WE KEEP SMART THINGS SIMPLE.



Assembly, commissioning, operation and maintenance

HygBox Connect



Content

1.	Ger	neral	3
	1.1	Notes on the operating instructions	3
	1.2	Symbols used	3
	1.3	Copyright / Standards / Warranty	4
2.	Saf	ety	4
	2.1	Intended use	4
	2.2	Fundamental dangers	4
	2.3	Dangers due to electrical energy	5
	2.4	Maintenance and repair work	5
3.	Ins	tallation instructions	5
4.	Des	sign and Function	6
	4.1	Scope of supply	6
	4.2	Optional accessories	7
	4.3	Design of the HygBox Connect	8
	4.4	Design of Control unit	9
	4.5	Functions	
	4.6	Functional description	10
	4.7	Displays and actions directly	
		on the device	
		4.7.1 LED display	
		4.7.2 Actions	13
5 .	Tra	nsport and Storage	14
	5.1	Transport	14
	5.2	Storage	14
6.	Ass	sembly	15
	6.1	Mounting the HygBox	15
	6.2	Installation of Siphon Connection Set	16
	6.3	Installation of the Waste Water	
		Connection Set	18
	6.4	Installation of 2 Boxes Connection Set.	20

7.	Pre	paring commissioning	22	
8.	Cor	nmissioning	23	
	8.1	Installing the SYR App	23	
	8.2	Accessing the HygBox Connect		
		via App (remote control mode)	23	
9.	Reg	jistration of the SYR App	25	
	9.1	Registration	25	
	9.2	Establishing a wireless connection	26	
	9.3	Connecting to SYR CONNECT	27	
	9.4	Information control	28	
	9.5	Remote control mode	29	
10.	Par	ts and accessories	30	
11.	Mai	intenance	31	
12.	Mal	functions	31	
13.	Tec	hnical specifications	33	
14.	Din	nensions	34	
15.	Check list for commissioning			
16.	Pip	e water content	35	

1. General

1.1 Notes on the operating instructions

The present operating instructions ensure the safe and efficient use of your SYR HygBox Connect. They are part of the scope of delivery and must be kept accessible to the user at all times.

Due to technical developments, illustrations and descriptions in these operating instructions may differ slightly from the HygBox Connect actually delivered.

We accept no liability for damage caused by non-compliance with these operating instructions.

1.2 Symbols used

All safety instructions are identified in the present operating instructions by respective symbols. The signal words at the beginning of the safety instructions express the extent of the risk.



Danger!

This combination of the symbol and the signal word indicates an imminently hazardous situation which, if not avoided, will result in death or severe injury.



Warning!

This combination of the symbol and the signal word indicates a potentially hazardous situation which, if not avoided, could result in death or severe injury.



Caution!

This combination of the symbol and the signal word indicates a potentially hazardous situation which, if not avoided, could result in minor injury.



Attention!

This combination of the symbol and the signal word represents important information that helps prevent material and environmental damage.



1.3 Copyright / Standards / Warranty

These operating instructions and all documents supplied with this device remain intellectual property of Hans Sasserath GmbH & Co. KG.

Their use is permitted and desired within the scope of the use of the device.

These documents may neither be reproduced without the express consent of SYR.

The manufacturer's warranty is subject to the conditions of sale and delivery.

The warranty expires in case of:

- Damage due to improper operation,
- Repair or conversion work performed by unauthorized persons,
- Use of non-original SYR accessories or spare parts,
- Faulty parts that are not repaired immediately so as to limit the extent of damage as far as possible and not impair the safety of the device (repair obligation).

2. Safety

2.1 Intended use

The SYR HygBox Connect flushes a drinking water installation according to specific criteria to avoid the stagnation of water.

The SYR HygBox Connect is intended for the use in drinking water installations. Any other use or use beyond this is deemed improper use.

Intended use also includes observing these operating instructions.

2.2 Fundamental dangers

In general, hazards can occur when handling electrically powered devices. Therefore, please follow safety and health regulations (VSG), other generally accepted rules pertaining to safety and occupational medicine as well health and safety regulations of the German trade associations (BGV).

Do not modify the HygBox Connect. The manufacturer does not assume any liability caused by improper modifications.

2.3 Dangers due to electrical energy

In general, hazards can occur when handling electrically powered devices. Therefore, please follow safety and health regulations (VSG), other generally accepted rules pertaining to safety and occupational medicine as well health and safety regulations of the German trade associations (BGV).

Do not modify the SYR HygBox Connect. The manufacturer does not assume any liability caused by improper modifications.

Please observe the prescribed values for voltage and power (see specifications) during installation. Work on electrical installations or controls may only be carried out by qualified electricians.

Disconnect the mains adapter and remove the batteries before starting work.

Regularly check the mains adapter and have it replaced by a qualified electrician in case it is damaged

2.4 Maintenance and repair work

Maintenance and repair work must be done by qualified and authorized specialists only. They are considered authorized specialists because of their vocational training, instruction or experience to do the required intervention, detect and prevent potential risks from occurring in pursuing their activity. They must be able to provide evidence about their knowledge of the relevant safety standards, safety regulations and the health and safety regulations of the German trade associations (BGV) and they must have read the operating instructions.

3. Installation instructions

The HygBox Connect operates in the 2.4 GHz ISM frequency band. Please avoid installing it near devices with the same channel assignment (e.g. wireless network devices, RF components, etc.).

When operating in unfavorable ambient conditions, in buildings/rooms with reinforced concrete walls, steel and iron frames or near metal obstacles (e.g. pieces of furniture), radio reception may be disturbed or interrupted.

The HygBox Connect may only be installed in frost-proof, non-condensing locations. The HygBox Connect must not be installed in inaccessible shafts.

