

FlowTimer+ Set

The fuse in the pipe

Innovative monitoring method for piping systems

Operating and Test instructions



Publisher usetech GmbH
Tanzplatz 10
D- 55130 Mainz
Phone: +49 (0) 6131 - 921325
Website: www.use-tech.com

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1 General

The operating instructions describe the entire life cycle of the system. Keep these instructions in a place where they are easily accessible to every user and available again to every new owner of the system.

NOTE **The operating instructions contain important safety information!**

Failure to follow these instructions can lead to dangerous situations.

- The operating instructions must be read and understood.

1.1 Explanation of symbols

DANGER

Warns of an imminent danger!

Failure to do so will result in death or serious injury.

WARNING

Warns of a possibly dangerous situation!

- Failure to do so may result in serious injury or death.

CAUTION

Warns of a possible hazard!

- Failure to do so may result in moderate or minor injury.

NOTE **Warns of property damage!**

Failure to do so may result in damage to the system or equipment.



Denotes important additional information, tips and recommendations that are important for your safety and the proper functioning of the system.



Refers to information in these operating instructions or in other documentation.

➤ **Action steps**

The defined sequence of action steps makes it easier for you to use the system correctly and safely.

✓ **Result**

Here you will find the result of a sequence of action steps described.

2 Technical data

2.1 Electrical data

- Input voltage: 100 - 240 V~
- Power consumption: Ø max. 6 Watt
- Frequency: 50 - 60 Hz
- Connection: Euro plug power supply

2.2 Fluidic data

- Inlet pressure: 1 - 10 bar
- Kv- value (valve): 8.0 / 24.0 m³/h (Std./XL version)
- Gasket material: EPDM
- Material: Eco Brass / Stainless Steel
- Connection: G ¾ / G1 ½ " IG (Std./XL version)

2.3 Environmental and climatic conditions

- Ambient temperature: +5°C - 40°C
- Media temp. (drinking water): +5°C - 30°C
- Protection class: IP20
- Place of use: only suitable for indoor use

2.4 Lifetime

- The function of FlowTimer+ must be checked by a specialist at the specified intervals (see also chapter 10.3.).
- If the fluidic part of the unit shows a fault due to wear, this is indicated by means of the control electronics by an error case from the entire system (incl. downstream piping system).

3 Intended use

Please observe the instructions in these operating instructions as well as the operating conditions and permissible data in accordance with the data sheet so that the system functions properly and remains operational for a long time. In case of non-observance of these instructions as well as in case of unauthorized interventions in the system, any liability on our part is void, as well as the warranty on system and accessories!

The FlowTimer+ is used for permanent monitoring of piping systems for drinking water (see also chapter 2"Technical data "). The aim is to prevent a permanent flow of water without interruption after a previously set duration and size, and thus to achieve damage limitation by minimizing the amount of water flowing out.

In addition and simultaneously, the entire system is permanently tested for overall tightness over several hours. This is performed independently of the user settings (see above) and consumer behavior. A system that is not tight for several hours is indicated by a yellow status display.

Any other use or use that goes beyond this is considered improper use. Usetech GmbH is not liable for any damage resulting from this. The risk is borne solely by the user.

3.1 Use not in accordance with the intended purpose

Unintended use in the sense of foreseeable misuse is considered to be:

- It must be checked whether the existing installation allows FlowTimer+ to function smoothly at all, e.g. permanent consumers, etc.
- The FlowTimer+ may only be operated with the components in the set or in combination with other FlowTimer+ products, unless explicitly stated otherwise! If components of other manufacturers are used, usetech GmbH is not liable for damages and the warranty is also void.
- FlowTimer+ was designed exclusively for drinking water. The system is not suitable for rainwater, other liquids or gases.
- FlowTimer+ is not suitable for use within the hot water preparation or heating installation!

3.2 Main differences from PPC 3000 Basic

The FlowTimer+ no longer shuts off if the system is not tight (observed over hours), but only displays this for convenience!

The shut-off valve of the FlowTimer+ is open without power! Thus, the water supply can be comfortably restored only by switching off the power supply if required or during a power failure. An active bypass mode is therefore no longer included.

The FlowTimer+ can also be installed upstream of the filter or backwash filter because of an integrated filter system.

A configuration of the system is no longer necessary in most applications, which means that the system is immediately ready for operation after proper installation!

The maximum permanent flow duration and sensitivity can be adjusted to personal needs very easily at the touch of a button.

A test mode is also available to assist the customer or installer in troubleshooting a possible leak.

4 Basic safety instructions



WARNING

Electrical voltage can be life-threatening.

- The installation of a fixed power supply must be carried out by a qualified electrician.



Commissioning and possible adjustment of the system must be carried out by a specialist. The local conditions must be observed.



The FlowTimer+ system may only be installed in the cold water line.



The measures before installation must be observed (see also chapter 6.1 "Measures before installation").

5 System description FlowTimer+ Set

5.1 Scope of delivery FlowTimer+ Set



Fig. 5.1: Scope of delivery FlowTimer+ Set

- 1 Plug-in power supply
- 2 Shut-off valve
- 3 Flow direction arrow
- 4 Pressure sensor - cable
- 5 Pressure sensor
- 6 FlowTimer+
- 7 Anchor tube

5.2 FlowTimer+ front view



Fig. 5.2: FlowTimer+ front view

- 8 Set / Reset button
- 9 Device illuminated rim / status display
- 10 Flow duration display
- 11 Nameplate
- 12 Check display
- 13 Alarm display

5.3 FlowTimer+ rear view



Fig. 5.3: FlowTimer+ rear view

- 14 I/O connection
- 15 Solenoid coil
- 16 Serial number
- 17 Pressure sensor connection
- 18 Power supply connection

6 Installation



The FlowTimer+ must be installed in the piping system by a trained specialist in accordance with the installation instructions.

