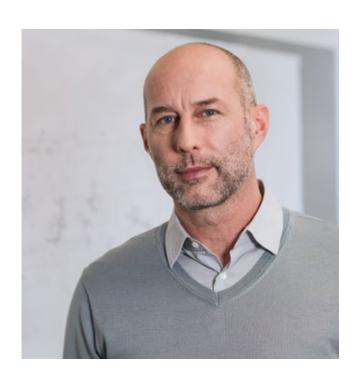


# ENSURE CLEAN POTABLE WATER. EVEN WHEN USED IMPROPERLY.

This innovation from TECE turns the toilet cistern into a hygiene flushing station. To achieve this we've integrated into our toilet cistern a hot water connection and a programmable control system in one compact assembly. With the new TECEprofil toilet module with integrated hygiene flush, you can fulfil your obligation as an operator to provide a clean potable water system. Convenient, reliable, economical.

"Water exchange can only occur by removing the water. This is sometimes difficult to explain, but is hygienically necessary."





Simple initial operation via app with any smartphone. Flushing programmes can be configured via *Bluetooth®*. All flushes are documented.





#### The advantages:

- Simple, reliable hygiene flush in a compact design
- Operational reliability with logging feature
- Individually programmable via app, for lots of applications
- Connection to smart home solutions or BCT possible
- Reduced assembly effort, completely pre-assembled components
- No additional fixtures and inspection openings in the bathroom
- No separate drainage piping, shorter pipe routing

This innovative product concept was awarded the German Desgin Prize: "Winner" in the category "Excellent product design - Bath and Wellness".

# When not in use: Ensure the water is exchanged. Automatically.

The fact that potable water systems in hotels, the housing industry or in hospitals are often left unused for long periods of time is normal in such facilities.

## How can we ensure the complete exchange of water even when the water lines are unused?

Clever pipe routing or stagnation-reducing components are not sufficient on their own here. At some point, the water has to be removed from the lines somehow. This can be done manually by service personnel. However, it can be achieved more safely, reliably and demonstrably using automatic flushing stations. The owner can thus meet his responsibility to provide a proper potable water system.



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The owners of potable water systems are responsible for ensuring proper use. In practice, this responsibility should be transferred to the actual users, tenants or employees. In order to avoid a possible organisational fault, this transfer of responsibility should be documented contractually and in the context of training. Automatic flushing stations drastically simplify this task.

Travel guides even contain tips for hotel guests that recommend thoroughly flushing the potable water lines directly after arriving in the room. It takes next to no time to flush 50 litres. However, in a properly operated potable water system it would be sufficient to rinse the fittings at the most.

#### No use, no exchange

"Our events focusing on potable water hygiene show that designers and fitters are now well-educated on the subject. There is a diverse range of technical solutions for planning, designing and operating a compliant potable water installation. Whether it's looped lines, ring lines, flow distributors, circulation right up to the tapping point: Everything is based on proper use. All measures are ineffective without this foundation. This leads to an aspect that is still hard to imagine for many: The vital flushing of potable water when not in use!"



Robert Schilling, subject specialist, TECE

### Requirements for the potable water installation Comfort Hygiene Sufficient quantity • Temperature f(t) **Temperature** Water exchange • Min. PWH • Max. PWC Through-flow Non-usage in operation • Regular, complete • Discharge times water exchange Flow speed • Time in the pipe • Stagnation · Dismantling of

dead lines

Improper warming of the cold potable water can make it necessary to exchange the water. Especially in internal bathrooms with very high room temperatures, the temperature of the cold water can rise above 25°C after a few hours.



The requirements for the regular and complete exchange of potable water are between 7 days and 72 hours, depending on the regulations. In principle, an interval that is appropriate to the system should be determined and adhered to depending on the usage type and risk category.

## The technology in the cistern: Pre-assembled components, digitally controllable.

#### Technical data:

Max. Water pressure: 10 bar (1 MPa) Minimum flow pressure: 1 bar (0.1 MPa) Calculation flow: 5 l/min

#### Defined water volume:

A dynamic flow valve ensures an operating range of 1 to 10 bar with a constant volume flow of 5 l/min. The corresponding programmed flush volume is thus drained over the calculated flush time.

