PUROTAP
by ELYSATOR™

Operating instructions PUROTAP® compenso

Installation
Function
Operation
Service

ELYSATOR
engineering water

www.elysator.com

Table of contents

1. Safety instructions

 Not drinking water

 Maximum 60 °C

 Maximum 4 bar pressure

2. Function

The PUROTAP® compenso filters lime and aggressive substances such as sulphates, nitrates and chlorides out of the fill water. The appliance uses a mixed bed ion exchanger to provide deionised, fully desalinated water (softened water) for systems of all sizes. This method does not emit any chemical additives into the water. The appliance operates without an external power connection.

3. Standard delivery

PUROTAP® compenso 2:
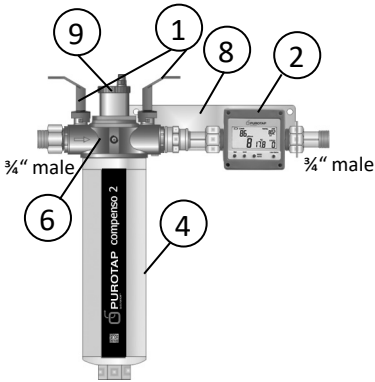- Appliance
- Combined meter
- Wall mounting bracket

PUROTAP® compenso 12/25/50:
- Appliance
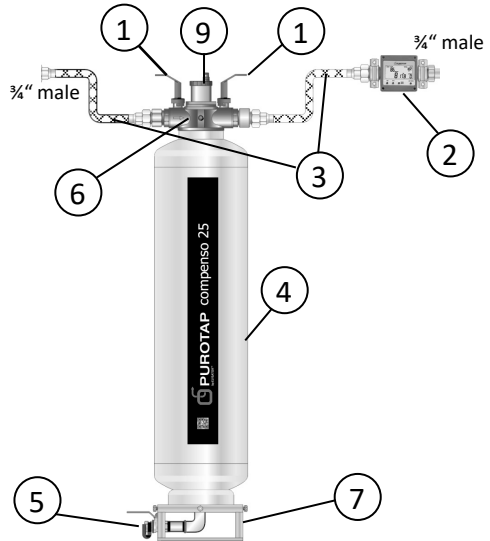- Combined meter
- 2 reinforced hoses

4. Specification

4.1. Device description

PUROTAP® compenso 2

PUROTAP® compenso 12/25/50

¾" male

1 Shut-off valve	6 Head
2 Combined meter	7 Base
3 Reinforced hose	8 Wall mounting bracket
4 Resin canister	9 Air vent
5 Drain valve	

4.2. Dimensions

PUROTAP®	compenso 2	compenso 12	compenso 25	compenso 50
Installed length	45 cm	80 cm	80 cm	80 cm
Height	46 cm	70 cm	115 cm	142 cm
Weight (empty)	5 kg	7.5 kg	15 kg	18 kg
Resin filling	1.75 l	12.5 l	25 l	50 l

4.3. Performance data

PUROTAP®	compenso 2	compenso 12	compenso 25	compenso 50
Annual requirement	< 250 l	< 2500 l	< 5000 l	< 10,000 l
Capacity at 1° dH	2.5 m³	20 m³	40 m³	80 m³
Capacity at 1° fH	4.5 m³	35 m³	70 m³	140 m³
Flow rate	2.5 l/min	10 l/min	20 l/min	20 l/min
Operating pressure	< 4 bar	< 4 bar	< 4 bar	< 4 bar
Max. temp.	60 °C	60 °C	60 °C	60 °C

5. Operation

5.1. Connection
5.1.1. Use with heating system fill hose
1. Flush the cartridge
   Open the valves. Connect a hose from the appliance to the drinking water supply. Route a further hose from the connection on the combined meter side to a bucket. Flush the cartridge with approx. 10 l of water.
2. Refill the heating system
   Now remove the hose from the bucket and connect it to the heating system. Fill the heating system.
3. Close valves and remove hoses

⚠ • Permanent connection via a heating system fill hose is not permitted.
• Unsupervised use is not permitted.
• Where DIN EN 1717 applies (Germany), observe the regulations regarding system separation.

- The ion exchange resin must not enter the heating system. Do not remove the fine mesh filter in the output.
- Observe the maximum system fill pressure.