6.1 Measures before installation

- The operating pressure must always be between 1 bar and 10 bar. If this is exceeded, a pressure reducer must be installed upstream of the FlowTimer+ in the direction of flow.
- Existing KFR valves, backflow preventers or check valves must be tested for function and tightness and replaced if necessary.
- All consumers must be checked for visible leaks and repaired or replaced as necessary prior to installation.
- If a water heating system with an expansion vessel is installed downstream of the FlowTimer+ system, this must be checked (see chapter 8.1)!

6.2 Installation position

- The FlowTimer+ is always installed upstream of the pipeline section and consumer to be monitored.
- A backflow preventer or KFR valve must be installed upstream of each FlowTimer+. Normally this valve is already present behind the water meter.
- However, if several FlowTimer+ are used (like fuses), each FlowTimer+ requires such a valve.

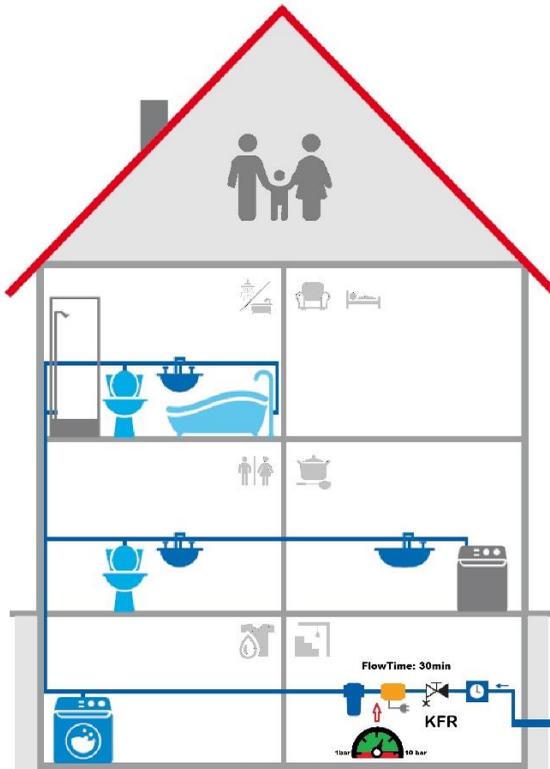


Fig. 6.2.1: FlowTimer+ installation EFH

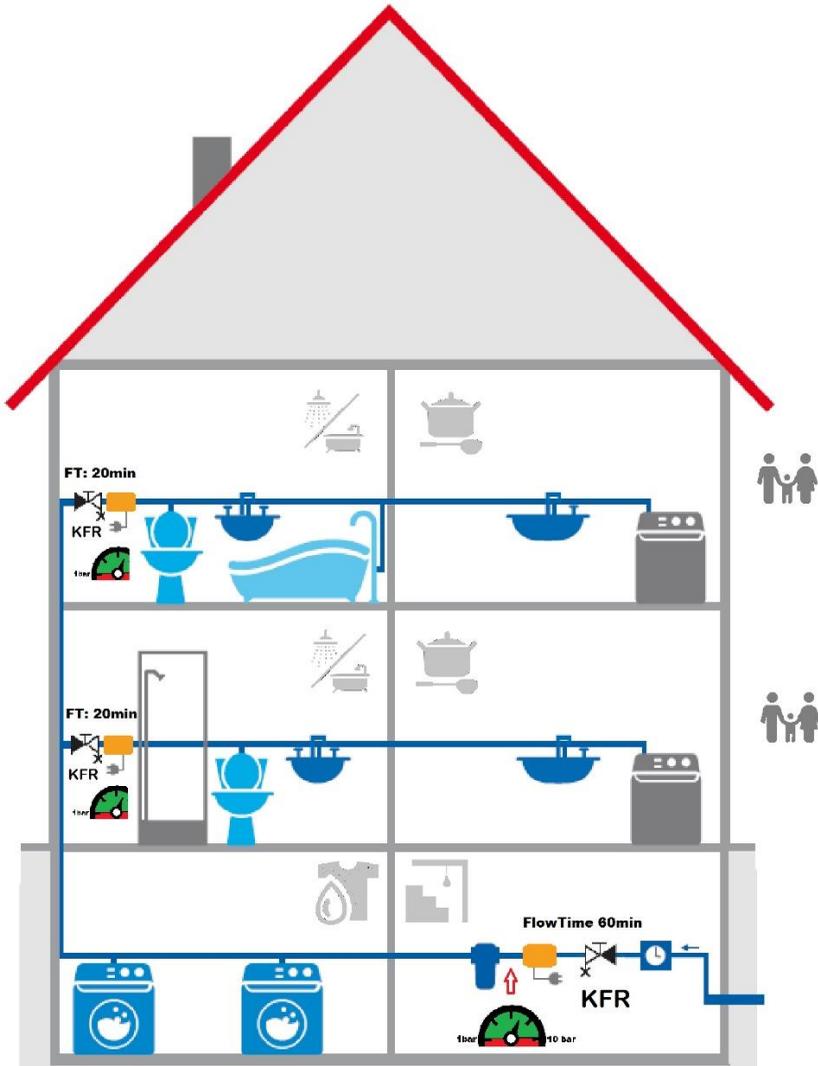


Fig. 6.2.2: FlowTimer+ installation MFH

6.3 Installing the shut-off valve

- The shut-off valve (2) can be installed in any position. The direction of flow (3) must be observed.
- It must be possible to open the valve body without difficulty for maintenance work. The Allen screws on the valve bonnet must be accessible from the outside.
- The selected installation position must allow the control electronics (6) with solenoid coil (15) to be mounted and dismantled.
- The shut-off valve may only be screwed into the pipeline at the flange connections using an open-end wrench.