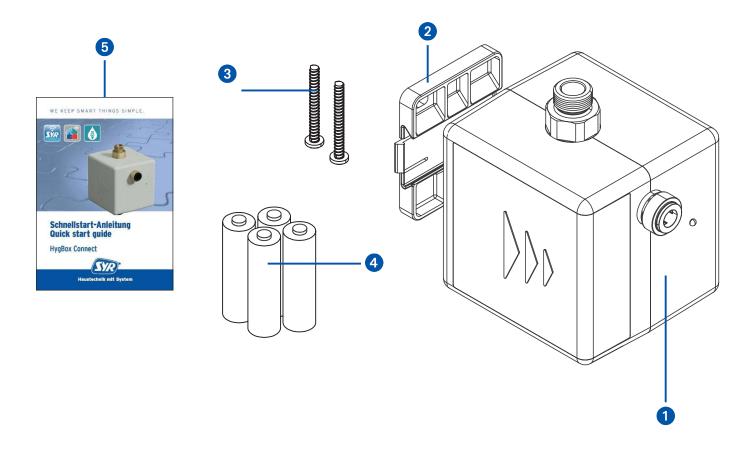
To ensure flawless and convenient operations, the HygBox Connect can have a wireless internet connection and may be operated via your smartphone, tablet or PC. In addition, offline operation is possible via the integrated AccessPoint of the HygBox Connect.

You need the SYR App for offline operation.



4. Design and Function

4.1 Scope of supply



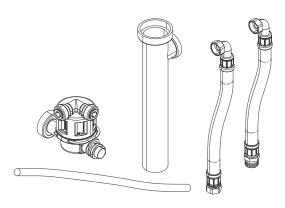
Legend

- HygBox
- Wall bracket
- 2 x fixing screws and plugs for the wall bracket
- 2345 4 x batteries (AA)
- Quick start guide

4.2. Optional Accessories

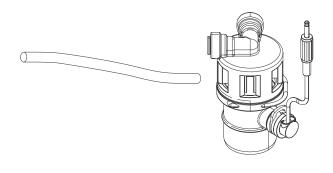
The following accessories are available to adapt the connection options:

Siphon Connection Set (Article no. 2622.00.900)
 The HygBox is connected to the T piece of the immersion pipe using the "Siphon" Connection Set.



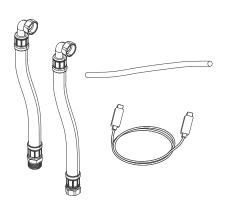


Connection set waste water DN 40 (Article no. 2622.00.901)
 The HygBox is connected to a HT pipe (DN 40) using the "Waste Water" Connection Set..





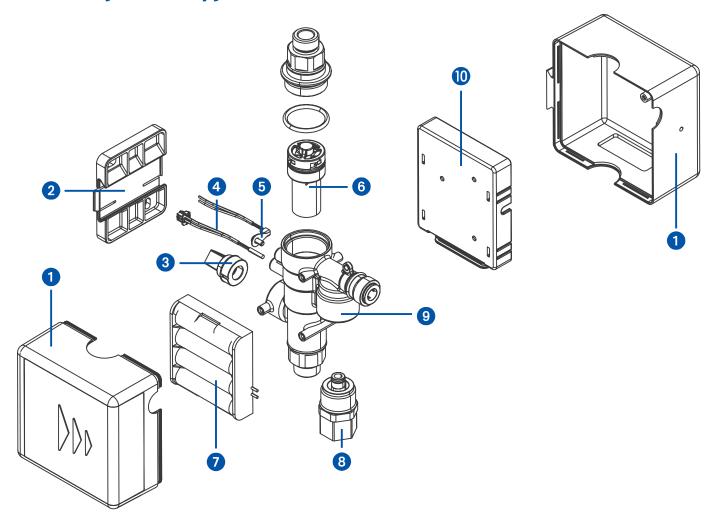
2 Boxes Connection Set (Article no. 2622.00.902)
 "2 Boxes Connection Set" to connect 2 HygBoxes for the hot and cold water lines.







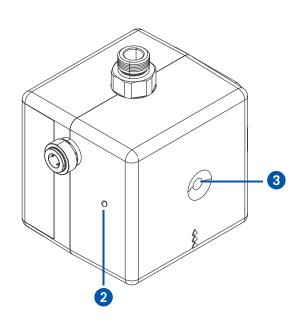
4.3. Design of the HygBox Connect



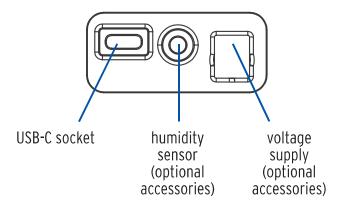
Legend

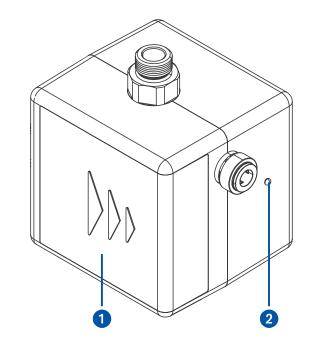
- Covering
- Wall bracket
- 3 Pressure sensor
- Reed Contact
- 4 5 6 7 8 9 Temperature sensor
- Turbine
- Battery tray
- Cartridge valve
- Casing
- Circuit board holder

4.4. Design of Control unit

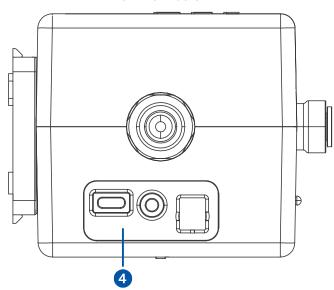


Connections





View from below



Legend

- Battery compartment
- 2 3 4 LED
- Button
- Connections



4.5. Function

The SYR HygBox Connect protects drinking water connections and pipe sections, whose intended operation cannot be observed.