#### Wiring:

- 2-pin plug for 12 V power supply
- 5-pin plug for optional connection of building control technology

#### Inspection:

All components can be inspected via the flush plate

## NEW

#### Alternative cold water

The TECEprofil toilet module with integrated hygiene flush is now also available as a cold water variant especially for cold water installations which are common in schools, service areas or even in the trade. The functions are identical to the version for hot and cold water.

The cold water version of the hygiene flush will be available from June 2021.

# Solenoid valves for hot and cold water Programming and control unit with Bluetooth connector: Operation via TECEsmartflow app or alternatively via building control technology EN 1717 safeguard: Anti-backflow with clear outlet, immersion pipe and overflow (type AC)

## Capacitive sensor for usage

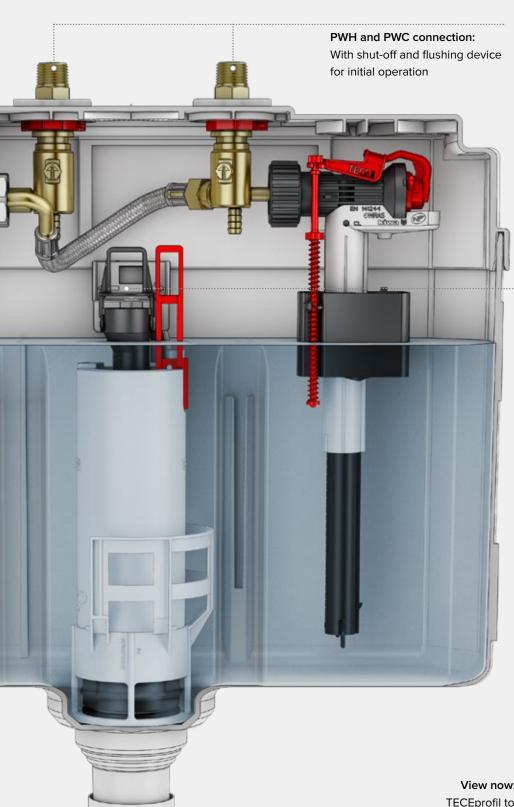
the Uni cistern.

recognition:

When the toilet flush is activated (the water level in the cistern drops), a hygiene flush is skipped and the timer is reset.

Splash-free release into the cistern: The warm water flush volume mixes with the large cistern volume from





#### Overflow in the drain valve:

The drainage capacity of the overflow is designed to be big enough to safely drain the flow volume of the hygiene flush and the filling valve in the event of a fault.

**View now:** This is how the TECEprofil toilet module with integrated hygiene flush works.



# The software: Programme the TECE hygiene flush with ease.

The hygiene flush is up and running in just a few minutes. After an initial flushing of the lines and connection to the power supply, the flushing station can be programmed using the easy to understand TECEsmartflow app via Bluetooth on smartphone or tablet.



View now: Find out how to easily programme the TECEsmartflow app here.



#### **Programmes:**

Choose between the "Weekdays" and "Interval" flush programmes.



#### Interval:

The interval and flush volume can be continuously adjusted. The interval timer is reset and restarted after a normal water removal.



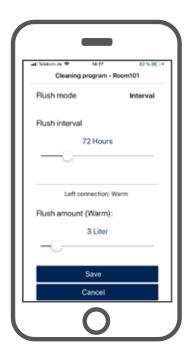
#### Weekdays:

You can select days and times for flushing. The flush volume can be continuously adjusted here, too. In case of regular water usage, the automatic flush planned for that day is skipped.



#### Flush volume:

The flush volumes for hot and cold water can be set to the individual line volumes independent of one another on each device.

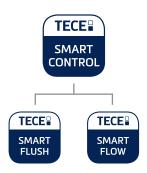




#### Logging feature:

The electronics record all flushes and store these as a log. Additionally, the current settings for the flush programme are always documented. You can use the app to retrieve, export and process the log in PDF format. The log tracks the flush history and demonstrates continuous proper operation.