First install the shut-off valve (2) and the pressure sensor (5)!

Observe the cable lengths and the visibility of the front of the FlowTimer+ when installing the valve and pressure sensor.

The FlowTimer+ electronics (6) and the plug connections must not be mechanically stressed (risk of destruction)!

6.3.1 Installation position KFR valve

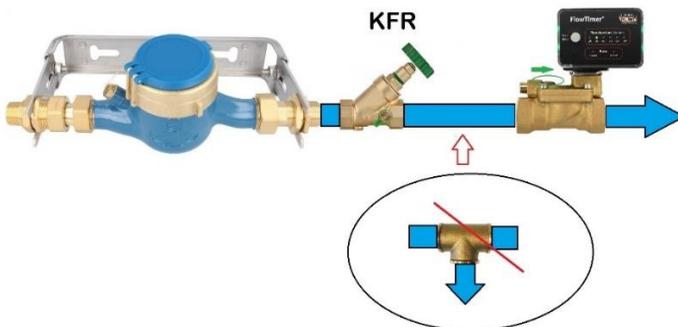


Fig. 6.3.1: Shut-off valve / KFR installation



In order to protect the solenoid valve from malfunctions due to contamination, care must be taken during installation to clean the processed materials carefully; in particular, it must not be possible for metal chips or sealing materials to be flushed into the valve interior.

6.3.2 Installation position pressure boosting

The FlowTimer+ system must always be installed downstream of a booster set (or domestic waterworks) in the direction of flow!



A backflow preventer or KFR valve must be installed between the booster set and the FlowTimer+.

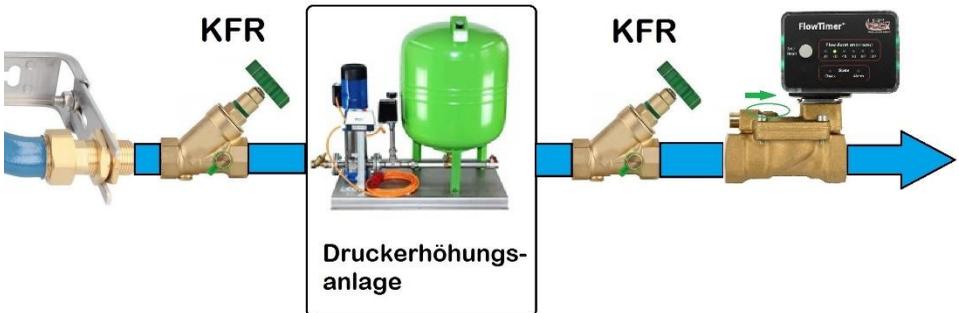


Fig. 6.3.2: FlowTimer+ and pressure boosting system

6.4 Installation of the pressure sensor

The pressure sensor (5) must be installed downstream of the shut-off valve (2). This can usually be screwed in directly in place of existing 1/4 inch vent valves or installed in the pipeline using a T-piece with a reduced outlet.

Only tighten the pressure sensor (5) with an open-end wrench!



The body of the pressure sensor or the plug area must not be turned by means of e.g. water pump pliers (danger of destruction)!

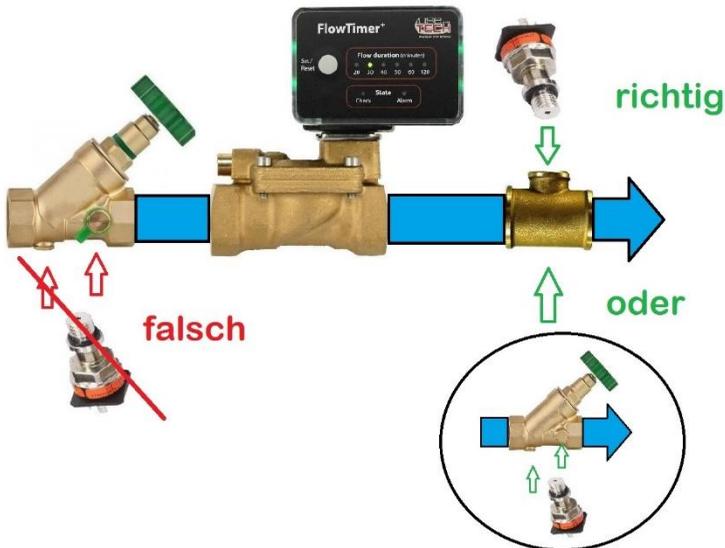


Fig. 6.4.1: Pressure sensor installation after the valve

The pressure sensor (5) can alternatively be installed Downstream of the house filter and / or pressure regulator (see below).



The pressure (measured at the filter outlet) must always be greater than 1 bar!