5.1.2. Simple permanent connection

Raw water →

Keep valves closed when not in use

Backflow preventer
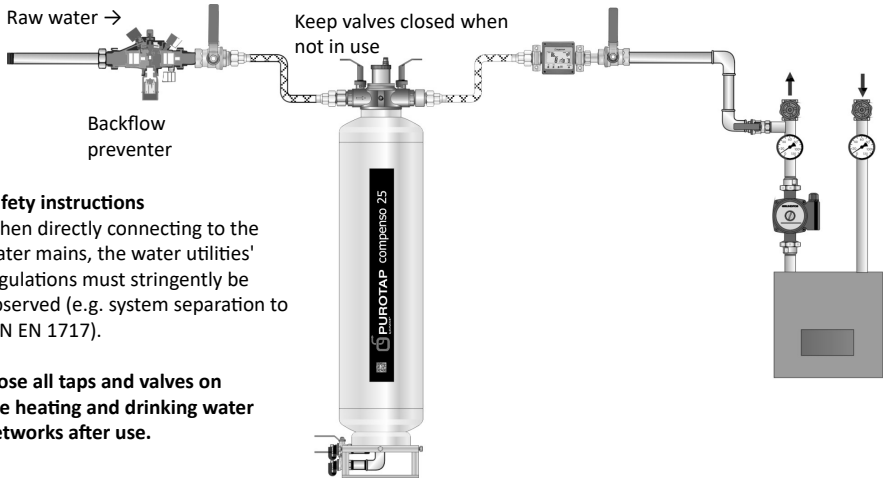
Safety instructions
When directly connecting to the water mains, the water utilities' regulations must stringently be observed (e.g. system separation to DIN EN 1717).

Close all taps and valves on the heating and drinking water networks after use.

5.1.3. Permanent connection in combination with automatic topping up

Raw water →

Automatic topping up monitor
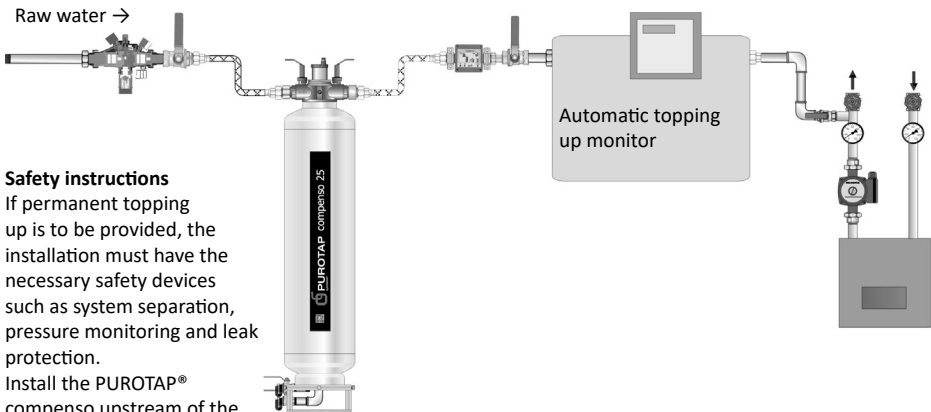
Safety instructions
If permanent topping up is to be provided, the installation must have the necessary safety devices such as system separation, pressure monitoring and leak protection.
Install the PUROTAP® compenso upstream of the topping up monitor.

5.2. Combined meter

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

Automatic quality monitoring

Battery indicator

Limit

Current conductivity value

Limit setting

Select between µS /TDS

Mains plug indicator

Total treated water

Present throughput

Water temperature

Select between litres/gallons

ON/OFF autom. operation

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. 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 (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 background is lit in 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 present throughput and the water temperature, as well as the total amount of 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 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 appears 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 to enable estimating and comparing the residual capacity of the ion exchange resin. The TOTAL litres cannot be reset to 0.