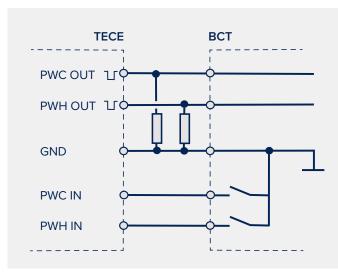


#### App – TECEsmartcontrol

The TECEsmartflow app is part of the new app TECEsmartcontrol. This enables commissioning and adjustment of both the TECE hygiene cisterns and the TECEsolid flush plates. Simply intuitive.

**Free:** The TECEsmartcontrol app. Download now:



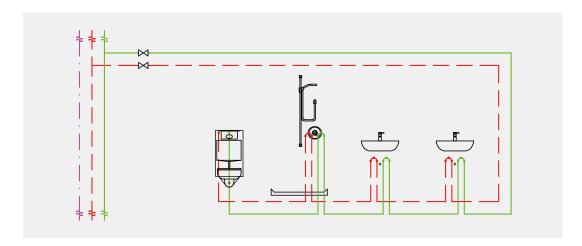


#### Building control technology:

There is also the option to connect the hygiene flushing unit to building control technology. Two BCT potential-free contacts can be used to actuate the hot and cold water flush valves. The BCT then functions as the master. The flushes can also be transmitted to the BCT via two outputs (low signal) for documentation purposes.

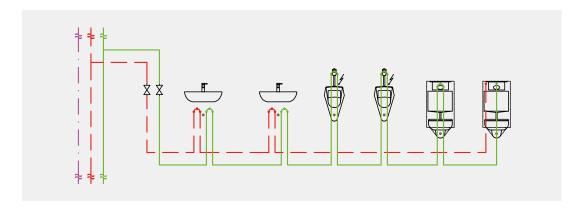
# Every piping system has room for reliability and hygiene.





Example – Hotel: Bathroom installation with dual washstand and looped serial installation.

To ensure that the total pipe contents up to the riser can be exchanged on an automatic flush, the TECEprofil toilet module with integrated hygiene flush is assigned as the last consumer in the potable water installation. Hotel guests in occupied rooms shouldn't be disturbed by an automatic hygiene flush. The "Weekdays" programme helps here. In this programme you can set the flush time for when there are normally no guests in the rooms (e.g. 11:30).

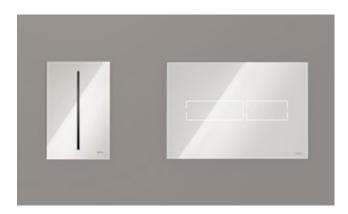


Example - Public/semi-public buildings: Looped series installation in a multi-toilet system

To ensure that the total pipe contents up to the riser can be exchanged on an automatic flush, the TECEprofil toilet module with integrated hygiene flush is assigned as the last consumer in the potable water installation. Thanks to the continuously adjustable flush volume, you can also exchange larger pipe volumes, for example in a public toilet with multiple consumers. The "Interval" flush programme is suitable for use in public and semi-public areas to prevent even short usage interruptions.



# The small solution: Hygiene flush for cold water lines with electronic toilet or urinal actuation



#### Electronic flush plates from TECE

Alongside many additional optional functions, electronic flush plates from TECE can be fitted with a programmable hygiene flushing function.



#### **TECEfilo-Solid**

A magnetic sensor lets you programme a flush interval of 24, 72 or 168 hours and a corresponding flush duration of 5, 15 or 30 seconds. At a line pressure of e.g. 4 bar, this results in programmable flush volumes between 2.2 and 13.2 litres.

	Designation	Order no.
	TECEprofil toilet module with Uni cistern, with integrated hygiene flushing function Installation height 1120 mm	9300100
	TECEprofil toilet module with Uni cistern, with integrated hygiene flushing function cold water, installation height 1120 mm	9300101
	TECEprofil transformer, including power cable	9810010
	TECEprofil power cable for building control technology	9810011

For more information, go to www.tece.com

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