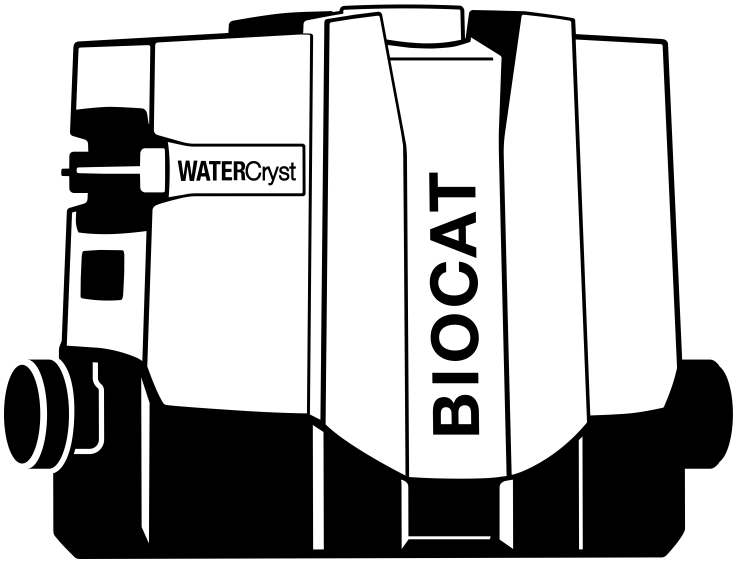
WATERCryst®
Wassertechnik

BIOCAT LS 25-C



Operating instructions EN

Rev.: 11013925-3

Table of contents

1 General Information

1.1 Notes to the operating instructions

In these operating instructions, you will find all important information for the proper operation of the BIOCAT leakage protection device. Observing this information will help avoid dangers, reduce repair costs and downtimes and increase the reliability and service life of the BIOCAT leakage protection device.

The operating instructions must be kept accessible and available at the place of use.

INFORMATION

Disclaimer

The manufacturer accepts no liability for damage caused by non-observance of these operating instructions, the applicable regulations or improper use. The risk is borne solely by the user / operator.

If you require further information or if problems occur that are not covered in detail in these operating instructions, please request them directly from WATERCryst customer service -> See last page.

1.2 Symbols used

The symbols in the operating instructions have the following meaning:

WARNING

Warning

This symbol indicates information that must be observed to avoid the possibility of extensive property damage. The safety instructions must be followed!

NOTICE

Notice

This symbol indicates a measure that must be observed to ensure correct installation and commissioning.

INFORMATION

Information

This symbol indicates information that contains important details regarding use. Failure to follow this advice may result in malfunctions.

1.3 Intended use

The BIOCAT leakage protection device according to DIN 3553 is used to detect leaks in single and multi-family houses. With the underlying flow and pressure monitoring principle, both pipe bursts and the smallest leaks can be detected and limited by an automatic shut-off unit. Due to the system, complete protection against leaks is generally not possible. The detection of small leaks always depends on the respective drinking water installation and is limited in pipe sections with a higher pressure level (hot water system).

The device is intended exclusively for installation in the main connection of the drinking water installation of single and multi-family houses or smaller supply units of hotels, businesses, schools and other public buildings.

The selection and sizing of the unit must be carried out in accordance with the planning documents and design specifications of WATERCryst.

The unit is designed for permanent operation only. A permanent power supply is required.

NOTICE

The manufacturer accepts no liability for damage caused by failure to comply with these operating instructions, the applicable regulations or improper use. The risk is borne solely by the user / operator.

The BIOCAT leakage protection device is not suitable for:

- service water whose composition does not comply with the Drinking Water Ordinance
- an operating pressure of the system greater than 8 bar or less than 2 bar
- applications where an uninterrupted water supply is absolutely necessary, e.g. safety systems such as fire extinguishing lines and emergency showers

1.4 Warranty

The warranty is honoured in accordance with our general terms of sale and delivery only if:

- the BIOCAT leakage protection device is installed by a qualified professional.
- the BIOCAT leakage protection device is used in accordance with the instructions of this operating instruction.
- the BIOCAT leakage protection device is used properly.
- repairs are carried out exclusively by authorised and qualified personnel.
- no unauthorised changes are made to the BIOCAT leakage protection device.

1.5 Duty of care of the operator

The BIOCAT leakage protection device was developed with careful attention to the standards to be observed as well as other technical specifications. The system thus corresponds to the state of the art and allows a maximum of safety during all operating conditions.

Equipment safety can only be implemented in operational practice if all measures necessary for this are taken. The operator's duty of care involves planning these measures and monitoring their implementation.

The operator must in particular ensure that:

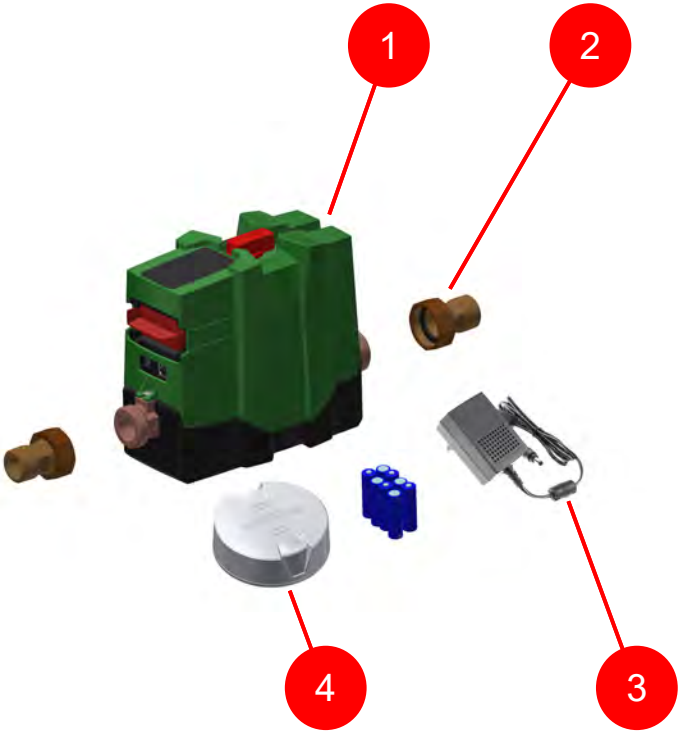
- the BIOCAT leakage protection device is only used for its intended purpose.
- the BIOCAT leakage protection device is only operated in perfect working order, and the safety devices, in particular, are regularly checked to ensure that they are in good working order.

