

Field of application

The BA-Filling-Combi type 6628 automatically fills and refills central heating installations. The integral BA backflow preventer complying with the European Standard EN 1717 prevents the backflow of heating water into the potable water pipe. The device is permanently connected to the heating installation as stipulated by EN 1717. The integral pressure reducing valve ensures correct and constant pressure in the installation. The BA-Filling-Combi 6628 is particularly suited for compact connection to the SYR Heating-Filter-Combi type 3315.

Design

The BA-Filling-Combi includes an isolating valve, a BA backflow preventer according to EN 1717, a tundish, test devices, a pressure reducing valve, a strainer and a pressure gauge. Setting range of the pressure reducing valve: between 0.5 and 4 bar. Threaded unions on both sides. Body made of DZR brass. Internal parts and tundish made of high quality synthetic material and NBR.

Specifications

Connection size:	3/4" IG
Nominal size:	DN 15
Fluid:	potable water
Max. operating pressure:	10 bar
Min. inlet pressure:	1.5 bar
Outlet pressure:	0.5 - 4 bar
Factory setting:	1.5 bar
Mounting position:	horizontal, tundish facing downwards
Max. inlet temperature:	30°C
Max. outlet temperature:	60°C
Tundish connection:	DN 40
Filling capacity:	V _{max} 1.35 m ³ /h, Δp 1.5 bar

Function

The SYR BA-Filling -Combi includes all components required for direct connection of the potable water pipe to the heating circuit, as stipulated by EN 1717. The integral pressure reducing valve ensures that the adjusted outlet pressure remains constant in order to protect the heating

installation against undesired overpressure during the filling operation. When the system is filled and vented, close the integral isolating valve to prevent uncontrolled re-filling of the heating installation.

Installation

The connecting pipe of the SYR BA-Filling-Combi shall not allow any stagnation. Thoroughly flush the pipe prior to installation of the SYR BA-Filling-Combi. Install the device in the pipe with the tundish facing downwards to allow correct drainage of the water. Free access to the device should be provided to simplify maintenance and inspection. It shall not be installed in locations liable to frost or flooding; ensure that the location is well ventilated. The drain device must be able to collect the drained volume. It is recommended to install a drinking water filter directly behind the water meter in order to ensure durable and perfect functionality of the valve. Observe the maintenance intervals of the BA-Filling-Combi. Follow the instructions of the European Standard EN 12056 for the connection of the tundish to the sewage system.

Maintenance of backflow preventer

As EN 1717 prescribes maintenance works on the BA backflow preventer on a regular basis, it is recommended to have service agreements between user and installer. The correct function of the valve has to be verified after one year and then periodically according to the operating conditions, but after one year at the latest. The connections for service valves available in each pressure zone allow to test the function of the valve with the corresponding pressure gauge (accessories; service kit art. number 6600.00.902). The cartridge system of the backflow preventer allows simple and unproblematic maintenance.

Setting of pressure reducing valve

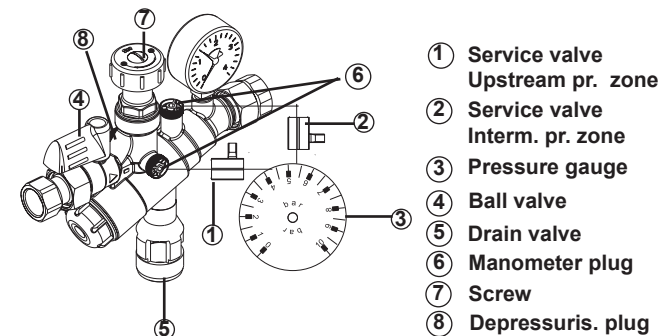
The pressure reducing valve of the BA-Filling-Combi is factory set to 1.5 bar. Verify functionality and clean on a regular basis, at least once per year. Adjust the pressure reducing valve as follows:

- ensure that the inlet pressure is at least 1 bar higher than the desired outlet pressure.
- loosen the screw (7).

- turn the adjustment knob in the direction of the minus symbol (-)
- relieve pressure from the pressure reducing valve for a short while.
- turn the adjustment knob in the direction of the plus symbol (+) and watch the outlet pressure manometer.
- Re-tighten the screw (7) when the desired pressure value is reached.

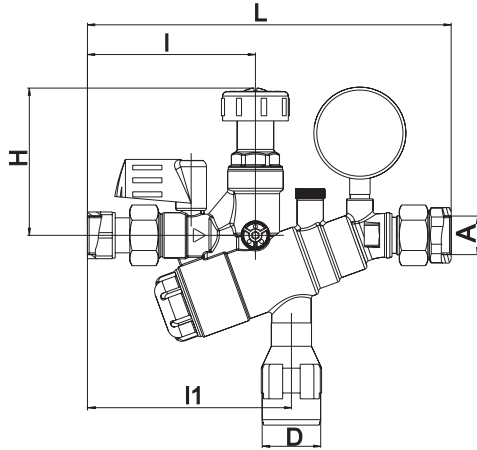
Maintenance

- To verify the primary check valve, depressurise the valve and replace the manometer plugs (6) with service valves.
- Connect the pressure gauge to the service valves.
- Open the service valves, pressurise the valve and close the ball valve (4).
- Reduce the inlet pressure by means of the depressurisation plug (8). The differential pressure drops, so that the intermediate pressure zone starts to open. The intermediate pressure zone must be fully open at the latest when the differential pressure between upstream and intermediate pressure zone has dropped to 140 mbar.
- Close the depressurisation plug (8).
- Open the ball valve. The intermediate pressure zone has to close. The differential pressure between upstream and intermediate pressure zone has to remain constant. Malfunction can result from impurities or mechanical defects.
- Remove the pressure gauge, assemble the manometer plug (6) and open the ball valve (4).



