



BWT Perla Model Series

The Stand-Out
Water Softeners.

For You and Planet Blue.

 **BWT**
BEST WATER TECHNOLOGY

What do you know about water hardness?

Water from the mains can be hard, medium or soft. But what do we mean by "hard" or "soft" water? And how can we test water hardness at home?



One phenomenon is upsetting inhabitants across many regions: hard, sometimes limy water. It most often reveals itself through unpleasant limescale stains in the bathroom, calcified household appliances and scratchy laundry. Water hardness varies from region to region, and there are different solutions that can deal with every level of water hardness in your locality. As a first step, it is important to find out how hard or soft your water actually is.

Why does water become hard?

Our drinking water contains natural minerals and trace elements, because water collects a whole range of substances during the cycle of evaporation and precipitation. The water is enriched with minerals based on the kinds of rock layer that it seeps through. Some are responsible for the "hardness" in the water, with calcium and magnesium being particularly important in this regard.

Regional differences

The hardness or softness of the water that ultimately comes out of your pipes is determined by the geological conditions of the well or spring area from which the water originates. That is why it tastes different from region to region.



How is water hardness measured?

Water hardness is measured for example in German degrees of hardness (dH). Essentially, however, water hardness does not really tell us anything about water quality. At the same time, the degree of hardness of our water is proven to have a huge impact on our daily lives and households.

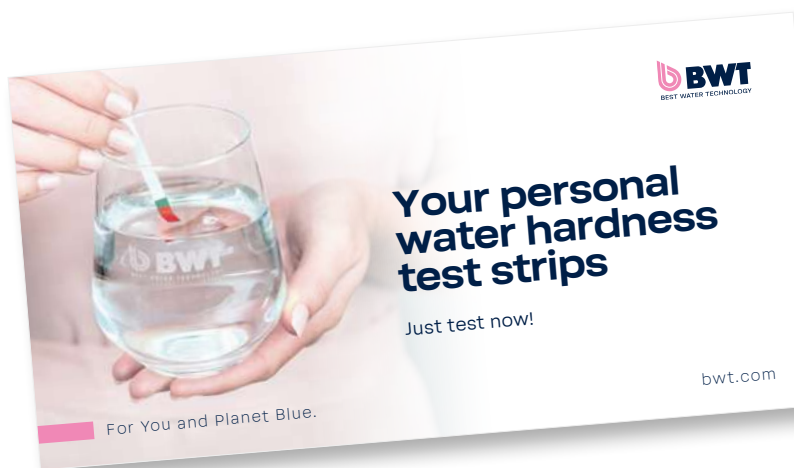
Silky-soft BWT Pearl Water

With the BWT Perla, BWT has developed completely unique, cutting-edge technology that transforms even very hard water into silky-soft BWT Pearl Water! BWT Pearl Water systems operate based on the principle of ion exchange. They replace the substances that cause water hardness with sodium ions. You can see and feel the difference!

Soft water: up to 8°dH

Medium-hard water: 8 to 14°dH

Hard water: over 14°dH



BWT
BEST WATER TECHNOLOGY

Your personal water hardness test strips

Just test now!

bwt.com

For You and Planet Blue.



Find out more now:
bwt.com/wasserhaerte



Outstanding

The BWT Perla Model Series

A Feat of Innovation: **Breaking Through to a New Era of Comfort**

The BWT Perla is the first of a completely new generation of BWT Pearl Water systems on the market. The features? A unique hygiene concept, highly sophisticated communication technology, maximum safety and the simplest operation.



Every step on the path to silky-soft Pearl Water, and every detail of the product, has been optimised to achieve the perfect result. Only the level of luxury provided by the BWT Pearl Water remains unchanged, with more delicate skin, shinier hair and silky soft laundry guaranteed at all times.

Save with BWT Perla.
Find out more here.



BWT Pearl Water means ...



... enjoyment

Noticeably softer skin,
smoother, shinier hair.



... protection

Less limescale in your
domestic water system
protects every connected
device.



... savings

Fewer limescale deposits
means less energy loss.

Pearl Water: A Skincare Essential

Beauty Begins with Water

Noticeably softer, more velvety skin and smoother, shinier hair – soft water is a true beauty revelation.

The less lime in the water, the less is retained in the body. Creams and body lotions are then better absorbed and hair can gleam in its natural splendour, with much less need for care products. Silky-soft BWT Pearl Water is a real beauty elixir.



Pearl Water for Cuddle-Level Comfort

Cosiness in Every Fibre

Silky-soft BWT Pearl Water protects the fabric of clothes and towels and prevents the unpleasant dry stiffness that washing can cause.