- required personal protective equipment for operating, maintenance and repair personnel is available and worn.
- the operating instructions are always available in legible condition and complete at the place of use of the BIOCAT leakage protection device.
- only qualified and authorised personnel operate, maintain and repair the BIOCAT leakage protection device.
- these personnel are regularly instructed in all applicable questions of occupational safety and environmental protection and are familiar with the operating instructions, particularly the safety instructions contained therein.
- all safety and warning notices attached to the BIOCAT leakage protection device are not removed and are legible.
- Modifications to the BIOCAT leakage protection device may only be carried out by authorised specialist personnel.

2 Structure and function

2.1 Scope of delivery and setup of the device

The BIOCAT leakage protection device is delivered ready for installation with a cover hood.



1	BIOCAT LS 25-C Leakage protection with control unit	2	connection fittings
3	power supply unit	4	wireless sensor incl. AA batteries

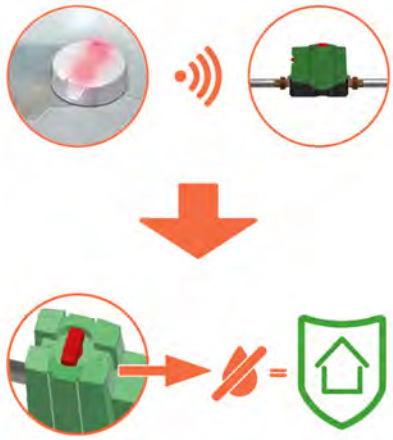
2.2 Optional accessories

The following accessories are available to extend the functions of the BIOCAT leakage protection device.

2.2.1 BIOCAT LSplus-C wireless sensor

Article 12000282 - BIOCAT LSplus-C single

Article 12000284 - BIOCAT LSplus-C duo (set of 2)



The BIOCAT LSplus-C wireless sensors can be installed on the floor at critical points, such as washing machines, dishwashers or under sink connections. As a result, leaking water can be detected immediately, and thus the extent of the damage can be further reduced.

The sensor communicates with your BIOCAT leakage protection device via radio. If the two contacts on the underside of the wireless sensor detect water, the BIOCAT leakage protection device shuts off the water supply. Up to 10 BIOCAT LSplus-C wireless sensors can be connected to your BIOCAT leakage protection device simultaneously.

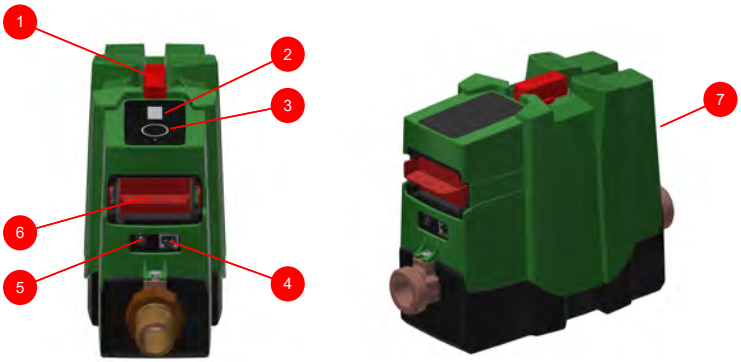
The BIOCAT LSplus-C wireless sensor operates in the ISM frequency band at 868 MHz. Devices with the same channel assignment (e.g. radio weather stations or radio sensors) can impair radio reception. The distance between the wireless sensor and the BIOCAT leakage protection device may not exceed 100 m. Obstacles, such as walls, reinforced concrete ceilings, metallic and conductive objects (e.g. radiators and furniture) or poorly shielded electrical devices, can sometimes significantly reduce the range!

2.2.2 Other accessories

The following accessories can be ordered as options:

- Article 12000283 - Powerline adapter with through-Schuko socket

2.3 Controls and interfaces



1	emergency open actuation	2	display
3	touch button with LED ring	4	LAN interface
5	mains connection	6	battery magazine
7	nameplate		

2.4 Functional description

The BIOCAT leakage protection device has an intelligent leakage detector according to DIN 3553. Through the permanent monitoring of the water flow, a leakage is detected early, and the water supply is automatically shut off. This minimises the extent of water damage. The BIOCAT leakage protection device is equipped with a flow measurement via a turbine flow sensor, permanently monitoring water consumption. In addition, your piping system is regularly checked for small leaks such as dripping taps or pipe fittings by means of an integrated pressure sensor.

NOTICE

Automatic micro leakage measurements

If you use a drip irrigation system in your household, this is recognised as a micro leak. In this case, deactivate the automatic microleakage measurements via the BIOCAT app.

The display of the device status and the acknowledgement of an alarm are possible directly on the BIOCAT leakage protection device by means of a display and touch button. With the integrated LAN interface, the BIOCAT leakage protection device can be connected to the BIOCAT app via the Internet or via Bluetooth. The BIOCAT app enables advanced operating functions, such as adjusting settings, push

notifications in the event of a leakage alarm directly to the smartphone, displaying water consumption data, and temporarily pausing the leakage monitoring, for example, to fill a pool.