By constant monitoring, stagnation is detected and an automatic hygiene flush is carried out before contamination occurs.

The connected sensors continuously record the condition of the drinking water installation and check criteria, according to which hygiene flushing should take place, such as time by volume.

The SYR HygBox Connect with built-in wireless connection includes an electronic water meter (via turbine), a temperature sensor, a humidity sensor and a pressure sensor.

The HygBox can be connected to SYR Connect.

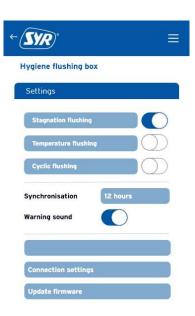
With the SYR Connect function, the maximum permissible parameters can be set or changed directly via a smartphone or PC. Even if the internet fails, the parameters continue to be monitored. However, communication to SYR Connect does not take place during this time.

The HygBox can be operated entirely with batteries. Mains operation is optional. The battery life is highly dependent on the set parameters. When using factory settings, the HygBox can be operated for 2 years.

4.6. Functional description

The SYR HygBox Connect has four different flushing modes:

- Stagnation flushing
- Temperature flushing
- Cyclic flushing
- Manual flushing
 (not via the App, only for testing after installing)



Stagnation flushing

If the set volume has not flowed within the predefined time, the HygBox activates a stagnation flush. The volume to be monitored depends on the set flush volume.

(Setting example: Measuring time: 3 days, flush volume 35 liters)

Example 1:

No water was drawn within a measuring time of 3 days. After 3 days, the HygBox flushes a volume of 35 liters.

Example 2:

After 12 hours, a volume of 35 liters was drawn. After flushing, the measuring time is reset because the set time of 3 days has not been exceeded. The device measures again over a period of 3 days.

Flush volume:

The flush volume is defined as the volume that is flushed after the measuring time has elapsed. The flush volume is also the water volume to be monitored.

Measuring time:

The measuring time is the monitoring period. Checks are performed to determine whether the set flush volume has flowed during the measuring time.

Temperature flushing

Temperature flushing is selected when pipes require flushing due to too high or too low temperature. The start and stop temperatures are specified. To avoid permanent or excessive flushes, it is important to set the parameters "maximum flush time" and "maximum number of flushings per day". The operating mode of the installation (hot/cold) must be known for the correct choice of settings.

Example 1:

Operating mode: hot/start temperature: 50 °C/stop temperature: 55 °C/max. flush time: 2 min./max. number of flushings per day: 5

The temperature falls below 50 °C. The HygBox starts a temperature flushing. If a temperature of 55 °C is reached within 2 min, flushing stops. If the temperature of 55 °C fails to be reached within the 2 min, an error message appears and flushing stops. If the device flushes more than five times within 24 hours, the device will activate an alarm and will not flush again for 24 hours.

Setting parameters

Measuring time: 10 min - 288 hrs.

> Flush volume: 11 - 1001



Setting parameters

Start temperature cold: 12 - 25 °C Stop temperature cold: 10 - 23°C

Start temperature hot: 58 °C Stop temperature hot: 52 - 60 °C

> Flush time: 30 sec. - 10 min.

Flushings / day 1 - 20





Example 2:

Operating mode: cold / start temperature: $25 \, ^{\circ}\text{C}$ / stop temperature: $20 \, ^{\circ}\text{C}$ / max. flush time: $2 \, ^{\circ}\text{C}$ / max. number of flushings per day: $5 \, ^{\circ}$

The temperature of 25 °C is exceeded. The HygBox activates a temperature flushing. If a temperature of 20 °C is reached within 2 min, the flushing stops. If the temperature of 20 °C fails to be reached within 2 min., an error message appears and flushing stops. If the device flushes more than 5 times within 24 hours, the device activates an alarm and will not flush again for 24 hours.

Start temperature:

Defines the temperature above or below which flushing is activated.

Stop temperature:

Defines the temperature at which flushing stops.

Max. flush time:

Indicates the maximum flush time. If the target temperature fails to be reached within the flush time, flushing stops and an alarm is given.

Cyclic flushing

The "cyclic flushing" function activates a flush in a definable interval. The flush volume can also be defined. The flush time is calculated in the same way as for stagnation flushing. Any water volume that has flown between intervals will not be considered.

Example:

Interval: 6 hours / flush volume: 30 liters

Interval:

Specifies the time between flushing.

Flush volume:

The flush volume is the volume that is flushed after the interval.

Manual flushing

Manual flushing is only intended for commissioning and can only be activated directly on the device.

Flushing can be activated by pressing the button as follows: Press and hold the button for approx. 3 seconds until the LED lights up green.

The flush time is 1 minute.

During flushing, the LED flashes in yellow. To cancel the flush, the same button function can be used as for starting the flush.

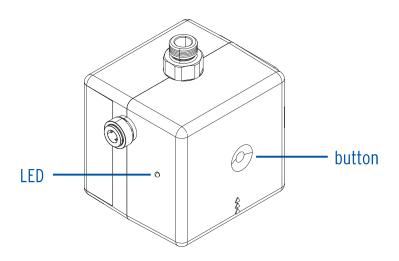
Setting parameters

Interval: 10 min. - 30 days

> Flush volume 11 - 1001



4.7. Displays and actions directly on the device The HygBox Connect features an LED status display and a button.



4.7.1. LED display

LED display	Blue	Green	Light blue	Yellow	Red
LED on	Wake-up	Manual flushing is activated	AccessPoint is switched on	AccessPoint is switched off	
LED flashes	Wireless connection is being established		Data transfer to the server	Flushing in progress	Alarm

4.7.2. Actions

State of device	Action	Function
HygBox is inactiv	Button 1 x for 1s and release	Wake-up and data transfer
HygBox is inactiv	Button 1 x for 3s and release	Initiate and cancel manual flushing
AccessPoint (de-)activated	Button 1 x for 10s and release	(De-)activates AccessPoint
Alarm is displayed	Briefly press button 1 x	Alarm message is acknowledged



5. Transport and Storage

5.1. Transport

The device is delivered pre-assembled. It weighs approx. 1.275 g.