It lets you drastically reduce your use of fabric softeners – without sacrificing the comfort of soft and fluffy towels and cuddle-ready bathrobes. BWT Pearl Water

systems give you silky-soft Pearl Water every day, and the incomparable feeling of soft and comfy laundry on your skin. An experience you will never want to miss.

Efficient Heating **Silky-Soft BWT Pearl Water** **Provides the Best Protection**

It does not usually take long for limescale issues to emerge. Wherever there is flowing or standing hard, calciferous water, limescale can accumulate. Even boilers and heat exchangers are at risk.

The level of failures due to lime deposits is much higher again in water heating, where limescale protection is the key issue. BWT Pearl Water keeps hard water away and protects boilers from defects caused by limescale deposits and calcified heating elements. Energy consumption remains low and your heating system stays efficient.



Good Protection Saves a Lot of Money **Expensive Repairs Can Be Avoided**



Repairs are expensive. Hard water can cause up to 60 kg of lime to flow through the pipes of your single-family home every year.

If just some of it is deposited in your pipes, it can clog and ultimately block them up entirely. Limescale deposits in household appliances shorten their service life. Silky-soft BWT Pearl Water protects your valuable assets from the premature wear that limescale causes. And it saves you from expensive repairs.

Bright and Shiny – **A Radiant Sheen:** **A Question of Water**

Cleaning is annoying. Silky-soft BWT Pearl Water leaves you with fewer limescale spots.

Less lime in your water also means less lime deposited on taps and tiles. Silky-soft BWT Pearl Water leaves your bathroom and kitchen looking cleaner and brighter. Likewise, cutlery, glasses and dishes from the dishwasher come out clean and streak-free, while using up to 50% less detergent! And as these savings apply to both your bathroom and kitchen cleaning products, you really feel the savings in your pocket. Silky-soft Pearl Water from BWT makes cleaning quick, giving you more time for the pleasures of life again.



Consume Less **Save More, Feel Better**

BWT Pearl Water helps reduce the use of laundry detergents, cleaning agents and care products by up to 50%, while keeping the amount of energy consumed by your devices at a low level.

Fewer limescale deposits in your appliances means less energy loss. That is just as true for washing machines, dishwashers, kettles and coffee machines as it is for hot water boilers and heating systems.

A limescale layer of just two millimetres on heating elements can increase energy consumption by up to 20%.



BWT Perla Model Series

Outstanding Technology

BWT Perla units are top-end devices that do their job almost completely automatically. You can find all the information you need on the built-in, ergonomic touch display. System data and operating parameters are easy to view and control, with checklists and assistants to help you with operation.

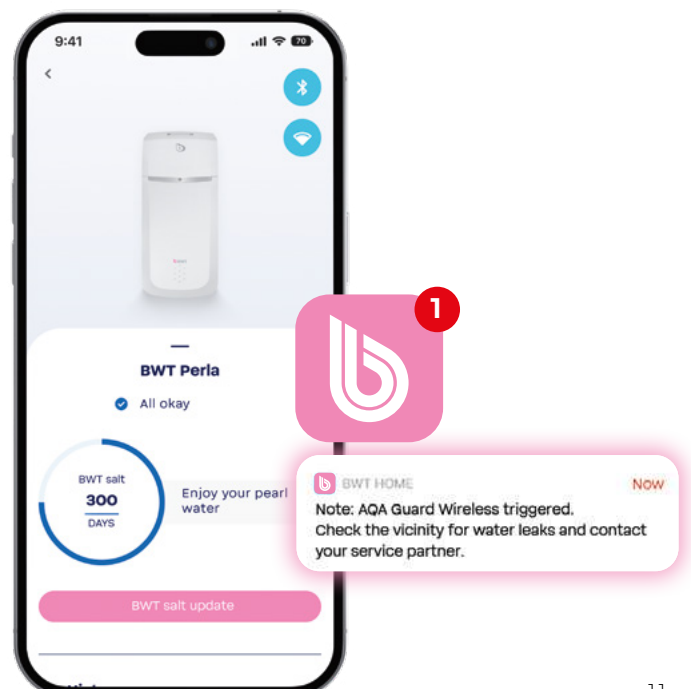


Safety, Pure and Simple

With comprehensive systems for protecting against water damage (AQA Safe/Watch/Guard/Stop) and the guarantee of perfect water hygiene (360° hygiene mode with loClean, sealed housing, dry cabinet, etc.), our customers cannot be more satisfied with our BWT Perla.