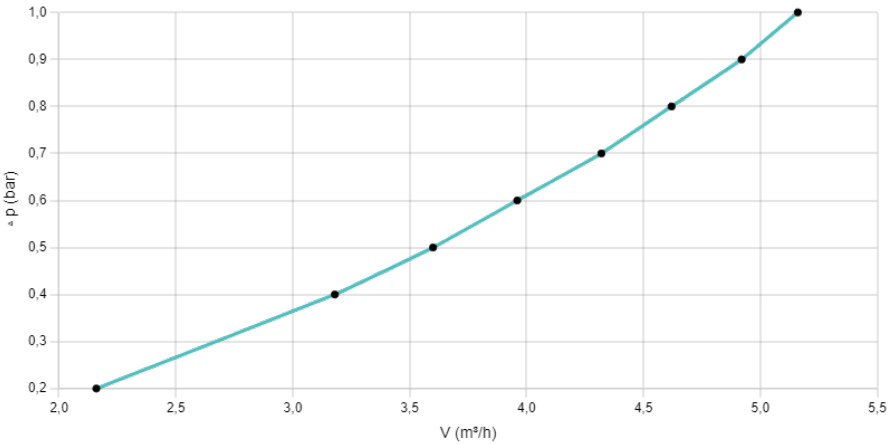
3 Technical data

Electrical connection	Unit	LS 25-C
Power supply		230 V, P+N+E, 50 Hz
Power plug type		Power adapter type C
Maximum power consumption	[W]	24
Power consumption in treatment/ standby	[W]	2
Electrical protection class		II
Protection type		IP40

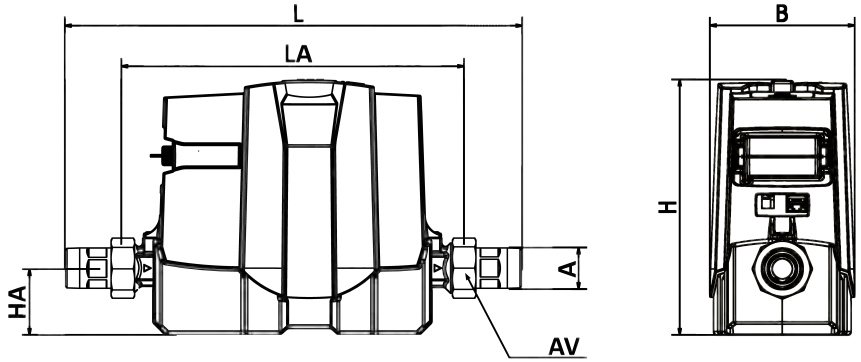
Sanitary data	Unit	LS 25-C
Connection dimension		DN25 (R 1" AG)
Volume flow sensor signal output from	[l/min]	0,8
Nominal flow QN	[l/h]	3.000
Pressure difference Δp at QN	[bar]	0,4
Nominal pressure		PN10
Operating pressure	[bar]	2 - 8
Water temperature inlet	[°C]	max. 25

3.1 Differential pressure

Pressure drop [bar]	Volume flow LS 25-C [m³/h]
0,2	2,16
0,4	3,18
0,5	3,60
0,6	3,96
0,7	4,32
0,8	4,62
0,9	4,92
1,0	5,16

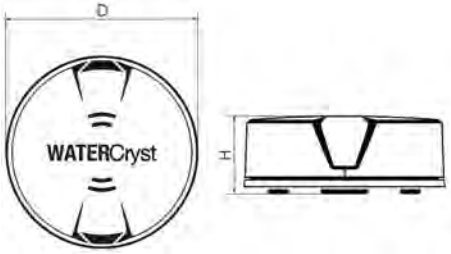

1,0
0,9
0,8
0,7
0,6
0,5
0,4
0,3
0,2
Δ p (bar)
2,0
2,5
3,0
3,5
4,0
4,5
5,0
5,5
V (m³/h)

4 Installation dimensions



Dimensions	Unit	LS 25-C
L	[mm]	380
LA	[mm]	285
H	[mm]	215
HA	[mm]	55
B	[mm]	120
A		G 1 1/4“
AV		R 1“

4.1 Dimensions wireless sensor BIOCAT LSplus-C



Dimensions	Unit	LSplus-C
D	[mm]	80
H	[mm]	35

5 Assembly and commissioning

5.1 Safety instructions and installation requirements

Caution!

- The applicable (local) installation regulations, general guidelines and standards for the supply of potable water and heated potable water (TrinkwV (German Drinking Water Ordinance), DIN2000, DIN2001, DIN50930, DIN1988, DVGW, ÖVGW- or SVGW standards) must be observed and complied with when used in potable water installations.
- Use the BIOCAT leakage protection device only in its proper working condition and intended use and in full awareness of safety issues and potential hazards.
- Observe the installation and operating instruction.
- Ensure that any faults that may affect safety are rectified immediately by a specialist.
- Installations and repairs that authorised experts do not carry out, as well as technical changes to the BIOCAT leakage protection device that are not approved in writing by the manufacturer and the use of non-original spare parts, lead to the expiration of the warranty and product liability by the manufacturer.
- The BIOCAT leakage protection device is designed for a nominal pressure of 10 bar. The operating pressure for the proper functioning of the BIOCAT leakage protection device must be between min. 2 bar and max. 8 bar and can be set with a commercially available pressure regulating valve.
- The BIOCAT leakage protection device must be connected to a properly installed, grounded and secured single-phase power outlet (230 V / 50 Hz).
- Only plug in the power plug after complete assembly and filling with water.
- The BIOCAT leakage protection device must not be directly exposed to moisture. In particular, ensure that no water drips onto it from above.
- Check regularly that the BIOCAT leakage protection device is watertight and correctly functioning and observe the prescribed inspection and maintenance intervals and the measures provided for this purpose accurately.
- Before performing maintenance or repair work, ensure that access to the working area of the BIOCAT leakage protection device is blocked for unauthorised persons!
  - Affix or position a sign indicating that maintenance or repair work is in progress.
  - Unplug the BIOCAT leakage protection device depressurise the system and secure it before switching it back on.
  - Before undertaking maintenance or repair work, ensure that all device and system parts have cooled to room temperature.