Attention!

Potential material damage in case of improper transport!

- Do not install the device if the packaging is significantly damaged.
- Replace the affected synthetic part after hard knocks or impacts (even without visible damage).

5.2. Storage

Respect the following ambient conditions for the storage of the device:

Temperature: +4 to +60 °C, relative humidity: max. 80 %.



Attention!

Protect the valve and electronics from frost.

6. Assembly

The assembly and commissioning of the SYR HygBox Connect may only be carried out be authorized, qualified and instructed personnel with the corresponding special knowledge.

The general safety instructions for drinking water installations have to be met, amongst others

- Drinking water supply systems (TRWI) DIN 1988, DIN EN 806, DIN EN 1717, VDI 6023
- Instructions and regulations of the local water supply



Attention!

Potential material damage in case of improper drinking water installation!

- Mount the HygBox Connect in accordance with the instructions for use.
 Check connections for leaks.
- Avoid water hammers, e.g. from solenoid valves downstream in the system.



Attention!

Dirt in the drinking water supply line can lead to malfunctions in the device.

 We recommend the installation of a filter (e.g. DRUFI+ DFR) at the point of entry of domestic water installations to protect the installation downstream!



Attention!

Potential material damage in case of improper electrical installation!

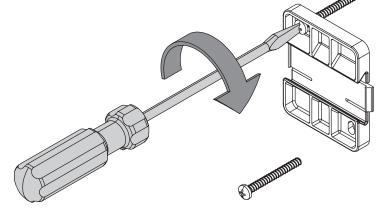
• Use only the supplied mains adapter to connect the device to the mains.

6.1. Mounting the HygBox

 Drill two holes (Ø 6mm) and mount the wall bracket using the enclosed plugs and screw.

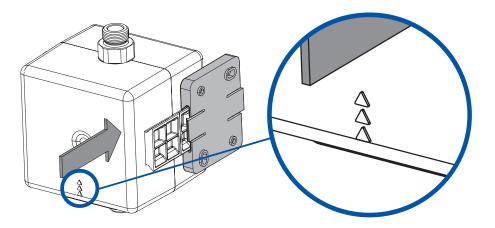
Alternatively, you can use the "Adhesive set for wall holder" (2622.00.909) accessory.

A precise description is included with the adhesive set.





Slide the HygBox sideways onto the wall bracket, observing the indicated direction of flow.



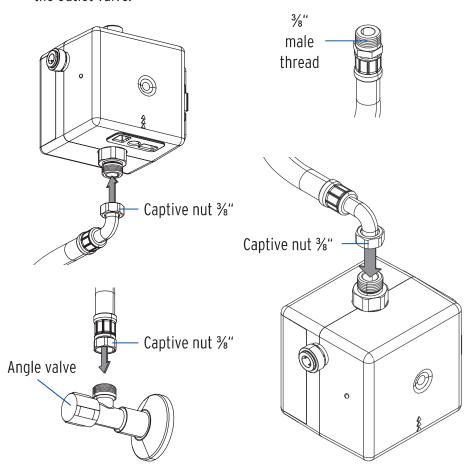
The arrows on the casing mark the direction of flow.

6.2. Installation of Siphon Connection Set

• Fix the two flexible hoses to the HygBox.

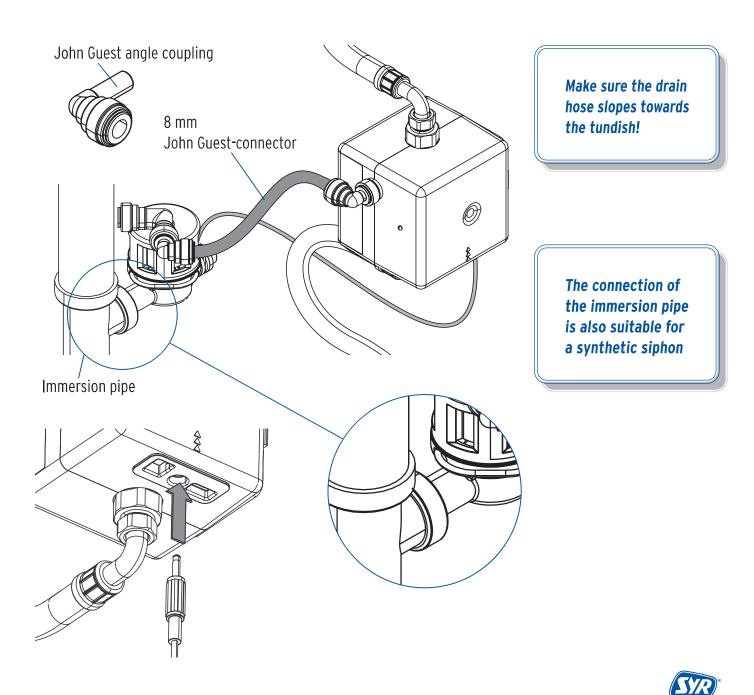
Connect the ¾" captive nut with an angle valve and the ¾" captive nut with the thread at the bottom of the HygBox.

Connect the ¾" captive nut with the thread on the upper side of the HygBox and the ¾" male thread with the outlet valve.