If you use a filter and / or a softening system, we strongly recommend to monitor them directly for water leakage using FlowTimer+ Detect V2.

In the event of a fault, the water supply is then immediately interrupted!

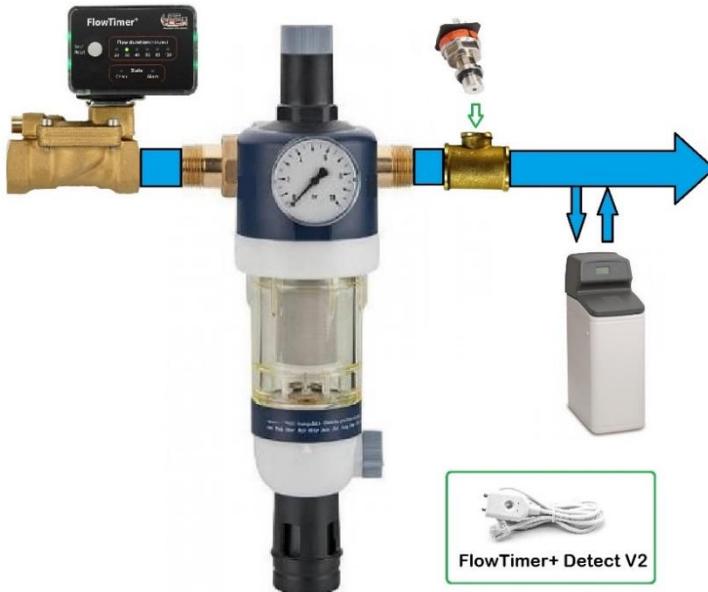


Fig. 6.4.2: Pressure sensor installation after filter / regulator

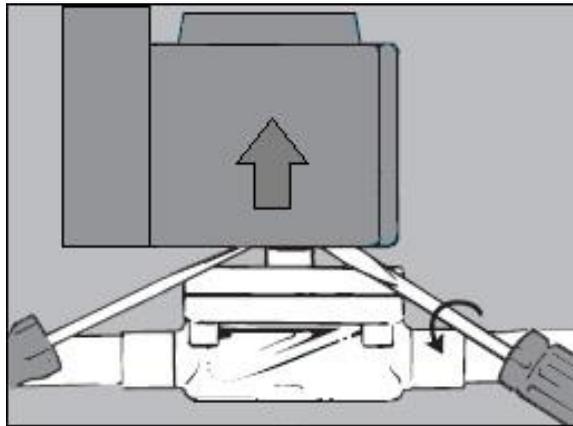
6.5 Mounting the FlowTimer+ on the shut-off valve



The FlowTimer+ electronics (6) forms a non-separable unit with the solenoid coil (15). The warranty will be voided if the unit is separated by force.

To mount the FlowTimer+ on the shut-off valve, place the solenoid coil (15) on the armature tube of the valve (7). Then press briefly and firmly on the top of the solenoid coil (not on the electronics) until the coil audibly engages in the holder. The coil is now correctly mounted.

To disassemble, insert one or two screwdrivers between the valve body (2) and the solenoid coil (15). Then lever the coil away from the valve body. This requires a little more force than the previous pressing.





Never use tools to lever between the valve and the plastic housing of the FlowTimer+ electronics! (risk of destruction)

6.6 Electrical connection

Connect the pressure sensor (5) with the connection cable (4) to the FlowTimer+ pressure sensor connection (17).

The plug-in screw connection on the pressure sensor is polarized (polarization contact in the plug) and can therefore only be plugged in one position!

Connect any accessories to the I/O port (14) of FlowTimer+ (see the accessory manuals for more information).

Plug the power supply unit into a suitable socket and connect the power supply unit to the voltage supply connection (18) of FlowTimer+.



The plug-in power supply unit (1) and the solenoid coil (15) may heat up considerably during operation depending on the ambient temperature. This is normal and is monitored internally.

Clicking noises can be heard at irregular intervals during water withdrawal and as a result of regular internal test cycles. These are part of the normal function.

7 Commissioning



WARNING

Electrical voltage can be life-threatening.

- The installation of a fixed power supply must be carried out by a trained electrician.



Commissioning and, if necessary, adjustment of the FlowTimer+ system must be carried out by a specialist. The local conditions must be observed.



Air in the hot water supply, e.g. in the hot water storage tank, can lead to scalding due to hot water running on in the event of the cold water supply being interrupted.

- Unplug the power supply of FlowTimer+ from the wall socket
- Establish water supply
- Vent and inspect cold and hot water piping including hot water heater and heat exchangers.
- Check consumers again for visible leaks, paying attention to traces of limescale! (Toilet flushing, leaking taps, garden connections, washing machines, dishwashers, etc.).
- Restore voltage supply

8 Tests

8.1 Checking the water heating system

- Set water heater to maximum permissible temperature and prepare hot water
- Open hot water pipe and test hot water leakage
- Disconnect the pressure sensor - plug on the FlowTimer+ and thus interrupt the cold water supply
- The status display of FlowTimer+ shows red
- At the moment of interruption, a run-on from the hot water circuit must not be detectable



CAUTION

There is a risk of scalding if hot water runs down!

- Disconnect the power supply to the FlowTimer+ to prevent possible shut-off.
- A specialist must check the installation.
- The system is not operational until clarified!

If the hot water leakage is due to the system, different thermostatic fittings are commercially available to solve the problem.