6. Maintenance

6.1. Resin change
PUROTAP® compenso 2
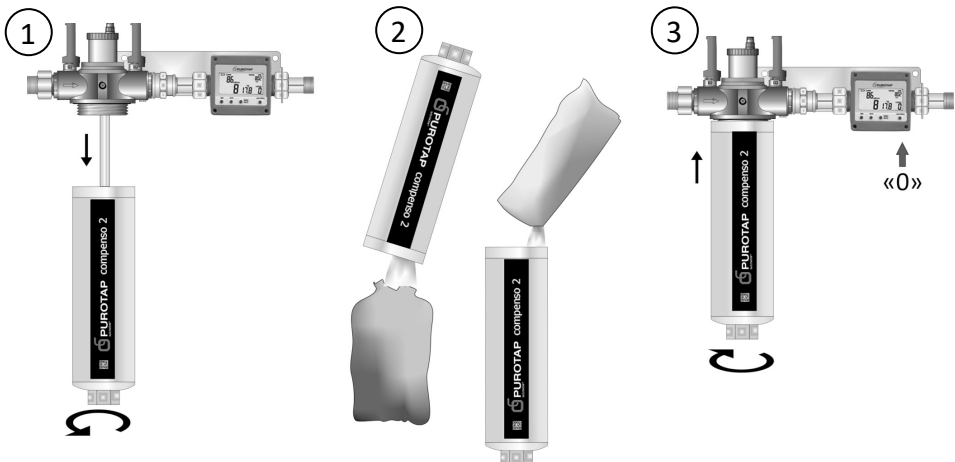
1. Close ball valves, unscrew the canister
2. Dispose of spent resin with household waste, fill in new resin
3. Screw on the canister, reset the combined meter to "0" (see chapter 5.2.)

PUROTAP® compenso 12/25/50

1. Close ball valve in the output, connect a hose to the drain valve and route into the supplied collection bag. Use water at mains pressure to rinse out the resin, let the water drip out and dispose of resin with the household waste.
2. Unscrew the reinforced hoses, unscrew the head unit.
3. Fill in new resin, re-attach the head unit, clean the thread with some water to remove any resin and moisten the newly added resin at the same time. This mak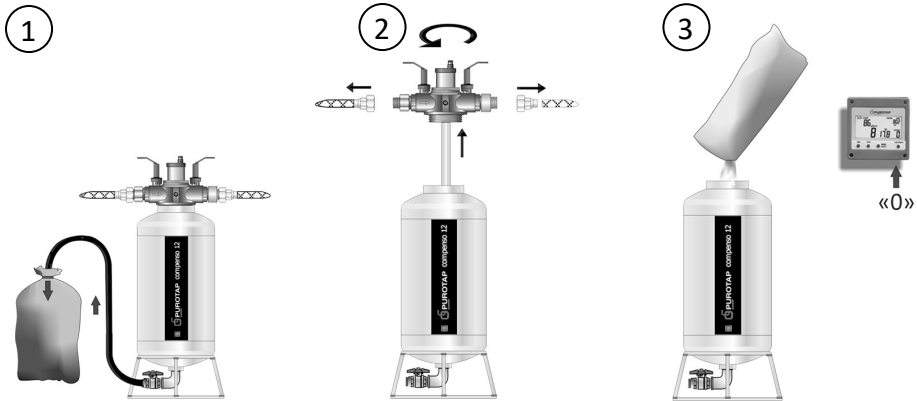es centring the brass head much easier. Connect the reinforced hoses, reset the combined meter to "0" (see chapter 5.2.)

6.2. Changing the batteries on the combined meter

When the battery symbol ( ) appears, the batteries need replacing. Undo the 4 screws on the red cover, lift off the cover and replace the three 1.5 Volt AAA (LR03) batteries with new ones. Make sure the cover seal is seated properly. Replace 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.

7. Spare parts

PUROTAP®	compenso 2	compenso 12	compenso 25	compenso 50
Combined meter	102278			
Head	102145			
O-ring for head	100255			
Air vent	100811			
Immersion pipe	100556	100967	100968	100739
Canister	100203	100201	100202	100204

8. Consumables

PUROTAP®	compenso 2	compenso 12	compenso 25	compenso 50
HF 1.7 l highpower	100920	—	—	—
HF 12.5 l highpower	—	100922	—	—
HF 12.5 l nexion	—	101651	—	—
HF 25 l highpower	—	—	100868	2x 100868
HF 25 l nexion	—	—	101653	2x 101653
Batteries for combined meter	3x 100280			

9. Accessories

PUROTAP®	compenso 2	compenso 12	compenso 25	compenso 50
LFM-20, mains unit plus connector	102280			
profi, funnel	100872			

All rights and technical modifications reserved.
The current version can be found at www.elysator.com.   EN0721

Service booklet

Installer: _____   Project: _____

_____   _____

_____   _____

Date of installation: _____   Device no.: _____

Sludge removal interval: |_____|

Maintenance interval: |_____|

Date	Job	Meter	mA	Company/ signature