Clean the function parts only with clear cold water without adding detergents or descalers.

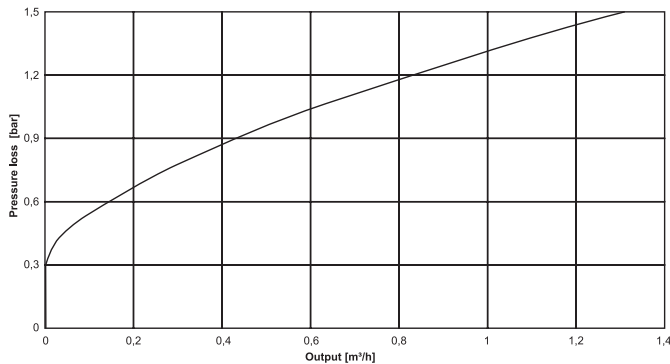
Dimensions



Dimensions

A	G ¾
D (mm)	40
I (mm)	249
H (mm)	101
I1 (mm)	140
l (mm)	115

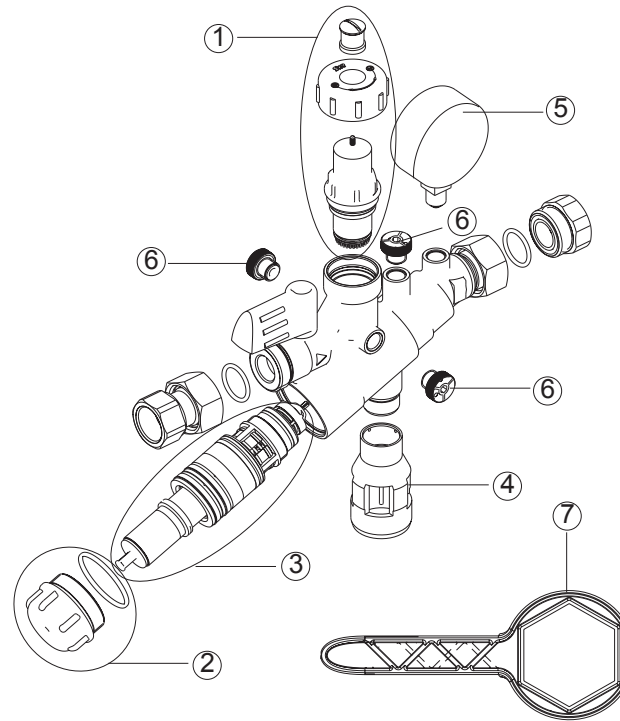
Outputdiagram BA FillingCombi 6628



WARNING

The installation and maintenance of this valve must only be carried out by certified personnel who have been fully trained in accordance with the requirements for installation and maintenance of Type BA – Verifiable Backflow Preventer with Reduced Pressure Zone (RPZ) Valves as directed by the WRAS Information and Guidance Note Number 9-03-02. No warranty in cases of malfunction of the device due to accumulated impurities.

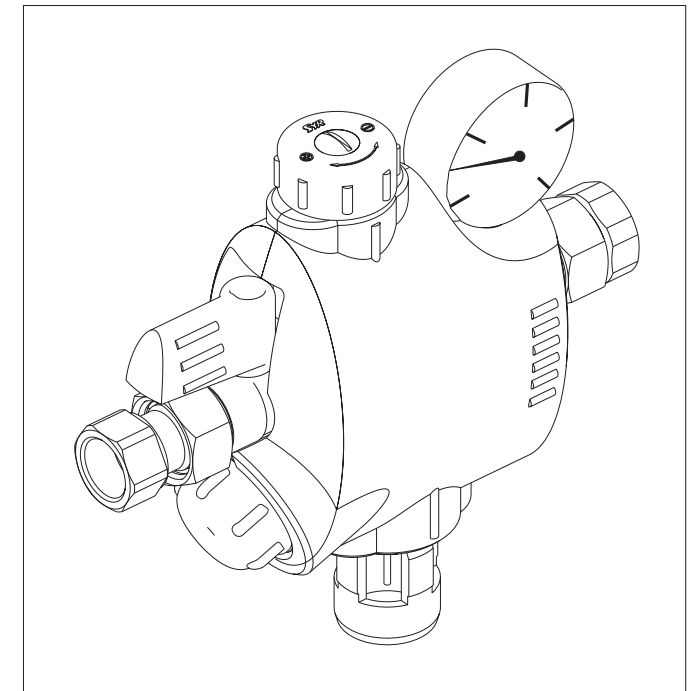
Spare parts



- | | |
|--------------------------------|-------------|
| ① Pressure reducer cartridge | 6628.00.900 |
| ② Cap | 6600.00.907 |
| ③ BA-Filling-Combi cartridge | 6628.00.907 |
| ④ Tundish | 6628.00.905 |
| ⑤ Manometer | 6628.00.901 |
| ⑥ Manometer plug | 0828.08.000 |
| ⑦ Service key for BA-Cartridge | 6600.00.908 |



Instructions for use and installation



SYR BA-Filling-Combi 6628