8.2 Checking the tightness

After installation and safe venting, the entire system should be tested for leaks (test duration approx. 5 minutes).



In normal operation, this test is performed autonomously, but requires several hours (see also Intended use chapter 3).

- To measure the tightness, all water tapping points must be closed.
- Now switch the FlowTimer+ to test mode.
- To do this, keep the Set / Reset key (8) pressed (max. 10 sec.) until the status display flashes green/yellow and the Check display flashes yellow. The system is now in test mode (see also chapter 9.1.4).
- ✓ Observe whether the status display after the green/yellow Flashing (after max. 5 minutes) then shows green.



If the status display shows green, the system is tight. Please press the reset key once briefly to return to normal operation.

Now do the test and simulate a leak (see next chapter 8.3)!



WARNING

If the status display shows permanent yellow, the system is not properly sealed!

- Make sure that all lines are vented!

Continue with chapter 10.2.2 Status display permanent yellow.

8.3 Verification of the leakage

The previously described leakage measurement should also be additionally verified. This is done with a simulated leak (test duration approx. 5 minutes).

- All water tapping points must be closed.
 - Now set a faucet (set to cold) so that in 10 - 30 seconds (depending on the given setting option) permanently only one drop of water drips.
 - Now switch the FlowTimer+ to test mode.
 - To do this, keep the Set / Reset key (8) pressed (max. 10 sec.) until the status display flashes green/yellow and the Check display flashes yellow. The system is now in test mode (see also chapter 9.1.4).
- ✓ Observe whether the status display after the green/yellow flashing (after max. 5 minutes) then displays yellow.



If the status indicator shows yellow, the leak in the overall system has been correctly detected.

Please press the reset button once briefly to return to normal operation.



WARNING

If the status display does not show yellow, the following further measures are required:

- Make sure that all lines are vented!
- Lines that are not properly vented are the reason for about 80% of support calls immediately after installation.

Status display green: Continue with chapter 10.2.3

Status display permanently green despite water flow.

Status display red: Continue with chapter 10.2.1 Status display permanent red.

8.4 Checking the time shut-off function



After installation and at regular intervals, the system should be tested for correct operation!

Test duration approx. 25 minutes

- First of all, all water tapping points must be closed.
- Now set a water tapping point (set to cold) so that approx. two drops of water drip off every second.
- Now set the FlowTimer+ to max. 20 min flow duration.
- Briefly press the Set / Reset key (8) and note the current time.

Now observe whether the status display changes from green to red after approx. 20 min and the water supply is shut off.



If the status indicator shows red, the pauseless water withdrawal has been correctly detected.

Please press the reset button once briefly to return to normal operation.



WARNING

If the status display shows green (despite water withdrawal), there is a fault!

- Make sure that all lines are vented!
- Lines that are not properly vented are the reason for about 80% of support calls immediately after installation.

Status display Green: Continue with chapter 10.2.3

Status display permanently green despite water flow.

9 Operation and function

9.1 Operating states

9.1.1 Normal operation

- ✓ FlowTimer+ works permanently, automatically in normal operation and disconnects the consumer from the supplier by means of a solenoid diaphragm valve in the event of a fault.

The FlowTimer+ operating status can be seen via the device illuminated rim (9) (see chapter **Fehler! Verweisquelle konnte nicht gefunden werden.**"**Fehler! Verweisquelle konnte nicht gefunden werden.**") and the flow duration display (10).

Should the FlowTimer+ interrupt the water supply during normal operation, fault identification is possible via the status display.

9.1.2 Restarting the system

- Briefly press the Set / Reset key (8).

or

- Unplug the power supply unit (1) from the socket or disconnect the power supply.
- wait ten seconds
- Restore voltage supply

9.1.3 Bypass mode

In order to still ensure a water supply during a power failure or troubleshooting, the system can be deactivated for this period of time.



Unplug the power supply unit (1) from the socket or disconnect the power supply.



WARNING

In bypass mode, the installation is no longer monitored.

After troubleshooting, the power supply must therefore be restored immediately.

Tips:

A smartphone with an alarm app or power failure app can be used to monitor the mains supply, which alerts via Wifi or GSM.

In case of poor power security (e.g. abroad), we recommend to connect a small inexpensive UPS (uninterruptible power supply) from the PC accessories market in front of the FlowTimer+ set.

By means of a radio-controlled socket with feedback, a socket timer or one of our Smart Home interfaces, the bypass mode can be activated simply by switching off the power supply in case of an intended longer water withdrawal, e.g. garden watering.

9.1.4 Test mode



In FlowTimer+ test mode and in conjunction with these operating and test instructions, the user is enabled to isolate possible faults in the overall installation or, ideally, even to determine the fault, even without greater prior knowledge.

The individual steps of the various tests are described under Point 8 explained, but in general the FlowTimer+ is always put into test mode as follows:

- Briefly press the Set / Reset key (8) once.
- Then press and hold the Set / Reset key (8) again (max. 10 sec.) until the status display flashes green/yellow and the Check display also flashes yellow.
- ✓ The FlowTimer+ is now in test operation.
- To return to normal operation after the test, briefly press the Set / Reset key (8) once.
- ✓ The FlowTimer+ status indicator lights up solid green.

9.1.5 Changing the flow duration



The FlowTimer+ is preset at the factory to a maximum continuous flow duration of 30 minutes. Experience has shown that this is an optimum value for most applications.