5.2 Assembly

The BIOCAT leakage protection device is installed exclusively in the cold water supply line!

WARNING

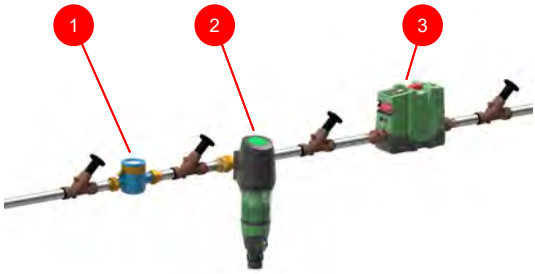
Separate outlet

The water supply for safety fittings (e.g. thermal discharge safety device) can be interrupted. In case of continuous water withdrawal (e.g. swimming pool filling, irrigation), the limescale protection effect may be impaired.

NOTICE

Observe assembly instructions

The installation diagram does not contain all shut-off and safety organs necessary for proper installation, only the essential components for the proper installation of the BIOCAT leakage protection device. Relevant standards, in particular, DIN 1988 and on-site installation guidelines, must be observed. A detailed description of the installation can be found in the separately enclosed installation instructions!



1	house water meter	2	filter with pressure regulator
3	BIOCAT LS 25-C		

Installation example: BIOCAT LS 25-C in the cold water connection of a single or multi-family house after the water meter, filter and pressure regulator.

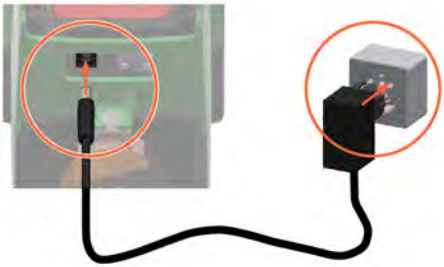
5.3 Commissioning

✓ The water supply to the BIOCAT leakage protection device must be established!

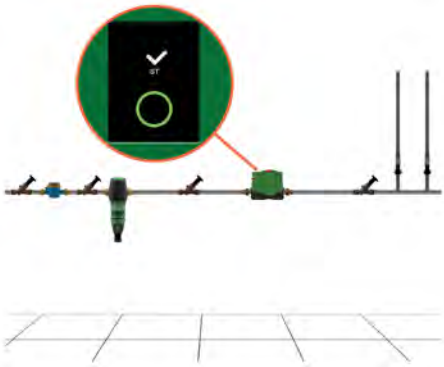
1) Check for leaks!

2) Insert the batteries

3) Establish power supply with the power plug



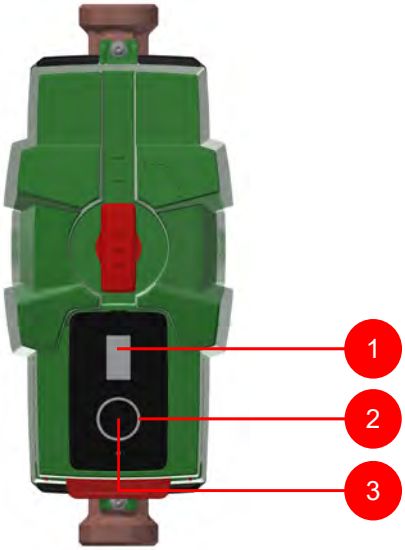
⇨ The BIOCAT leakage protection device now starts the operation with the self-test routine (ST)



6 Operation and settings

6.1 Operation directly on the device

The control unit of the BIOCAT leakage protection device consists of a display and a touch button with a multicoloured LED ring. The display is automatically deactivated after about one minute and is dark by default during operation. By pressing the touch button for 1 second, the display can be turned on again.



1	display	2	LED ring
3	touch key		

6.1.1 LED ring

LED ring	Meaning
GREEN	The BIOCAT leakage protection device works trouble-free
YELLOW	Warning! Device functions are limited
RED	Alarm! Leakage detected, water shut off or an error occurred. The BIOCAT leakage protection device does not work!
BLUE	Active Bluetooth connection
WHITE	Feedback when pressing the touch button

6.1.2 Muting the audible warning signal

By pressing the touch key for 1 second, an acoustic warning signal can be temporarily deactivated. Alarms and faults are always accompanied by an acoustic warning tone. Warnings are only sounded in the period between 7:00 a.m. and 8:00 p.m.

6.1.3 Acknowledge an alarm or warning

By pressing the touch button for 3 seconds, upcoming warnings and alarms can be acknowledged. The BIOCAT leakage protection device automatically starts a self-test (ST) in case of certain warnings or alarms or if a leakage alarm is acknowledged the water treatment mode (WT) or thermal disinfection (TD).

6.2 Operation and settings via BIOCAT app

The device status can be displayed and an alarm acknowledged directly on the BIOCAT leakage protection device using the display and touch button. The BIOCAT leakage protection device can also be connected to the BIOCAT app via the integrated LAN interface over the Internet or via Bluetooth. The BIOCAT app enables extended operating functions, such as adjusting settings, as well as push notifications in the event of a leakage alarm directly to the smartphone.

