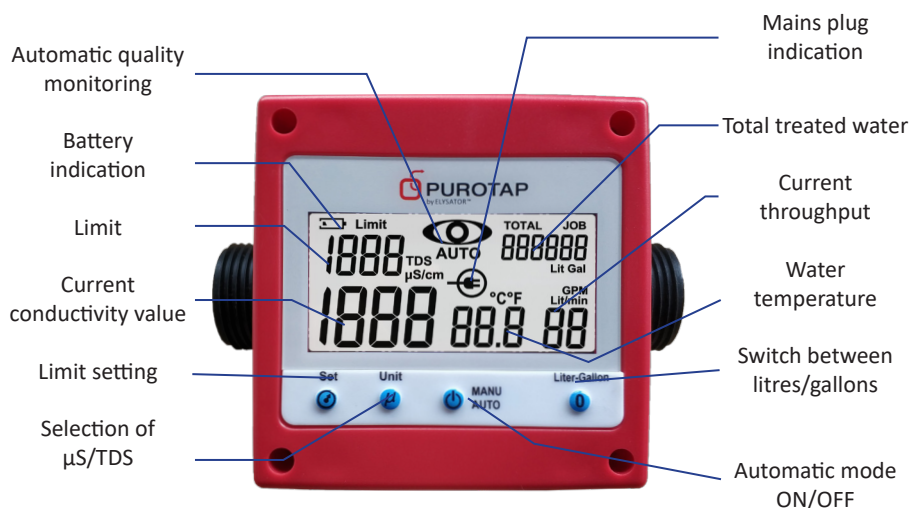
For permanent connections, we recommend the PUROTAP® compenso range.

- Flush the cartridge with approx. 5 l of water before each use. Flush for longer in the case of algae growth. The cartridge must not be allowed to dry out.

- The ion exchange resin in the cartridge must not enter the heating system. As a precaution, a fine filter is fitted which must not be removed.
- After use, always close the cold water tap, the ball valve on the PUROTAP® and the boiler fill valve. As a point of safety, remove the hoses after filling.

5.2. Combined meter

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 $\mu\text{S}/\text{cm}$ or 6 TDS. Hold the key for 3 seconds to reset the limit to zero. Programming the limit ensures that a warning is issued when the ion exchange resin is spent. 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 ($\mu\text{S}/\text{cm}$) and TDS (total dissolved solids) as well as between $^{\circ}\text{C}$ and $^{\circ}\text{F}$. 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 $\mu\text{S}/\text{cm}$ (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. $20 \mu\text{S}/\text{cm}$, while 1°dH corresponds to approx. $35 \mu\text{S}/\text{cm}$. Sequence of units: $\mu\text{S}/\text{cm} -- ^{\circ}\text{C} \mid \mu\text{S}/\text{cm} -- ^{\circ}\text{F} \mid \text{TDS} -- ^{\circ}\text{C} \mid \text{TDS} -- ^{\circ}\text{F}$

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 ($> 2 \text{ l}/\text{min}$) 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. Auto mode is recommended for operation with an automatic topping up device.

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!

6. Recycling



You can now return this product to selected trade partners or directly to ELYSATOR Engineering AG.

We'll recycle for you!



Scan the QR code for more information about recycling.

7. Resin quality

QUALITY CERTIFICATE



Certified vacuum-packed quality resin

Tested PUROTAP® 2-component mixed bed resin for reliable full desalination. Removes limescale and corrosive salts from water. The vacuum pack protects against oxidation for maximum long-term performance. ELYSATOR Engineering AG checks the quality and mix of the PUROTAP® resin with the greatest care. Conductivity, pH value and water hardness are regularly tested and certified by Aquitest, the largest Swiss water laboratory.



View resin analyses

8. Maintenance

8.1. Changing the cartridge

1. Close the ball valve (6) at the inlet
2. Unlock the front part of the casing (5) by pushing it upwards (approx. 2 cm) and lifting it off
3. Unscrew the coupling at the inlet
4. Unscrew the coupling between the cartridge (4) and the combined meter (3)
5. Remove the spent cartridge (4) and either return it or dispose of it with the household waste
6. Insert a new cartridge into the casing
7. Screw the couplings back on and check for leaks
8. Reattach the front part of the casing (5)

8.2. 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.

9. Spare parts

Item no.	Designation
102 278	PUROTAP® LFM-20, combined meter (without coupling)
101 834	PUROTAP® mini +, PVC polyflex hose 4 m
101 910	PUROTAP® mini +, elbow coupling
101 911	PUROTAP® mini +, reducer coupling
100 280	PUROTAP® device battery (3 pce)

10. Consumables

Item no.	Designation
101 966	PUROTAP® 750 nexion
100 853	PUROTAP® 1000 highpower