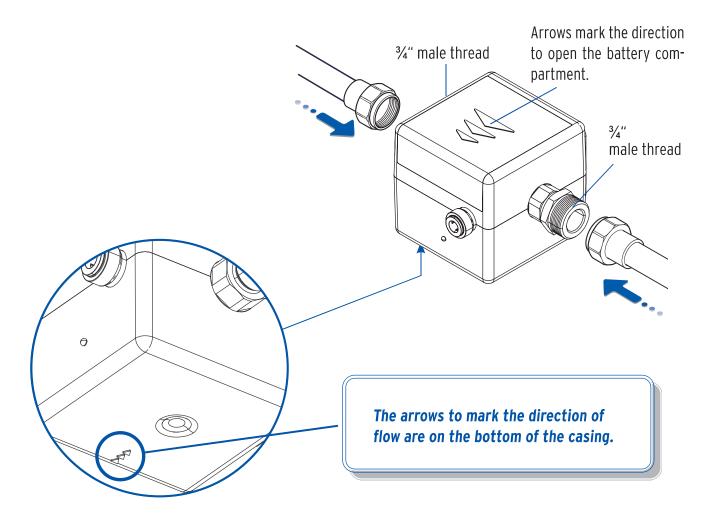
To cover several installation options, the Siphon Connection Set includes a second flexible hose to connect the connection valve with the HygBox under consideration of the actual installation situation.

- An immersion pipe with device connection is required for the installation of the Siphon Connection Set. Please replace the existing immersion pipe with the supplied immersion pipe with device connection (For kitchen connections or room-saving siphons, you can connect the tundish to a standard appliance connection socket).
- Fix the Siphon Connection Set to the device connection of the immersion pipe and connect the drain hose via one of the two John Guest connectors with the Siphon Connection Set (Art.no. 2622.00.900). For easier installation of the drain hose, use the John Guest angle coupling (included in each connection set).
- Close the other connection of the Waste Water Connection Set with a plug!
- If available, insert the plug of the humidity sensor into the connection of the HygBox (p. 9 4).



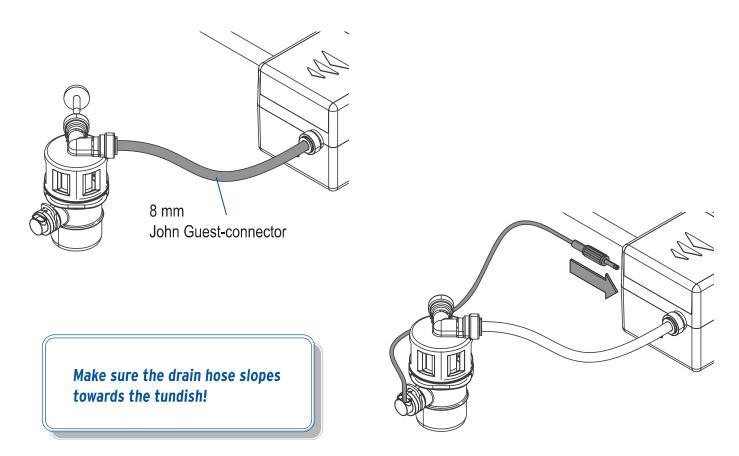
6.3. Installation of the Waste Water Connection Set

• Mount the HygBox using the adapter ¾" x ¾" (included in the Connection Set) with commercially available transition pieces.

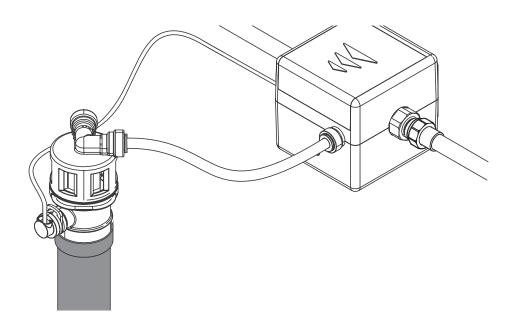


• Connect the drain hose via one of the two John Guest connectors with the Waste Water Connection Set (Art.no. 2622.00.901) and insert the plug of the humidity sensor into the HygBox connection (p. 9 4).

• Close the other connection of the Waste Water Connection Set with the enclosed plug!



• Connect the Waste Water Connection Set to a DN 40 Waste Water connection.



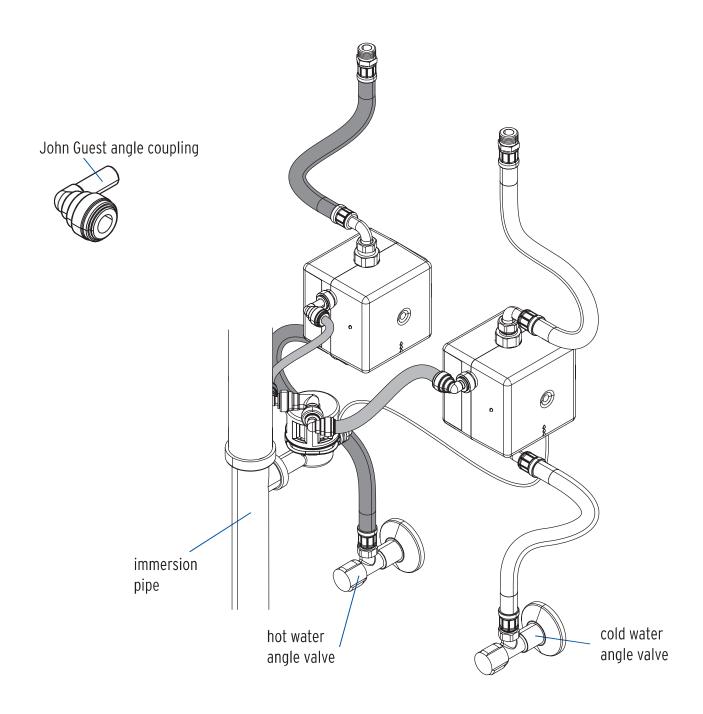


6.4. Installation of 2 Boxes Connection Set

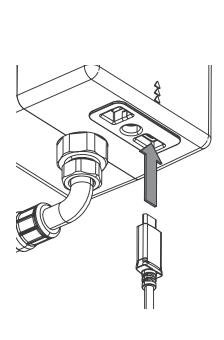
To install two HygBoxes, you need the 2 Boxes Connection Set (art.no. 2622.00.902), which includes two additional flexible hoses, a waste water hose and a communication cable with USB-C port.

