



## Field of application

The backflow preventer STBA 6625 is designed to protect potable water against non-potable water up to and including fluid category 4 according to EN 1717. As determined in the national annex of EN 1717 dealing with the selection of safety devices, the use of backflow preventers is compulsory for various applications such as printing, chemical and food industry or laboratory and medical technology.

## Design

All STBA's are equipped with an integrated strainer, a BA backflow preventer according to EN 1717 up to and including fluid category 4, three connections for ball valves to connect differential pressure gauges, threaded unions and a tundish.  
The heating filling station with backflow preventer STBA 200 is suited for the connection to a draw-off valve.  
The leakage valve with nozzle and backflow preventer STBA 400 is suited for the replacement of a usual DN 15 draw-off valve.  
The heating filling station with backflow preventer STBA 600 has a pressure reducing valve and a pressure gauge and can be used as a filling valve for heating systems.

### Materials

- Body made of hot-pressed brass
- Cartridge insert made of high quality synthetic material
- Check valve made of high quality synthetic material
- Sealing elements made of NBR and EPDM
- Internal parts made of high quality synthetic material / brass
- Tundish made of high quality material

## Technical specifications

Fluid:	potable water
Nominal size:	Type 100, 200: DN 10 Type 400, 600: DN 15
Upstream pressure:	max. 10 bar
Min. inlet pressure:	1.5 bar
Mounting position (200/400):	horizontal, tundish facing downwards
(100/600):	any, if tundish faces downwards.
Service temperature:	max. 65°C (Inlet), except STBA600 which have max 30°C inlet max. 65°C (Outlet)
Ambient temperature:	5°C - 40°C
Drain pipe connection:	DN 40
Flow rate:	STBA 100: 1.8 m³/h, Δp 1.5 bar STBA 200: 1.27 m³/h, Δp 1.5 bar STBA 400: 1.27 m³/h, Δp 1.5 bar STBA 600: 1.27 m³/h, Δp 1,5 bar

## Function

The BA backflow preventer (Reduced Pressure Zone Valve) from SYR includes all components set by EN 1717 and is designed as 3 pressure-zone-system with a controllable upstream, intermediate and downstream pressure zone. Each pressure zone is equipped with connections for ball valves allowing to check each zone and to ensure the leaktightness of the safety devices by pressure measurement. The BA backflow preventer is equipped with 2 consecutive check valves with an intermediate pressure zone in between, which can be vented to the atmosphere. When no water is drawn off, the check valves on either side and the drain valve are closed. In case of back-siphonage, the inlet pressure drops. The drain valve opens at the latest, when the differential pressure between the upstream and intermediate zone decreases to 0.14 bar.

### NOTE

All backflow preventers BA have to be installed in a frost-free area!

Do not expose to ambient temperatures below 5°C !

### WARNING

Only qualified installers are authorized to install and service the device. Follow the maintenance instructions! The warranty does not cover malfunctions caused by dirt.

Hans Sasserath  
Korschenbroich

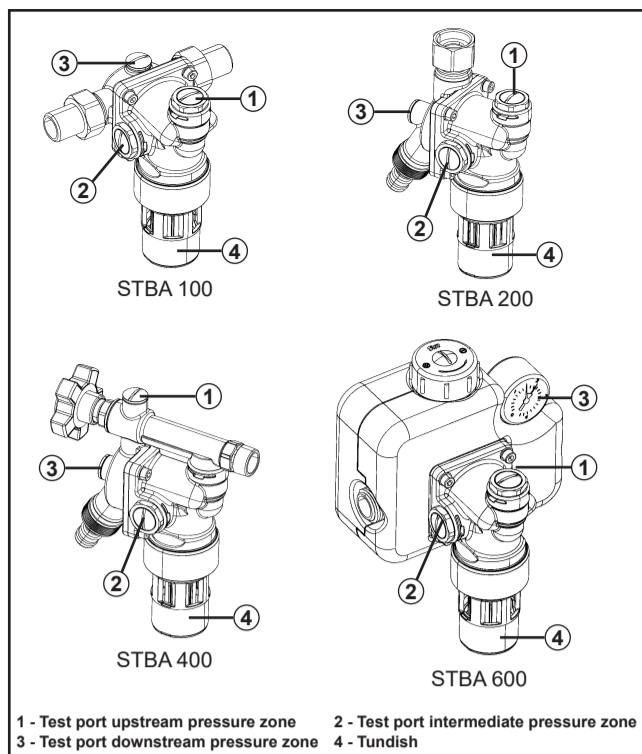
STBA  
100/200

P-IX 7610/I  
MPA NRW

Hans Sasserath  
Korschenbroich

STBA  
400

PA-IX 16725/I  
MPA NRW



1 - Test port upstream pressure zone 2 - Test port intermediate pressure zone  
3 - Test port downstream pressure zone 4 - Tundish