Function	Bluetooth	Internet
Customizing settings	Yes	Yes
View event history	Yes	Yes
Location independent operation	-	Yes
Push notifications in case of leakage alarm directly to the smartphone	-	Yes
Detailed assistance for leakage alarm	-	Yes
View water consumption data	-	Yes
Temporary pausing of leakage monitoring e.g. for filling a pool	Yes	Yes
Software updates	Yes	Yes

Download the BIOCAT app to your smartphone. For more information on how to download the BIOCAT app for your smartphone, please visit: app.watercryst.com.

6.2.1 Bluetooth

To use the Bluetooth functions, a smartphone with the latest BIOCAT app is required. Activate Bluetooth on your smartphone and select Bluetooth connection in the BIOCAT app.

6.2.2 Internet

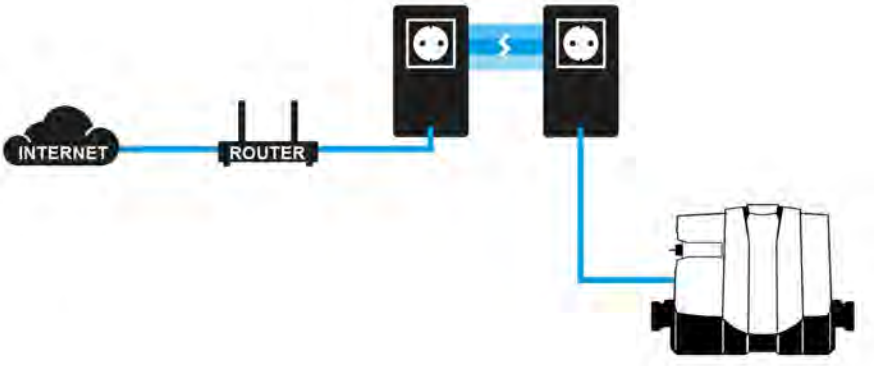
Internet ports, MQTT:

Name	Port	Protocol
Primary communication (MQTT)	8883	TCP/UDP
Time server (NTP)	123	TCP/UDP
Firmware updates (HTTPS)	443	TCP/UDP

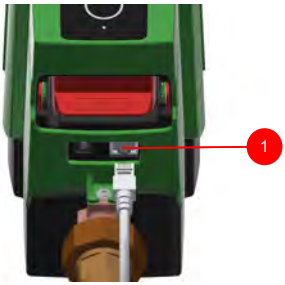
To use all functions of your BIOCAT leakage protection device, you need an active internet connection. This allows you to access your BIOCAT leakage protection device from any location, make settings on your BIOCAT leakage protection device and track consumption data and statistics. To do this, connect your BIOCAT leakage protection device to your Internet connection using a LAN cable (RJ45 patch cable min. CAT 5).

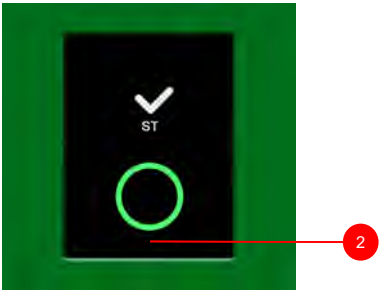
If a direct connection via LAN cable (RJ45) from your BIOCAT leakage protection device is not possible, you can in most cases realise this with a powerline adapter set via the existing earthed socket. We recommend the following accessories:

Powerline adapter set with pass-through earthed socket – Article 12.000.283



To do this, connect your BIOCAT leakage protection device to your Internet connection using a LAN cable (RJ45 patch cable min. CAT 5).





1	LAN	2	connection LED

When the Internet connection is active, the blue connection LED appears on the display of your BIOCAT leakage protection device.

6.2.3 Settings

The following setting parameters can be viewed and individually adjusted with the BIOCAT app:

NOTICE

Microleakage

A detected micro-leakage does not necessarily have to be a problem. If you cannot detect a leak yourself, contact your plumber and have your piping checked for hazards. If you use a drip irrigation system in your household, this can be detected as a micro leak. In this case, deactivate the automatic micro leakage measurements via the BIOCAT app.

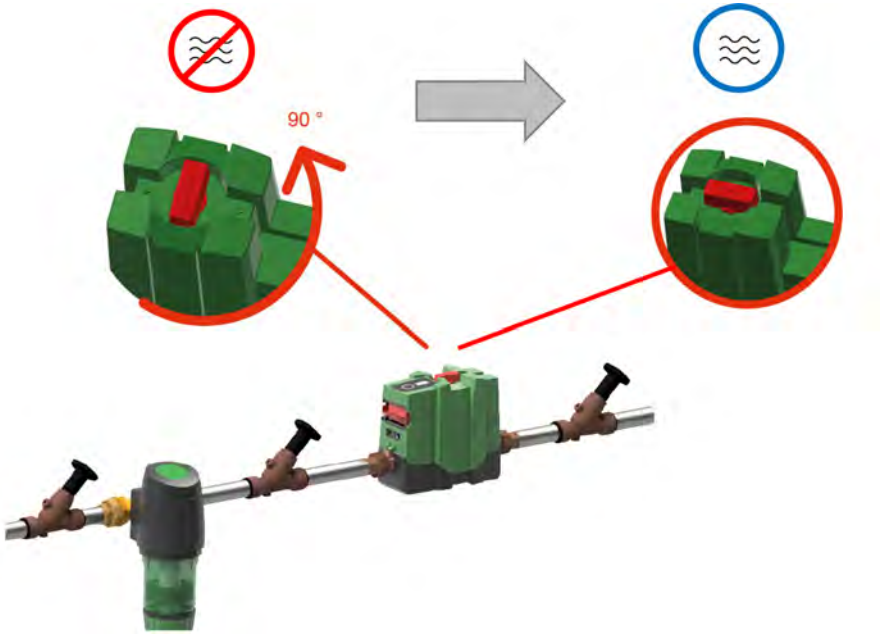
Leakage detector		
Parameter	**Factory setting**	**Adjustment range**
Pipe breakage / flow leakage A flow leakage (pipe break) is triggered when the measured water flow exceeds the limit value of 50 l/min. In this case, the system reports a pipe break alarm and shuts off the water supply.	2500 l/h = 50 l/min	10 - 120 l/min
Flush valve available yes/no The actuation of a pressure flusher is recognised by the leakage detector as a pipe break. To avoid this, the function "Pressure flusher present" can be activated. This slightly delays the pipe break detection.	No	Yes/No
Absence mode You have the option of setting the leakage detector more sharply during longer absences by activating the absence mode via the app.	Present (inactive)	Absent (active)
Volume leakage Maximum permissible tap quantity of a tap without interruption. When the set value is reached, the water is automatically shut off. If you need an exceptional amount of water, for example to fill a whirlpool, you can deactivate/pause the leakage detection for a certain period of time.	300 Litres	1 - 1.500
Volume leakage in absence mode	30 Litres	1 - 100