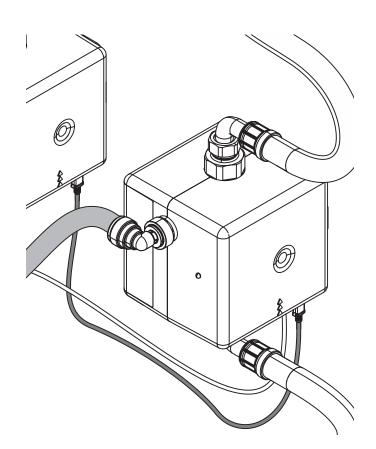
• Mount the second HygBox using the other angle valve and connect the two flexible hoses, the waste water hose and the humidity sensor (p. 11).

For easier installation of the drain hose, use the John Guest angle coupling (included in each connection set).



• Connect both HygBoxes via the USB-C cable to the corresponding USB-C ports (p. 9 4).





During power supply operation, not only is communication via the USB-C cable, but also the second HygBox is automatically supplied with power. Thus, only one power supply unit (optional accessory) is required for both HygBoxes.

Split voltage power supply only applies to operations with the power supply unit. In battery mode, both HygBoxes must be powered by batteries!

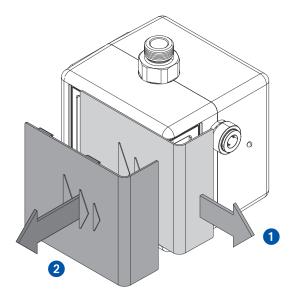
Make sure the drain hose slopes towards the tundish!

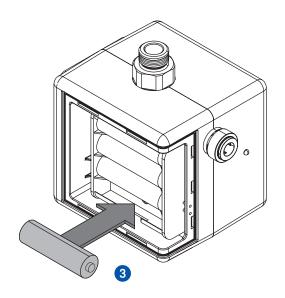


7. Preparing commissioning

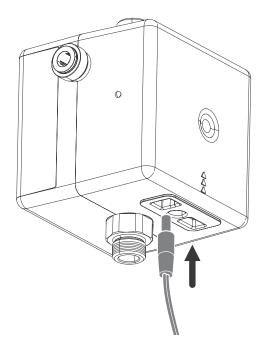
To start commissioning, it is necessary to insert the batteries. As an option, you may connect the HygBox using a mains plug (accessories).

- Open the cover (1) and remove it (2).
- Insert the batteries (3) 4 x batteries (AA, LR6). Pay attention to the correct polarity!





• If necessary, connect the HygBox via the power supply unit available as an accessory.



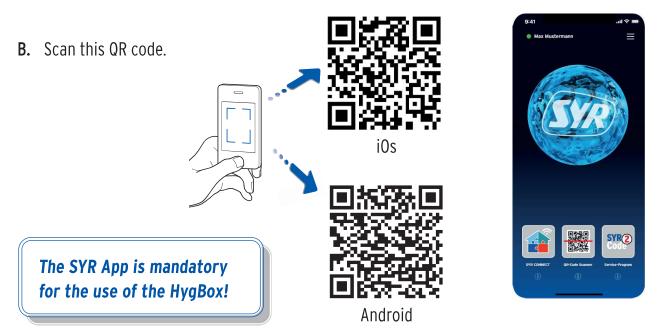
The HygBox also works when no batteries are inserted. Nevertheless, we recommend the use of batteries, as they can ensure proper hygienic function even in the event of a power failure.

8. Commissioning

8.1. Installing the SYR App

The HygBox Connect is controlled and operated via the SYR App. To install the SYR App, select option A or B.

A. Download the SYR App for free from the appropriate Store and install it on your smartphone or tablet.



8.2. Accessing the HygBox Connect via App (remote control mode)

To set up the HygBox Connect by remote control mode, you only need a local connection, no internet connection is required!

Start the App. Click on "SYR CONNECT" and then on "Remote Control CONNECT" and scan the productspecific code.

The QR code and the code number of the HygBox Connect are located inside the battery cover.









The AccessPoint deactivates after 3 min. and has to be reactivated, if required.

- When prompted by the App, activate the AccessPoint of the HygBox Connect so that the SYR App can connect with the device. To do so, press the button (p. 13, chap. 4.7) for 10 seconds.
- 3 Once the connection is established, the SYR App wants to join the wireless network of the HygBox Connect. Click on "connect".
 - You may now access the HygBox Connect via the App and adjust settings.

Connection to the HygBox Connect

Press the button for ten seconds until the LED lights up light blue.

OK

"SYR intern" wants to join the WiFi "HygBox[......]?

Cancel

Connect

2

3

9. Registration of SYR Connect

9.1. Registration

The HygBox Connect is operated via the SYR App using a wireless router. Please follow the instructions (p. 23, chap. 8.1.) to install the SYR App.

You may also control your HygBox Connect via your web browser. Go to http://syrconnect.de to access the registration mask. Follow the browser instructions.

Registering the HygBox Connect

- 1 Start the SYR App and click on the SYR CONNECT button on the lower left of the start screen.
- 2 Click on "registration new user/device" on the login mask.
- 3 There are two ways to register a new CONNECT device: Click on "QR code scanner" and scan the product-specific code or enter the code number underneath and click on "add CONNECT device".

The QR code and the code number of the HygBox Connect can be found inside the cover of the battery compartment:



4 Enter a project name, your user data and confirm your entries. Then select a user name and a password of at least eight characters.