BWT Best Water App

Your gateway to the new age of customer satisfaction – your personal water consultant for BWT Perla and countless other BWT products. BWT Best Water provides added value in the form of more information, safety and convenience, plus a whole range of extra benefits.





BWT Perla seta

The Luxurious One

More Capacity Means an Abundance of Pearl Water!

Duplex
system:
High
capacity



The BWT Perla seta is particularly suitable for modern domestic installations with a high level of water consumption. It can also withstand even very high levels of water hardness. No matter how much water you consume while filling your pool or using your splash or rain-fall shower, you have no limits with the BWT Perla seta!

The BWT Perla seta adjusts its operating mode to each different level of consumption based on the amount of water needed throughout the day. Water passes through the two columns in an adaptive parallel flow that ensures maximum Pearl Water availability and a peak water flow of up to 50 litres per minute.

The Benefits to You

- » Protection from leaks with AQA Guard floor sensor, AQA Stop, AQA Watch and AQA Safe valve
- » Motor blending valve for AQA Stop and holiday mode
- » Proximity sensor and illuminated logo as status indicator
- » Dry salt storage for more hygiene
- » 5" display and connectivity via GSM, WLAN, LAN and BWT Best Water App


Optional

- » Up to 10 AQA Guard wireless water sensors
- » BWT salt service with free home delivery

Order no. 11601



Design

 Duplex
2 x 18 m³ x °dH (max.)



Pearl Water capacity

 50 l/min



Dimensions

H x W x D: 797 x 394 x 505 mm



Max. salt supply

32 kg



Regenerative/regeneration

0.76 kg



BWT Perla

The High-Performer

Designed for Those who Make no Compromise!

Duplex
system:
High nominal
flow rate



The BWT Perla is designed as a duplex system. At the heart of the system are the two resin columns, where the ion exchange takes place. The exchange material binds itself to the substances causing the hardness. As soon as the material in one column stops allowing further material binding, the second resin column jumps into action. That means you have a supply of silky-soft Pearl Water around the clock.

Furthermore, adaptive parallel operation lets BWT Perla reach a peak flow rate of up to 53 litres per minute. That means a constant supply of silky-soft Pearl Water throughout your house.

The Benefits to You

- » Protection from leaks with AQA Guard floor sensor, AQA Stop, AQA Watch and AQA Safe valve
- » Motor blending valve for AQA Stop and holiday mode
- » Proximity sensor and illuminated logo as status indicator
- » Dry salt storage for more hygiene
- » 5" display and connectivity via GSM, WLAN, LAN and BWT Best Water App


Optional

- » Up to 10 AQA Guard wireless water sensors
- » BWT salt service with free home delivery

Order no. 11424



Design

 Better | duplex
2 x 6.2 m³ x °dH (max.)



Pearl Water capacity

 53 l/min



Dimensions

H x W x D: 797 x 394 x 505 mm



Max. salt supply

32 kg



Regenerative/regeneration

0.25 kg



BWT Perla home

The Functional One

Compact, with Intelligent Regeneration Control!

Simplex
system:
Dynamic
adjustment



The practical solution for families with conventional water requirements. The BWT Perla home contains a column with exchange material that produces up to 28 litres of silky-soft BWT Pearl Water per minute. A predictive regeneration control system allows it to clean itself automatically in periods of low water consumption.

Once the exchange material in the column is exhausted, it is regenerated with a small amount of sodium chloride solution. In this period, only hard water would be available. However, BWT Perla home uses a pre-emptive and predictive system to regenerate the material (at night, for example), optimally adapting to your habits to ensure your Pearl Water is available whenever you need it.

The Benefits to You

- » Protection from leaks with AQA Guard floor sensor, AQA Stop, AQA Watch and AQA Safe valve
- » Motor blending valve for AQA Stop and holiday mode
- » Proximity sensor and illuminated logo as status indicator
- » Dry salt storage for more hygiene
- » 5" display and connectivity via GSM, WLAN, LAN and BWT Best Water App

Optional

- » Up to 10 AQA Guard wireless water sensors
- » BWT salt service with free home delivery

Order no. 11431



Design

Simplex
9–18 m³ x °dH (min.–max.)



Pearl Water capacity

28 l/min



Dimensions

H x W x D: 797 x 394 x 505 mm



Max. salt supply

32 kg



Regenerative/regeneration

0.76 kg



BWT Perla one

The Clever One

The Smart Entry to the World of Pearl Water!

Simplex
system:
Entry-level
model



The BWT Perla one saves on performance where it makes sense, but never on quality and comfort! This intelligent single-column system is particularly suitable for medium-hard water (8–14°dH) and low water demand. It is specially designed for installation upstream of the water heater.