If you want to adjust the pauseless flow duration to your needs, you can easily change it:

- Press the Set / Reset key (8) repeatedly until the desired flow duration is shown on the display (10).
- Then wait until the flow duration indicator (10) stops flashing.

- ✓ The new flow duration is now stored and will be displayed again after a restart or power failure.



After a flow duration of 120 min, all stages are displayed simultaneously. This corresponds to an **infinite flow duration!**

An **infinite flow duration** is indicated by a running light in the flow duration display (10) after flashing.



WARNING

Tightness and water flow duration are no longer monitored! Connected water sensors or additional devices remain active in their protective functions.

9.1.6 Changing the sensitivity



WARNING

This setting should **ONLY** be changed by a professional!

Sensitivity here refers to the magnitude of the flow that is to be evaluated by the system in terms of time as water withdrawal or leakage.

Thus, the threshold value from tightness measurement without shutdown (tolerance range) to water withdrawal with shutdown (after exceeding the preset permanent flow duration).

The result and the display of the tightness measurement remain unaffected.



The FlowTimer+ is preset at the factory with maximum sensitivity (level 20).

If leakage must be tolerated in your application due to the system (size or type of installation), you can change the sensitivity of FlowTimer+ in 6 steps as follows:

- Disconnect the plug-in power supply (1) and wait 30 seconds
- Press and hold down the Set / Reset key (8)
- Now plug in the power supply again at the same time
- ✓ When the status display flashes green/red (after approx. 10 sec.), you can release the Set / Reset key again.

The status indicator now flashes green/red together with the sensitivity level.

- Press the Set / Reset key (8) repeatedly until the desired sensitivity is shown on the display (10).
- Then wait until the display (10) stops flashing.
- ✓ The new sensitivity is now saved.



Sensitivity level 20 is the highest sensitivity and level 120 corresponds to the lowest sensitivity (the system tolerates greater water flow).

The sensitivity can only be adjusted as long as the status display is also flashing green/red!



Immediately following the setting of the sensitivity, a possible change of the flow duration (see also chapter 9.1.5) is indicated when the status display is green.

9.2 Status display (illuminated device edge)

 Green (duration)	No leak has been detected so far.
 Yellow (duration)	This display is independent of the set max. flow duration or sensitivity! The overall system was not tight for several hours. The check display (12) is also permanently yellow (for more information, see section 10.2.2 "Status display permanently yellow").

 Yellow (flashing)  Green (flashing)	The test mode is currently active (for more information, see Chapter 9.1.4 "Test mode").
---	--



The water supply was automatically interrupted by FlowTimer+.

 Red (duration)	Permanent water withdrawal or leakage that has exceeded the preset maximum flow duration (30 min. ex works) and the tolerance limit (sensitivity) has been detected. The alarm display (13) is permanently red (for more information, see section 10.2.1 "Permanent red status display").
---	--

10 Troubleshooting, maintenance



Power outage

- In the event of a power failure, the FlowTimer+ opens automatically and connects the downstream piping system to the utility.
- The monitoring function is then no longer given!

Tips:

For additional monitoring of the mains supply, a smartphone with alarm app or power failure app can be used, which alerts via Wifi or GSM.

In case of poor power security (e.g. abroad), a small inexpensive UPS from the PC accessories market can be connected upstream of the FlowTimer+ set for additional security.

10.1 No display

If FlowTimer+ does not display a status, make sure that the power supply is working and that the plug-in power supply unit is plugged in. If there is still no display, restart the system:

- Unplug the power supply and wait approx. 30 seconds
- Plug in the power supply again
- ✓ The status display shows the restart of the system

Possible cause

A fault in the voltage supply has switched off the FlowTimer+. If this error occurs repeatedly, consult a specialist.

10.2 Alarm messages

Please note:

The patented and proven Permanet Pipe Control (PPC) process has been used for microleakage protection since 2008!

The procedure is used in FlowTimer+.

Check the installation carefully for malfunctions in case of repeated error detection!

Malfunctions are particularly common in new or older installations.

10.2.1 Status display permanent red



The water supply was automatically interrupted by FlowTimer+.



Red (duration)

- The preset maximum permanent flow duration has been exceeded.
- Large leak possible.
- Sensor breakage, sensor plug incorrectly screwed to sensor.
- Mains pressure briefly below 1 bar.
- External accessories have triggered the shut-off.

Testing:

- Check whether accessories on the I/O port were the cause (please use the instructions for the accessories).

- Check mains pressure
- Check the plug connection of sensor plug and pressure sensor



WARNING

Do not remove the pressure sensor under any circumstances. Sensor is located directly in the pressure range of the water. Water with high pressure could escape.

- Check if water has been used for a long period without interruption.

If a longer permanent flow duration is required, the system can be specifically adapted to your application (please refer to chapter 9.1.5 "Changing the flow duration").

If no prolonged water withdrawal is known, the piping system must be tested for tightness (see chapter 8.2 "Checking the tightness").

10.2.2 Status display permanent yellow



Yellow (duration)

- Leakage measurement indicates slight leakage.
- Water withdrawal or leak was detected during system restart.
- Their overall system was not tight for several hours.

FlowTimer+ indicates with high accuracy a pressure loss in the installation. Few drops per minute can be detected.

In most cases, leaking, little dripping water outlets are the cause.