Mr.	Mrs.
irst Name*	
lame*	

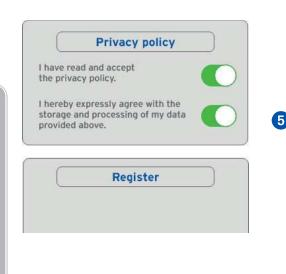


4

5 Read the privacy policy and agree to it. Then click on "register".

Please note that remote access to the HygBox Connect via internet is only possible with an active internet connection.

Do not switch off your router if you want to control the HygBox Connect via internet and/or the SYR App.

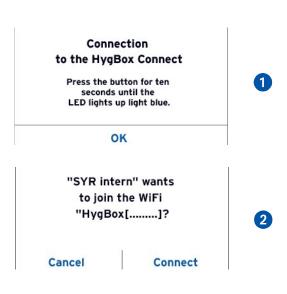


The HygBox Connect has an AccessPoint (AP) that creates its own small wireless network. The SYR App joins this network. You may now connect the HygBox Connect with a wireless network of your choice.

9.2. Establishing a wireless connection

- 1 Activate the AccessPoint of the HygBox Connect so that the SYR App can connect to the device.

 To do so, press the side sensor button for 10 seconds.
- 2 Once the connection has been established, the SYR App wants to join the wireless connection of the HygBox Connect. Click on "connect". Assign the desired wireless network to the HygBox Connect by selecting it from the list.
- 3 Enter the password for the selected wireless network, click on OK and "Save".





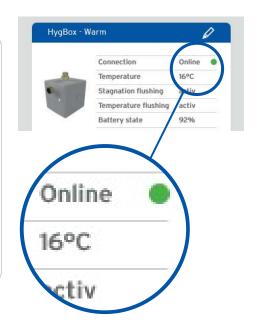
- 4 The corresponding confirmation appears.
- 5 Return to the list of devices in your project. A green dot indicates that the connection has been established: The HygBox Connect is connected to your wireless network.



4

Please ensure that you are near to the device so that it can establish a connection.

If a connection fails to be established, please check whether the AccessPoint mode of the HygBox Connect is activated. The AccessPoint is switched off after three minutes and has to be reactivated, if required.



Via SYR CONNECT, the HygBox Connect is easy to control and monitor and can be connected to other SYR CONNECT devices, if required.

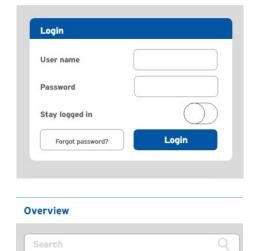
9.3. Connection to SYR CONNECT

You have successfully registered the HygBox Connect and connected it to the wireless network.

To operate the device, start the SYR App and click on the SYR Connect button on the bottom left of the start screen

- 1 Enter your user name and password. Click on LOG IN.

 Press the slider and you can remain logged in.
- The project you created is displayed.



Residential house sample man





3 When you click on it, the registered HygBox Connect appears. Please select it



4 Click on Settings to configure the device.



You may create several projects and include different SYR CONNECT devices. Everything is displayed in a clear manner and easy to select.

9.4. Information control

- 1 "Status" informs you about the current set values and the operating status of your HygBox Connect.
- 2 "Statistics" show the daily, monthly and cumulated flushes in your installation in graphic format.



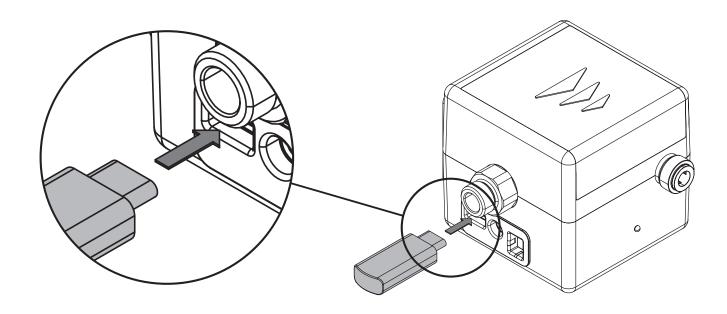
9.5. Using a USB storage medium

The HygBox is able to store data internally and transfer them to a USB storage medium if required. Flushing statistics, alarm events and a history are stored.

The USB storage medium should only be connected for the period of data transfer, not during normal operation of the HygBox.

A USB-C stick formatted as FAT32 (default) should be used for data storage. Product recommendation: SanDisk USB-C stick. This stick has a USB-C and a USB-A port and is thus compatible with every device.

To retrieve the data, the USB stick is connected to the USB-C socket (p. 9 4) of the HygBox.

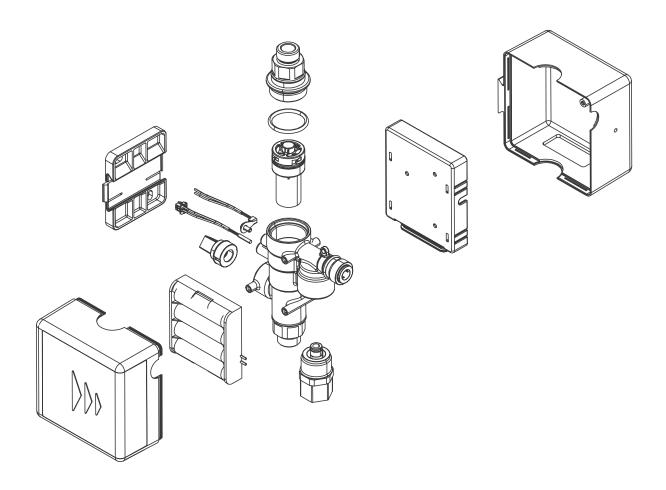


Then the HygBox is "woken up" by pressing the button (p. 13, chap. 4.7). After approx. 10 seconds, the LED of the HygBox starts to flash purple, indicating that data transmission is in progress. As soon as the LED stops flashing purple, the data transfer is finished and the USB stick can be removed.