Leakage detector		
Parameter	**Factory setting**	**Adjustment range**
In the event of an absence, stricter limits apply to the total quantity of a tap. The factory setting is 30 litres, which is roughly equivalent to flushing the toilet and filling a watering can at the same time.		
Time leakage Maximum permissible duration of a tap without interruption. When the set value is reached, the water is automatically shut off. If you need an exceptional amount of water, for example to fill a whirlpool, you can deactivate/pause the leakage detection for a certain period of time.	60 Minutes	10 - 3.600 min
Microleakage test The BIOCAT leakage protection device regularly checks the drinking water installation for microleaks and issues a warning if a microleak is detected. This function can be deactivated. Microleakage measurements check the tightness of the piping on a daily basis. This enables the detection of micro-leakages such as dripping taps or pipe fittings. The automatic measurement is carried out at night when no water is being consumed. For these measurements, the water supply is shut off for a short time. Unexpected water consumption during the measurement process, e.g. flushing the toilet or opening a tap, is automatically detected and the water supply is restored within a few seconds. In this case, the measurement is repeated at a later time. In addition, it is possible to start microleakage measurements manually via the BIOCAT app. The automatic micro-leakage measurement can optionally be deactivated via the app.	On (active)	On / Off
Time window for acoustic warning signal Warnings are muted outside this period. Note: Alarms and errors are always supported by an acoustic alarm signal!	7:00 - 20:00	Not changeable
Pausing the leakage detector function	Off	15 min - 24 h

Leakage detector		
Parameter	**Factory setting**	**Adjustment range**
For tapping larger quantities of water, e.g. filling a pool, it makes sense to temporarily pause the leakage detector function to prevent false alarms (e.g. by exceeding the set volume limit).		

7 Emergency open function

The emergency open function enables manual restoration of the water supply in the absence of power. To do this, turn the red knob to the desired position.

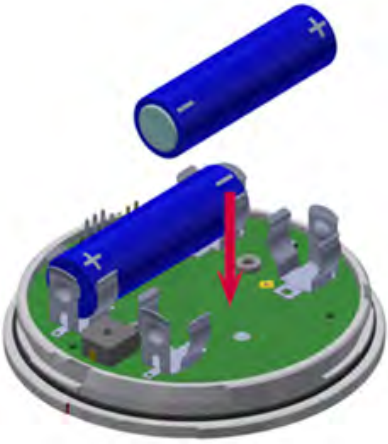


8 Integrate optional accessories

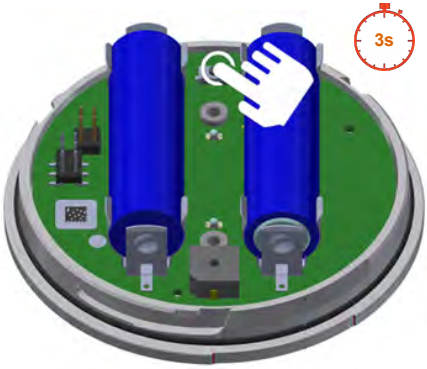
8.1 Pairing the wireless sensor

1) Remove the cover from the wireless sensor by turning it anticlockwise (it should come off easily)

2) Insert the enclosed batteries into the holder on the circuit board

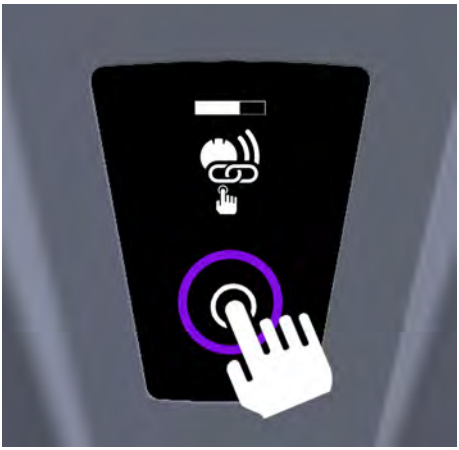


3) Press and hold the button on the circuit board of the wireless sensor for 3 seconds until the two LEDs start to light up green



4) The display module of the BIOCAT leakage protection device now shows this symbol