Testing:

- Were any small amounts of water taken over a long period of time with short interruptions?
- Were there any persons present?
- Are there multiple slow-dripping faucets, if applicable?
- Do the solenoid valves of dishwashers and washing machines really close tightly?
- Do you find drips forming on the faucets?
- Carefully check all water leakage points.
- Look for traces of lime, e.g. in the toilet.

Persons were not present. Dripping end users are not detectable:

Micro leakage in the piping system is possible!

Test the piping system for leaks (see chapter 8.2 "Checking for leaks").

For larger systems (if the installation allows this by means of shut-off valves), temporarily disconnect individual strings, floors or devices from the system to be measured.

Then, according to chapter 8.2 "Checking the tightness", measure each section of the installation in order to get an indication of the fault location and the faulty section by means of a simple exclusion procedure.

Disconnect connected appliances, a central water heater, washing machines and dishwashers or cisterns from the mains supply using the respective shut-off cocks in order to also check the end devices or fittings for leaks.



WARNING

Do not attempt to force open or close stuck, calcified fittings!

The risk of destruction of the fitting including an unintentional water leakage is very high!

Very rarely moved and old fittings can also cause small leaks after closing and opening. This also necessarily check after a time.



If the leak cannot be found, close all water taps.

Now actuate all the cisterns of the entire installation once in succession.

Please wait 5 min and do not remove any water!

Close the KFR valve on the water meter (see also next page, Figure 10.2.2).



Fig. 10.2.2: KFR valve water meter

Now disconnect the plug-in power supply of FlowTimer+. The FlowTimer+ goes into bypass mode (is therefore inactive).

Please wait 30 min (if possible also 1-2 hours) and do not remove any water!

Now turn the KFR valve back on as quickly as possible and watch the water meter at the same time.



If one of the pointers turns or the digital counter shows a short water withdrawal, water could escape from the system somewhere during the waiting time.

You can continue to try to find the leak or hire a specialist company.

Alternatively, you can wait to see if you notice anything else over the next few days, as the leak is very small and therefore does not require immediate action.

If this leakage becomes larger, the display will change from yellow to red and the water supply will be shut off.



If none of the pointers turn, or the digital meter does **not** show a short water draw, you should have the KFR valve (or backflow preventer) replaced.

Plug the plug-in power supply of FlowTimer+ back into the power supply socket.

FlowTimer+ restarts and goes into "normal operation" after a short time.

If leakage is still indicated after replacing the KFR valve or backflow preventer, you should have the FlowTimer+ shut-off valve cleaned.

Residues of sealing tapes or chips from connectors may have entered the valve during installation.



A qualified person can disassemble and inspect the valve by opening the four Allen screws without voiding the warranty. (Please note the pressure spring and the two O-rings when opening)!

To better detect possible foreign bodies when opening the valve, it is best to drain the residual water through a white cloth into a bucket.

see also <https://www.youtube.com/watch?v=f5uo0P4UyfE>

The video is in English, but shows very well the individual steps even without language skills, please note: Do not execute point 1., because the FlowTimer+ electronics can not be separated from the coil!



If leakage is still indicated according to chapter 8.2 "Checking the tightness", please contact our customer service at info@use-tech.de .

Pictures of the installation location of FlowTimer+ as well as the respective peripherals (softening, pressure boosting, pump station, osmosis etc.) are also helpful.

10.2.3 Status display permanent green despite water flow



Green (duration)

- The status display remains permanently green even though water has been flowing continuously for longer than set.
- The status display remains permanently green after test 8.3 "Verification of leakage"



If the leakage is not indicated and there is a central hot water supply, please temporarily turn off the valve in front of the boiler and the safety group and do the test 8.3 again. If the test now shows the leak, you should have the KFR valve (or backflow preventer) replaced immediately.



WARNING

A risk of contamination of the cold water supply is possible!



If the leakage is still not indicated, temporarily close the KFR valve on the water meter (see also Figure 10.2.2).



Fig. 10.2.2: KFR valve water meter

Now check again according to point 8.3. "Verification of leakage".



After the check, please open the KFR valve again immediately to prevent the system from running empty via the simulated leak.

If a leaking system is now indicated, you should have the shut-off valve of the FlowTimer+ cleaned.

Residues of sealing tapes or chips from connectors may have entered the valve during installation.



WARNING

The system must first be disconnected from the power supply, shut off from the water supply and depressurized.



A qualified person can disassemble and inspect the valve by opening the four Allen screws without voiding the warranty. (Note the position of the pressure spring and the two O-rings when opening)!

To better detect possible foreign bodies when opening the valve, it is best to drain the residual water through a white cloth into a bucket.

see also <https://www.youtube.com/watch?v=f5uo0P4UyfE>

The video is in English, but shows very well the individual steps even without language skills, please note: Do not execute point 1., because the FlowTimer+ electronics can not be separated from the coil!



If leakage is still not indicated according to chapter 8.3 "Verifying the tightness", please contact our customer service at info@use-tech.de .

Pictures of the installation location of FlowTimer+ as well as the respective peripherals (softening, pressure boosting, pump station, osmosis etc.) are also helpful.

10.2.4 Status display permanent green, but no water



Green (duration)

- After the installation of the system, they each have water for about 60 seconds after pressing the Set/Reset button.
- After that, the water supply is shut off.
- The status display shows green permanently.



The pressure sensor was installed in the water flow direction upstream and not downstream of the FlowTimer+ shut-off valve.

