## Dimensions







1	Cartridge with mounting help:	6600.00.974
2	Tundish:	6600.00.903
3	Test screw connection:	6600.00.973
	Locking clamp, DN 20	6600.00.972
	Locking clamp, DN 25	6600.00.965



## Instruction for use



Nominal size		DN 15	DN 15
	А	G ¾"	G 1"
	A1	G 1"	G 1"
Dimension	L (mm)	81	81
	H (mm)	207	207
	D (mm)	40	40

# Backflow preventer 6600 BA 6600 ST DN 20 / 25

## for Standpipes

#### WARNING

Only qualified installers are authorized to mount and service the device. Follow the maintenance instructions! The warranty does not cover malfunctions caused by dirt. SYR - Hans Sasserath GmbH & Co. KG Mühlenstrasse 62 41352 Korschenbroich - GERMANY Tel.:+49 2161 6105-0 - Fax: +49 2161 6105-20 www.syr.de - info@syr.de

## Field of application

The Backflow Preventer BA 6600 ST is designed to protect potable water against non potable water up to and including fluid category 4 in compliance with EN 1717. The use is compulsary for

- for protection of standpipes
- for temporary water drawn off

## Desian

#### The BA Backflow Preventer BA ST is designed as follows:

- Casing
- Integral strainer, mesh width about 0.25 mm
- Cartridge with integral check valve and drain valve
- Check valve at the outlet
- 3 ball valves to connect a differential pressure gauge
- Threaded unions
- Drain connection

#### Werkstoffe

- Nickel-plated body
- Cartridge of high-quality synthetic material
- Check valve made of high-guality synthetic material
- Ball valves made of brass
- Sealing elements made of NBR and EPDM
- Internal parts of high-guality synthetic material / brass
- Drain connection of high guality synthetic material

### **Technical specifications**

- Nominal size: Medium: Upstream pressure: Min Inlet pressure: Mounting position: Service temperature: Drain pipe connection: Flow rate:
- DN 15 Trinkwasser max. 10 bar 1.5 bar Senkrecht mit Ablassventil nach unten max. 65 °C DN 40 1,8 m³/h at ∆p 1,5 bar

## **Function description**

The BA Backflow Preventer 6600 ST (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 ball valves allowing to check each zone and to ensure the leaktightness of the safety devices by pressure measurement. The BA Backflow Preventer 6600 ST 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.

- 2 (5)
- **(4**) Hose connection Upstream pressure zone (2)
  - Intermediate pressure zone (5) Tundish
- (3) Downstream pressure zone

## Installation

Thoroughly flush the pipe prior to installation. When using the model without shut-off valves, service valves shall be provided either side of the Backflow Preventer. Mount the device in the pipe with the drain valve facing downwards to ensure a perfect operation of the tundish. Free access to the Backflow Preventer shall be provided to facilitate maintenance works and the inspection. Do not install the device in locations liable to frost and flooding. It should only be mounted in a well-ventilated environment. Once installed, vent the device by means of the 3 ball valves.

After installing the Backflow Preventer the inlet screw connection has to be sealed with the locking clamps ( $G^{3/4}$  /  $G1^{\circ}$ ) included in delivery.

## Maintenance

#### The valve necessarily has to be depressurized before opening!

According to EN 1717, the Backflow Preventer has to be serviced on a regular basis. Therefore maintenance agreements between user and installer are very useful. The correct function has to be verified after the first service year and then periodically in accordance with the operating conditions, but every year at the latest. The ball valves in each pressure zone allow to check the correct operation of the valve by means of the pressure gauge (accessories; service kit art. no 6600.00.000). The Backflow Preventer is designed with a cartridge system, which makes the regular maintenance works simple and unproblematic.

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

- To check the discharge valve, close the inlet shut-off valve 4a.
- Remove the manometer plugs at the service valves 1+2 and mount the measurement device with the needle valves (service kit, art.no. 6600.00.000).
- Connect the measurement device with the needle valves.
- Open shut off valve 4a.
- Vent the device by means of both needle valves. Close them again.
- Close shut off valve 4a.
- Relieve the pressure slowly by means of the needle valve 1.
- Watch the tundish. When the first drop comes out of the tundish, the diff. pressure shall exceed 140 mbar. If it is not the case, dirt has accumulated in the device or there is a mechanical defect.
- Open the needle valve 1 and discharge the intermediate pressure zone until completely drained.
- To verify the secondary check valve (RV2) close the inlet shut-off valve 4a, depressurize the valve and remove possible installed unitsand mount the outlet shut off valve (4b).
- Open shut off valve 4a.
- Vent the device by means of the outlet shut off valve 4b.
- Close shut off valve 4a and remove manometer plugs 1+2. DWater couls drip off the manometer plugs 1+2 and the tundish.
- No more water should drip off. Should water drip from the tundish, there is probably a mechanical defect or dirt has accumulated in the secondary check valve.



(1) Manometer plug 1 ③ pressure gauge inlet pressure zone (4a) inlet shut off valve (4b) outlet shut off valve 2 Manometer plug 2 (5) drain valve intermed. press. zone