5) Press the ring on the display module until an acoustic signal sounds



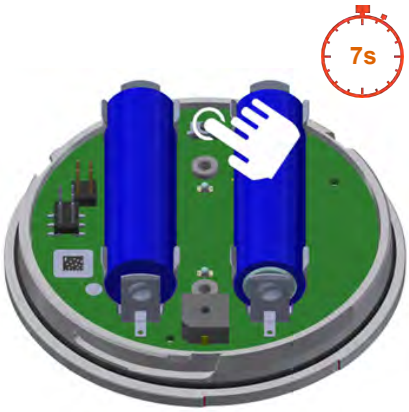
6) The following symbol now appears on the display

⇨ The wireless sensor is now successfully connected to the BIOCAT leakage protection device

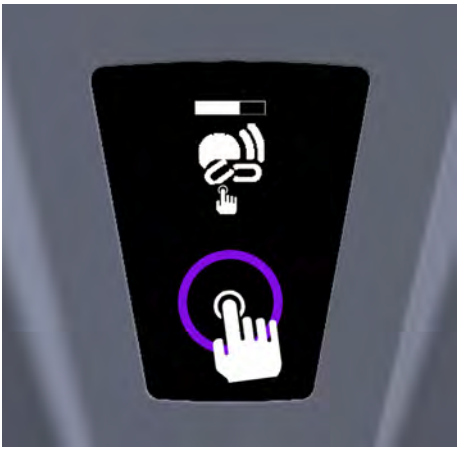
8.2 Decoupling the wireless sensor

1) Remove the cover from the wireless sensor by turning it anticlockwise (it should come off easily)

2) Press and hold the button on the circuit board of the wireless sensor for 7 seconds until the two LEDs start to light up red



3) The following symbol now appears on the display module. Press and hold the ring on the display module until an acoustic signal sounds



⇨ The wireless sensor is now decoupled

9 Operating displays, faults and warnings

Correct, fault-free operation is always signalled by the green LED ring lighting up or pulsing. A warning is signalled by the LED ring lighting up yellow. The warning is supported by a short acoustic signal in the period (7:00 - 20:00). An alarm or error is signalled by the red pulsating LED ring and also by an acoustic alarm tone. In addition, warnings and alarms are signalled externally to the BIOCAT app via an Internet connection.

A symbol with the active operating status is shown on the display. The display is automatically deactivated after approximately one minute and is therefore dark by default during operation. The display can be switched on again by pressing the touch button for 1 second.

Example displays:

Proper Operation

Warning „81“ Battery low

Fault / Alarm „65“ Minimum volume flow for RS/ST not reached

LS = Leakage protection

9.1 Symbols on the display

Symbol	LED ring	Description
	GREEN	The BIOCAT leakage protection device works properly
	GREEN	The BIOCAT leakage protection device works properly The leakage protection is set to "Absence" mode - the stricter limit value is active for volume leakage detection.

Symbol	LED ring	Description
	GREEN	Leakage protection paused
	YELLOW	A warning is pending The BIOCAT leakage protection device may only continue to work to a limited extent
	YELLOW	Battery pack of the BIOCAT leakage protection device low
	RED	A fault is pending The BIOCAT leakage protection device does not work!
	RED	Leakage alarm The BIOCAT leakage protection device has shut off the water supply!
	YELLOW	Microleakage detected (warning) The water supply is maintained
	RED	W-OFF mode The water supply was shut off manually via the BIOCAT app
	RED	Leakage alarm via BIOCAT LSplus-C wireless sensor (optional accessory)
	YELLOW	Low battery for BIOCAT LSplus-C wireless sensor (optional accessory)

To acknowledge warnings, alarms and faults, see Chapter „Operation directly on the device“. [▸ 18]

9.2 Operating states, warning and fault codes

Operating states		
Code	**Description**	**Measure**
LS	Leakage protection active or paused	
LS-ML	Leakage protection - Microleakage test is currently being carried out	
UD	Firmware update	
Leakage alarm	Acknowledge warnings, alarms and faults	
50	Time leakage detected	Water supply automatically shut off
51	Volume leakage detected when present	Water supply automatically shut off
52	Volume leakage detected in absence	Water supply automatically shut off
53	Pipe breakage detected	Water supply automatically shut off
55	Wireless sensor - water detected	Water supply automatically shut off
72	Microleakage detected - warning	
W-OFF	Water supply switched off manually via BIOCAT app	

Warnings and faults Acknowledgement of warnings, alarms and faults see Operation directly on the device [▶ 18]		
Code	**Description**	**Measure**
19	Firmware update not possible - Compatibility	
20	Real-time clock (RTC) - fault	
24	Self-test timeout error	
37	Manual intervention by user - Position of the shut-off valve changed	Acknowledge and perform ST
38	Leakage protection shut-off valve Position error	
56	Water temperature too high	Check the ambient temperature and flush the sanitary installation
57	Frost warning: water temperature ≤ 3°C	

Warnings and faults Acknowledgement of warnings, alarms and faults see Operation directly on the device [▶ 18]		
Code	**Description**	**Measure**
58	Malfunction of the pressure sensor (measured pressure > 16 bar)	Can occur if a shut-off valve immediately upstream of BIOCAT is closed during the TD. Draw water briefly -> acknowledge error
59	Malfunction of the volume flow sensor	
60	Malfunction of the temperature sensor	
80	Batteries defective	Renew batteries
81	Batteries low	Renew batteries
82	Batteries too weak in FailSafe mode	Renew batteries
83	Real-time clock (RTC) - Battery defective	
84	Real-time clock (RTC) - Battery low	
5506	Bluetooth module defective	
5577	Wireless sensor - Connection interrupted	Check the wireless sensors, replace batteries if necessary or change the location of the wireless sensor
5580	Wireless sensor - Batteries low	Renew batteries

10 Maintenance

DANGER

Risk of slipping due to water on the floor

Before carrying out maintenance or repair work, block access to the working area of the limescale protection device for unauthorised persons!