(see also point 6.4 "Installation of the pressure sensor")



If there is no incorrect installation, please take pictures of your installation and send them to our customer service.

info@use-tech.de

10.3 Maintenance



Self-cleaning in normal operation

In normal operation, the valve is permanently moved by the control electronics and thus cleans itself automatically.



Recommissioning (after longer standstill)

After a longer standstill, an inspection must be carried out by a specialist.

Interval	Action
Weekly	Visual inspection of the status display (see chapter 9.2 "Status display").
Monthly	Restart the system and check the function (see chapter 8.2 "Checking the tightness").
Biennial	FlowTimer+ should be checked by an installer after two years at the latest.

11 Decommissioning



WARNING

When FlowTimer+ is taken out of service, the installation is no longer monitored.

- In the event of malfunctions or leaks, the water supply is no longer shut off.

If the FlowTimer+ system is not to be used for a longer period of time:

- Unplug power supply



Recommissioning

- A function test must be carried out when the device is put back into operation.
- Start with point 8.2 (Checking the tightness) and then work your way through each of the subsequent tests and checks.

The FlowTimer+ system is no longer required:

- Completely remove the FlowTimer+ system to avoid the possibility of interference and contamination of the installation.

12 Packing, transport, storage



Transport damage!

Inadequately protected systems can be damaged during transport.

- Transport the system protected from moisture and dirt in shockproof packaging.
- Avoid exceeding or falling below the permissible storage temperature.
- Protect electrical connections from damage with protective caps.

The system must be transported or stored in the packaging provided until installation.



Incorrect storage can cause damage to the system!

- Store the system in a dry and dust-free place!
- Storage temperature: -30°C to +60°C

13 Disposal

Information on the Waste Electrical and Electronic Equipment Ordinance

Law on the marketing, return and environmentally sound disposal of electrical and electronic equipment (Electrical and Electronic Equipment Act - ElektroG).



Note on the Electrical and Electronic Equipment Act (ElektroG):

Please dispose of old devices, as required by law, at a municipal collection point, or return them to your local retailer free of charge.

Disposal in household waste is expressly prohibited according to the old equipment ordinance!

Devices received from us can be returned to us free of charge after use by sending them back with sufficient postage to the address given in the imprint.

Waste equipment containing harmful substances is marked with the symbol of a crossed-out trash can.

14 EC Declaration of Conformity



to:

Annex III of the EC Low Voltage Directive 2014/35/EU.

Annex I of the EC Directive on Electromagnetic Compatibility 2014/30/EU.

RoHS Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

The

usetech GmbH
Tanzplatz 10
D-55130 Mainz

declares that

Product name: Flowtimer+
Type: V4.2
Year of manufacture: 2017

complies with the provisions of the above-mentioned EC Directives.

The following standards and technical specifications have been applied:

DIN EN 61326-1; VDE 0843-20-1:2013-07

Date: 31.07.2017
Name: Dipl. Ing. (FH) Stefan Windisch
Function: CEO

Signature:

A handwritten signature in blue ink, appearing to be 'S. Windisch', written over a horizontal line.

15 Declaration of Conformity Pressure Sensor



Danfoss A/S
Nordsborgvej 81
DK-6440 Nordborg
Denmark

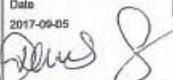
Danfoss A/S

DK-6430 Nordborg
Danmark
CVR nr.: 26 16 57 15
Phone: +45 7485 2222
Fax: +45 7489 0619

Manufacturers Declaration Danfoss A/S Industrial Automation IB-IA

We Danfoss hereby declare that Pressure Transmitter MBS 1900,
Code no. 064G6502 comply with the following legislation standards:

- DVGW Arbeitsblatt W 270
- DIN 50930-6 / Bewertungsgrundlage für metallene Werkstoffe im Kontakt mit Trinkwasser – 17.03.2017

<p>Date 2017-09-05</p> 	<p>Issued by : Dennis Carstensen Product Manager</p>	<p>Date 2017-06-09</p> 	<p>Approved by: Christian Dall Larsen Senior Director, Product Management</p>
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Danfoss only vouches for the correctness of the English version of this declaration. In the event of the declaration being translated into any other language, the translator concerned shall be liable for the correctness of the translation.

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16 Declaration of conformity valve



Danfoss A/S
Albuen 29
DK-6000 Kolding,
Denmark

Danfoss A/S

DK-6430 Nordborg
Danmark
CVR nr.: 20 16 57 15
Phone: +45 7488 2222
Fax: +45 7449 0949

Manufacturers Declaration Danfoss A/S Danfoss Industrial Automation Fluid Controls

We Danfoss hereby declare that valve type EV220B 15-50 BE (EPDM and ECO brass versions, CW724R) comply with the following legislation standards:

- DVGW Arbeitsblatt W 270
- Leitlinie zur hygienischen Beurteilung von Elastomeren im Kontakt mit Trinkwasser (Elastomerleitlinie) – 22.12.2011, Liste 1
- DIN 50930-6 / Bewertungsgrundlage für metallene Werkstoffe im Kontakt mit Trinkwasser – 17.03.2017

Date 2017-08-11 	Issued by Per Thestrup Product Manager	Date 2017-08-11 	Approved by Henrik Bergmann Engineering Director
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Danfoss only vouches for the correctness of the English version of this declaration. In the event of the declaration being translated into any other language, the translator concerned shall be liable for the correctness of the translation

ID No. 033F0842

Revision No. 00

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