The BWT Perla one also offers comprehensive protection against water damage if desired. For instance, up to 10 AQA Guard floor sensors can be connected to the unit. They monitor the floor for unwanted moisture at its position. The optional AQA Watch feature sounds the alarm in the event of atypical water consumption – a leaking toilet cistern, for example.

The Benefits to You

- » Protection from leaks with AQA Watch and AQA Safe valve
- » Motor blending valve
- » Dry salt storage for more hygiene
- » Illuminated logo as a status indicator
- » 3.5" display and connectivity via WLAN, LAN and BWT Best Water App

Optional

- » Up to 10 AQA Guard wireless water sensors
- » BWT salt service with free home delivery

Order no. 11433



Design

Simplex
9–18 m³ x °dH (min.–max.)



Pearl Water capacity

28 l/min



Dimensions

H x W x D: 797 x 394 x 505 mm



Max. salt supply

32 kg





Regenerative/regeneration

0.76 kg

Your installer will advise you
on the best device for you

BWT Perla Model Series


At a Glance

UNIT TYPE	 BWT PERLA SETA THE LUXURIOUS ONE	 BWT PERLA THE HIGH PERFORMER
APPLICATION AREA AS PER DIN 1988-200 HU* NO. OF PEOPLE	6-8 12-20	1-5 2-12
NOMINAL CAPACITY AS PER DIN EN 14743 (M ³ X°DH)	2 X 18	2 X 6.2
NOMINAL FLOW RATE AT ΔP 1 BAR DIN EN 14743 (M ³ /H)	3.0	3.2
MULTI-TOUCH DISPLAY	5"	5"
DRY SALT STORAGE FOR MORE HYGIENE	●	●
MOTOR BLENDING	●	●
BWT BEST WATER APP	●	●
GSM DATA CARD	●	●
LAN-WLAN CONNECTION	●	●
DEVICE STATUS INDICATOR (BWT LOGO)	●	●
PROXIMITY SENSOR	●	●
AQA WATCH FUNCTION	●	●
AQA SAFE FUNCTION	●	●
AQA STOP FUNCTION	●	●
AQA GUARD WIRELESS FUNCTION	OPTIONAL ACCESSORY	OPTIONAL ACCESSORY
MINERAL METERING UNIT SMART DOS PLUS	OPTIONAL ACCESSORY	OPTIONAL ACCESSORY
ORDER NO.	11601	11424



Standard Equipment:

Breaking Through to a New Era of Customer Satisfaction – With Every BWT Perla

 BWT PERLA HOME THE FUNCTIONAL ONE		BWT PERLA ONE THE CLEVER ONE	
1-5 2-12		1-5 2-12	
9-18		9-18	
1.7		1.7	
5"		3.5"	
•		•	
•		•	
•		•	
•		–	
•		•	
•		•	
•		–	
•		•	
•		•	
•		–	
OPTIONAL ACCESSORY		OPTIONAL ACCESSORY	
OPTIONAL ACCESSORY		OPTIONAL ACCESSORY	
11431		11433	

01 **No more need to think about salt! No more need to drag heavy salt around!**

Sensor measures the salt supply. Salt level indicator and reminders in the app, fully autonomous ordering and free just-in-time delivery, ergonomic 2 x 10 kg easy packs

02 **Best Water App with a whole range of extra benefits for users and consultants**

Check more than 30 BWT products on your smartphone/tablet, personal helpdesk with installers/BWT customer service through app/online/by phone. Operating instructions, additional warranties, promotional offers, regenerative salt, and much more

03 **AOA Guard Wireless – up to ten wireless water monitors**

Protection against leaks throughout the house, battery-less AQA Guard wireless water sensors report water leaks via EnOcean, available to order as an optional accessory

04 **Less maintenance**

Simple routine maintenance by the operator every six months with BWT IoClean Expert, maintenance every two years

05 **Plenty accessories included**

Multiblock X connection block, connection set, siphon, IoClean tablet, BWT AQA test and BWT Pearl Water Check

Glossary

360° hygiene mode

BWT makes no compromises when it comes to drinking water hygiene. The 360° hygiene mode ensures the Pearl Water systems are safe and hygienic throughout production, installation and operation. Production in a hygienic environment, commissioning by trained personnel and installers, IoClean tablets for regular unit cleaning, sealed housing, a dry cabinet in which the brine is only freshly mixed for regeneration, and a maintenance service.

Auto-Check

System check of core components every two months. Automatic unit self-check with error messages in the event of malfunctions: water meters, brine meters and electronic components. Does not replace regular maintenance.