- Attach or erect a sign drawing attention to the maintenance or repair work

DANGER

Electric shock

Material damage and personal injury due to electric current

- Unplug the BIOCAT leakage protection device
- Depressurise the system
- Secure before switching back on

DANGER

Risk of scalding

Before carrying out maintenance and repair work, ensure that all appliance and system parts have cooled down to room temperature.

Component	Exchange interval
Gaskets and sensors	10 Years *1)

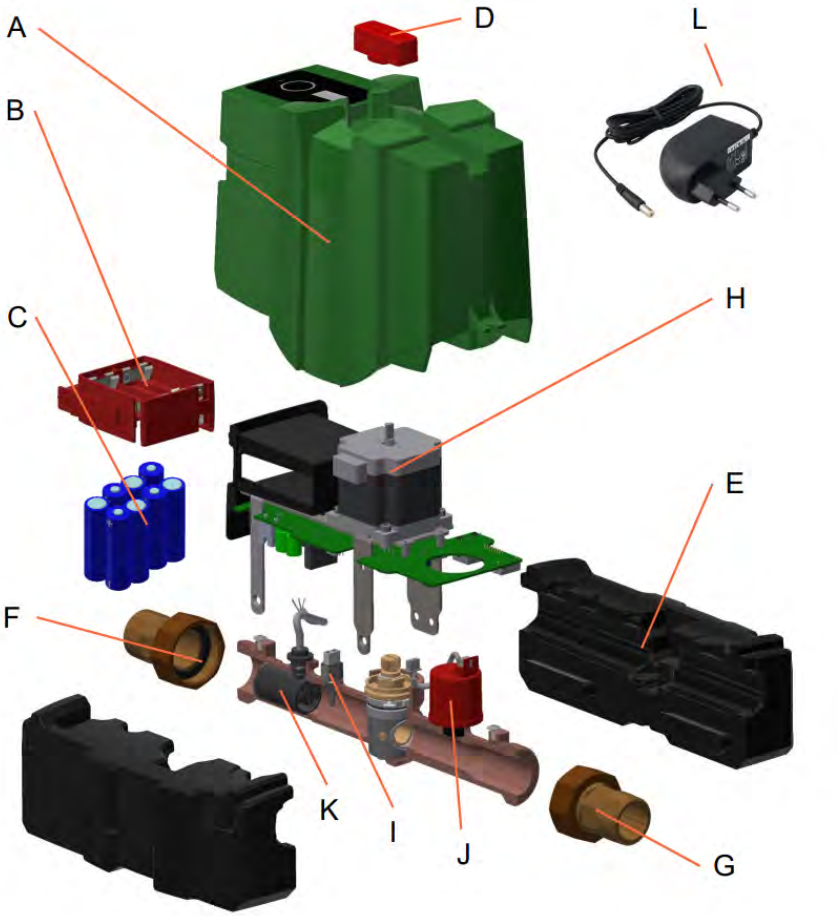
*1): All wearing parts, such as seals and sensors, must be replaced after 10 years. A 10-year service set is available for the replacement.

We recommend an annual inspection by a certified specialist.

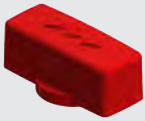
NOTICE

Do not clean plastic parts and sealing elements with solvents!

The manufacturer accepts no liability for damage caused by non-compliance with these operating instructions, the applicable regulations or improper use. The risk is borne solely by the operator.



10.1 Spare parts list

Position	Image	Description	Article number
A		Top cover with type plate incl. display module *NOTE: This component is only available from WATERCryst customer service due to the attached type plate. It is exclusively prepared for you for the serial number specified on the type plate!*	12.000.347
B		Battery compartment	12.000.293
C		8 pcs. AA batteries	12.000.294
D		Shut-off knob	12.000.348
E		EPP insulation LS 25-C	12.000.349
F		Flat gaskets for connection screw fitting	12.000.350
G		2x Connection screw fitting (G 1 1/2" - R 1" DN25) incl. flat gaskets	12.000.351

Position	Image	Description	Article number
H		Control *NOTE: Due to the IoT interface to be configured and the operating hours counter, this component can only be replaced by a WATERCryst customer service technician!*	12.000.352
I		Temperature sensor	12.000.353
J		Pressure sensor	12.000.304
K		Flow sensor Consisting of: - Turbine insertion - Circlip - Hall sensor with safety bracket	12.000.305
L		Power adapter	12.000.365

Notes

NOTICE

Service

When requesting service, please be sure to quote the **BIOCAT serial number** from the type plate and the **error code from the device display!**

WATERCryst Wassertechnik GmbH
Elsa-Brandström-Str. 31
DE-42781 Haan
+49 2129 3475 - 204

Branch Austria
Messerschmittweg 26
AT-6175 Kematen in Tirol
+43 5232 20602 - 204
kundendienst@watercryst.com, www.watercryst.com

WATERCryst in Denmark
WATERCryst Vandteknik ApS
Birk Centerpark 40 - C/O Innovatorium A/S
DK-7400 Herning
+45 89 88 07 63
denmark@watercryst.com, www.watercryst.dk

WATERCryst partner in Czechia and Slovakia
Duco Tech CZ s.r.o.
Polívkova 583/30
CZ-158 00 Praha 5 – Jinonice
+420 777 733 095
servis@ducotech.cz, www.ducotech.cz

WATERCryst partner in Switzerland
Georg Fischer JRG AG
Hauptstraße 130
CH-4450 Sissach
+41 61 975 23 77
tkd.jrg.ps@georgfischer.com, www.gfps.com

This document is translated from German

Ident. Nr. 11013925_v3/ 02.25 / ©Georg Fischer JRG AG

BFS Code 1161586_v3_02_2025
Production: GF BFS / SDE