## Installation

Thoroughly flush the pipe prior to installation. **Service valves shall be provided either side of the backflow preventer (type 100 / 600).** Mount the device in the pipe with the drain valve facing downwards and **observe the direction of flow indicated by an arrow on the body** to ensure a perfect operation of the tundish. Free access to the backflow preventer shall be provided to facilitate maintenance works and inspections. Do not install the device in locations liable to frost and flooding. It should only be mounted in a well-ventilated environment. The drain pipe's diameter shall be able to accommodate the maximum discharge volume.

We recommend to install a potable water filter according to EN 13443, part 1 upstream of the backflow preventer in order to ensure its perfect and durable operation. Once installed, vent the device by means of the 3 ports. Then, the backflow preventer is ready for operation.

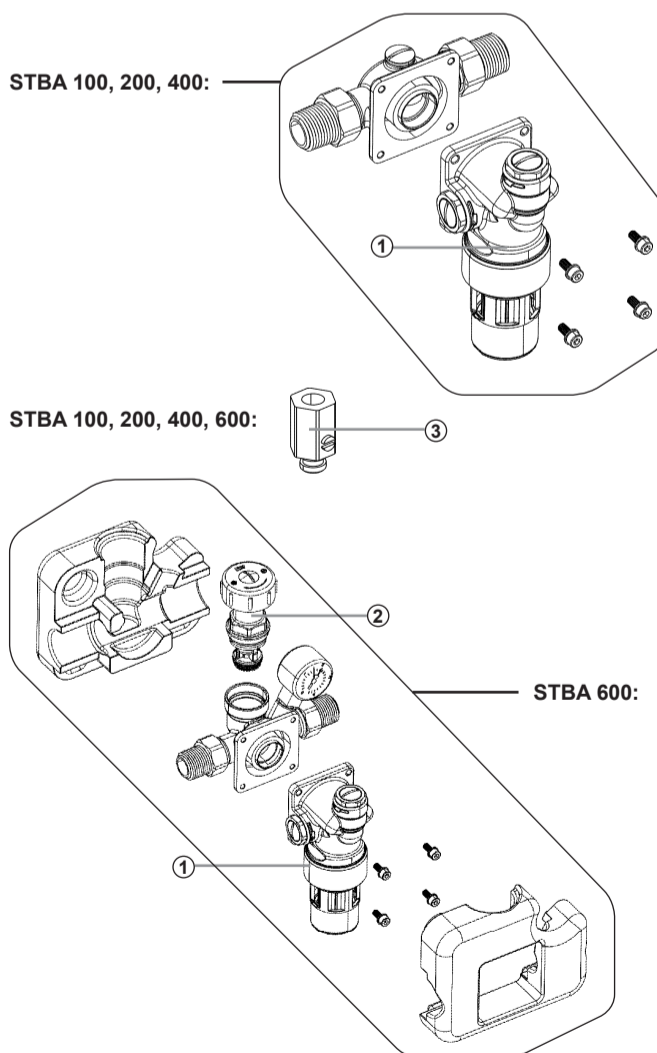
After installation of STBA 200 the inlet screw connection can be fitted with a ½" clamp to seal.

When connecting the tundish to the sewer, comply with the requirements set in the standard EN 12056.

## Maintenance

It is compulsory to service the BA backflow preventer on a regular basis. Therefore maintenance agreements between user and installer are very useful. The correct function of the backflow preventer has to be verified every 6 months as described in EN 806-part 5, the pressure reducing valve after a year and then periodically in accordance with

## Spare parts



- |                                 |             |
|---------------------------------|-------------|
| ① Backflow preventer cartridge: | 6625.15.900 |
| ② Pressure reducer cartridge    | 6625.15.901 |
| ③ Ball valves DN 6 (3 units):   | 6625.15.902 |
| Clamp to seal                   | 6600.00.972 |

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the operating conditions, but every year at the latest. The ball valve connection of each pressure zone allows to check the correct operation of the valve by means of the measuring device (accessories; service kit art. nr. 6600.00.902).