Separate files are created for flushing statistics, alarm events and the history. Each file contains the stored values with time stamp. In addition, the serial number and the device name of the HygBox are stored again in each file. The flushing statistics are stored as .html, the other files as .csv. The latter can be opened with Excel, for example.



10. Parts and accessories



Accessories

Mains adapter (no pict.) 1500.01.915

Adhesive set for wall holder (no pict.) 2622.00.909

Siphon Connection Set (no pict.) 2622.00.900

Waste Water Connection Set (no pict.) 2622.00.901

2 Boxes Connection Set (no pict.) 2622.00.902

11. Maintenance

The turbine and the cable harnesses should be serviced.

- Perform a visual check of cable harnesses (cable kinked? Correctly plugged in?)
- Check turbine and stop valve:
 Select cyclic flushing (e.g. with 10 min. measuring time or interval and 1 liter flush volume).
 If the HygBox flushes 1 liter after 10 min., the turbine is working properly.

We recommend annual maintenance intervals by our SYR service technicians. Consider our maintenance contract service!



Attention!

Potential material damage due to improper care!

• Do not clean synthetic parts with cleaning products containing solvents.

12. Malfunctions

In case of malfunctions, a visual or acoustic notification (buzzer) is emitted. In addition, the malfunction is reported by push message externally to a smartphone / tablet or a PC.

Causes for malfunctions include:

- Reaching limit values (e.g. flush times)
- Device failures
- Spent batteries



Alarm text	Cause	Remedy
A1 Pressure sensor mal- function	The pressure sensor does not report anything. There may be a defect.	Please contact the SYR service.
A2 Temperature sensor malfunction	The temperature sensor does not report anything. There may be a defect.	Please contact the SYR service.
A3 Flow sensor malfunction	No turbine pulses were recorded over an extended period of time. The turbine or the sensor may be dirty or faulty.	Open a water tapping point and check whether turbine pul- ses are displayed on the LED. Please contact the SYR service.
A5 Tundish sensor malfunction	Flushing was interrupted because the tundish sensor detected an overflow.	Make sure that the tundish is free.
A6 Pressure too low	Flushing has not been started because the required operating pressure is too low.	Please check the installation. Flushing will be resumed when the operating pressure is rea- ched.
A7 Change of batteries	Batteries are spent	Please replace the batteries.
A8 Stagnation flush time exceeded	The flush time of the stagnation flushing has been exceeded.	Open a water tapping point and check whether turbine pul- ses are displayed on the LED. Please contact the SYR service.
A9 Flush time interval exceeded	The flush time of the interval flushing has been exceeded	Open a water tapping point and check whether turbine pul- ses are displayed on the LED. Please contact the SYR service.
A20 No. of flushes exceeded	The maximum number of temperature flushings within 24 hours has been exceeded.	Increase the number of flushings or check the installation.

13. Technical specifications

	Unit		
Battery		4 x LR6 AA	((
Standard wireless protocol		WiFi 2,4GHz WPA/WPA2	
Operating pressure	bar	1 - 10	
Ambient temperature	°C	10 - 60	_ \
Operating temperature	°C	10 - 60 (approved for thermal disinfection 80°C)	

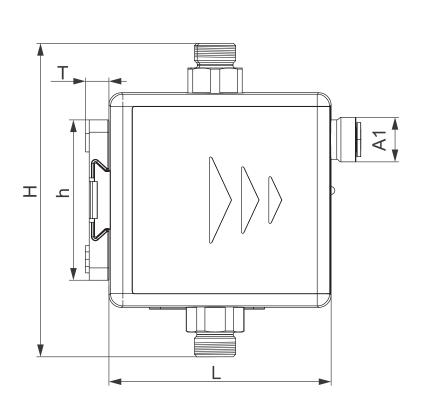
Flow rate	
Δp 1,0 bar	2,0 m³/h

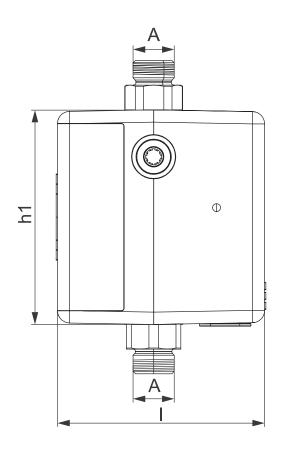
Flushing velocity		
	2,0 l/min.	

Mains adapter (accessory)	Unit	
Input voltage	V (AC)	110 - 230
Mains frequency	Hz	50
Output voltage	V (DC)	12
Current	А	2
Protection class		II



14. Dimensions





A	G ¾''
A1	John-Guest connection 8 mm
Н	127 mm
h	65 mm
h1	87 mm
L	90 mm
1	82,5 mm
Т	9,5 mm

15. Check list for commissioning

Date of assembly:			
Name of technician:			
Flush settings:			
Temperature:			
Time:			
Volume:			
Cyclic flushing?	Yes 🗌	No 🗌	
Name of wireless network			
Address of wireless network			

16. Pipe water content

Copper pipes	Content per m (Liter) approx.
15 mm	0,13
18 mm	0,20
22 mm	0,31
28 mm	0,49
35 mm	0,80
42 mm	1,198
54 mm	1,96
Multilayer composite pipes	Content per m (liters) approx.
16 mm	O,11
20 mm	0,18
26 mm	0,31
32 mm	0,53
40 mm	0,86
50 mm	1,32



Smart and safe - SYR CONNECT Drinking Water Installations

SYR CONNECT sees to safe domestic installations in a smart way. You can monitor and control your valves and fittings in the areas of leakage protection, water conditioning, hygiene control and heating system monitoring using the SYR App via smartphone and tablet or on your PC via the browser. They can even be connected and centrally controlled thanks to "internet-supported swarm intelligence" (ISI).



Any questions on internet control, software and the SYR APP:

SYR Hotline +49 2161 6105-0