AQA Safe

Prevention of water damage caused by flushing water in the event of a power failure. The AQA Safe valve closes the waste water valve in the event of a power failure and thus protects against water damage caused by rinsing water, especially when the rinsing water is being drained by a pump that stops functioning when the power fails.

AQA Stop floor sensor

If the product's floor sensor detects water on the floor, the water supply in the direction of flow from the unit is shut off and a warning is issued. The floor sensor only responds to mains water (minimum conductivity of 200 µS/cm).

AQA Stop litre

To minimise water damage, the control valve shuts off the water supply downstream of the product following continuous flow of a preset water volume. If larger quantities of water are to be drawn without interruption (e.g. to fill a pool), this function can be deactivated.

AQA Watch

Very small volume flows (< 60 l/h) over a longer period of time (> 10 minutes) indicate a problem in the pipeline network (e.g. leakage, dripping drain tap or leaky toilet cistern). The programmable AQA Watch function of the intelligent control unit monitors the water supply to the building and issues a warning message.

AQA Guard wireless

Protection against leaks throughout the house: The battery-less AQA Guard wireless water sensors can be distributed throughout the house (for instance, in the washing machine, in the dishwasher or behind curtain wall installations). The sensors send a radio signal (EnOcean protocol) from any locations where water leaks need to be detected quickly.

Best Water App

The app offers added value in terms of information, safety and convenience for many BWT products. Get status notifications, maintenance reminders, information about salt refills and much more.

Duplex system (two-column units)

The unit has two columns in which part of the "limescale" (calcium and magnesium) is removed from the water through ion exchange processes. When the ion exchange material in one column reaches its limescale limit, the limescale is flushed out of the column with a salt solution. The salt does not enter into the drinking water system in the process. One of the benefits of duplex systems is that the way the columns are controlled ensures one column is always supplying soft water. They also deliver a higher nominal flow rate and a supply of soft water around the clock.

DVGW certification

The design of all BWT devices and systems ensures that their water-carrying components meet the strict requirements of the German drinking water standard. In very simple terms, the DVGW certifies that all these standards and guidelines are complied with and the devices are safe for users.

Application area according to DIN

In the standard, one residential unit is comprised of two people. However, this does not take peoples' individual behaviour into account. Large rainfall showers, showering in two showers at the same time, children, washing machines, and so on, can increase consumption considerably. The nominal flow rate can provide good guidance in this regard.

IoClean tablets

IoClean tablets are used to clean the unit every six months. They dissolve residues that may be left behind by even the purest of regenerative salts and sanitise the brine tank.

Ion exchange process

The softening columns of the water-softening units contain a food-safe ion exchange material. This material is able to remove lime from the water. Some of the calciferous water is then mixed in by the blending valve to achieve the desired degree of water hardness. Once the material is fully saturated with lime, the water-softening unit switches to regeneration mode. A salt solution is guided through the column and the material releases the lime into the flushing water as part of the ion exchange process. Following regeneration, the column is flushed with clean water. This prevents any salt water from entering into the drinking water system.

Nominal flow

The flow rate per hour. In simple terms, a nominal flow rate of 1.7 m³/h, for example, means that 28 litres of soft water can be extracted in one minute. The flow rate of a shower is about 10 litres, while the flow rate of a large rainfall shower is more than 15 litres. If a family has two bathrooms where they shower at the same time, this means that a unit supplying 1.7 m³/l is close to reaching its limits. Duplex systems with two softening columns have a higher nominal flow rate and are able to deliver soft water around the clock. Specialist advice from the installer or BWT specialist is needed to ensure that the Pearl Water system is dimensioned correctly.

Regenerative

Food-grade pure boiled salt is used as the regenerative in water-softening units. We recommend Perla Tabs, which are particularly pure and comply with DIN EN 973, type A. To protect health and the units themselves, salts that do not comply with DIN EN 973, type A are not permitted for use.

Status message

On the device and online. Status indicator lights up red in the event of faults and yellow for regenerative. A push notification is sent to the app.

Simplex system (single-column unit)

The unit has one column in which some of the "limescale" (calcium and magnesium) is removed from the water through ion exchange processes. When the ion exchange material reaches its limescale limit, the limescale is flushed out of the column with a salt solution. The salt does not enter into the drinking water system in the process. Soft water is unavailable for a short period during regeneration.

Dry salt storage

One important hygiene factor: the brine required for regeneration is always freshly produced by the system and completely used up.

For You and Planet Blue.

BWT Wassertechnik GmbH
Industriestrasse 7, DE-69198 Schriesheim
T +49 6203 73-0
info@bwt.de | www.bwt.com

**BWT Best
Water App**