## Verification of the disconnection of the discharge valve and the secondary check valve

- To check the discharge valve, close both shut-off valves upstream (5) and downstream (6) of the backflow preventer.
- Remove the manometer plugs on the test ports 1 + 2.
- Mount the service ball valves 1 + 2.
- Open the service ball valves 1 + 2 to depressurize the device.
- Mount the measuring device's needle valves A and B on the service valves 1+2.
- Fit the measuring device.
- Open both shut-off valves 5 + 6.
- Vent the device by means of both needle valves and tap water. Close them again.
- Close the shut-off valves 5 + 6.
- Relieve the pressure slowly by means of the needle valve A.
- Watch the tundish. When the first drop comes out of the tundish, the diff. pressure shall exceed 140 mbar. If it is not case, dirt has accumulated in the device or there is a mechanical defect.
- Open the needle valve A and discharge the intermediate pressure zone until completely drained.
- STBA 200/400: Test is only possible, if hose nozzle and a hose is connected. To verify the secondary check valve (RV2), open the outlet shut-off valve (6). Should water drip from the tundish, there is probably a mechanical defect or dirt has accumulated in the secondary check valve.
- Close both service ball valves 1 + 2.
- Remove the measuring device and put the manometer plugs back in their position on the test ports.
- Open both shut-off valves (5 + 6).

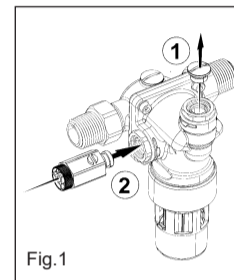


Fig. 1

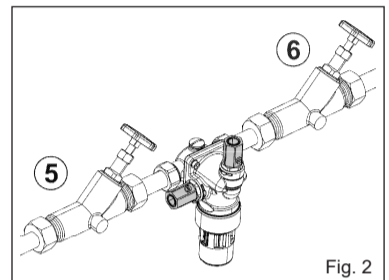


Fig. 2

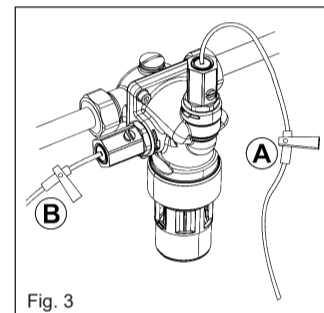


Fig. 3

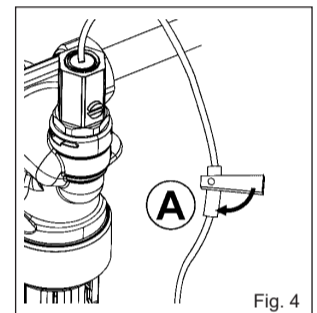
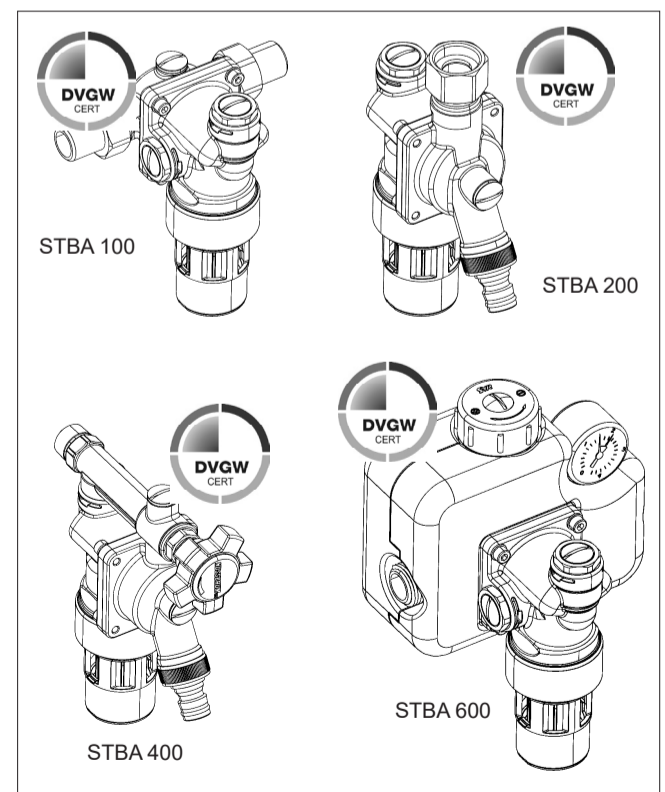


Fig. 4



## Instructions for use and installation



## Backflow Preventer STBA 6625