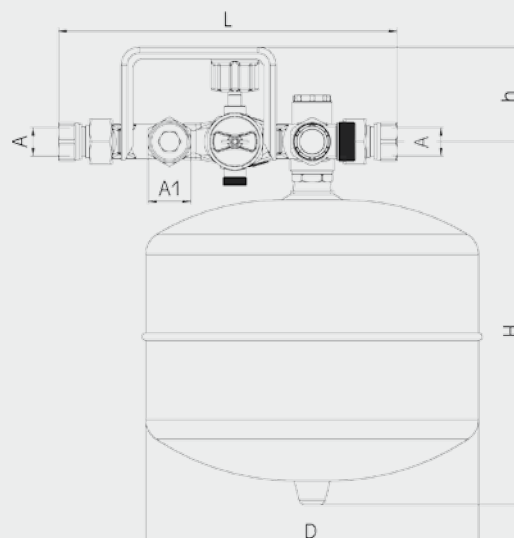


BOILER SAFETY CENTRE



DVGW Certified



Nominal size	– A A1	DN 20 G 3/4" G 1"
Unit dimensions	L (mm) h (mm) H (mm) D (mm)	285 80-90 (adjustable) 305 (12 litre MAG), 385 (18 litre MAG) 280

Boiler safety centre

The boiler safety centre protects closed drinking water heaters (TWE) to max. 560 l volume, in compliance with DIN 1988, part 2; DIN 4753, part 1; DIN 4807, part 5 and DIN EN 1488. In compliance with DIN 1988 and DIN EN 1488 it contains the components that are required to be fitted to the input side of drinking water heaters. This equipment includes a flow unit with integrated maintenance shut-off, as well as a compact flow-through membrane expansion tank (MAG) with a nominal volume of 12 l or 18 l, in compact form.

Specifications

Type	BSC-12l	BSC-18l
Item no.	1610488	1610489
Membrane expansion tank (MAG)	12 litres	18 litres
Pressure relief valve response pressure	6 bar	10 bar
Max. drinking water heater volume	200 l	560 l
Dimension	DN20	
Connection	G 3/4"	
Inlet pressure	10 bar in compliance with DIN EN 1488	
Operating pressure	Max. 80% of the pressure relief valve response pressure	
Operating temperature	Max. inlet temperature 30 °C	
Response pressure	6, 10 bar through enclosed cartridges	
Component test no.	TÜV-SV-05-545-DN-W-p	
Installation position	Any	
Flow rate	1.9 m ³ /h at 0.2 bar Δp / 4.5 m ³ /h at 1.0 bar Δp	
ABP-No.	PA-IX 7728/I	
DVGW-No.	NW-6160AT2654	

TANK ACCESSORIES

BOILER SAFETY CENTRE

Design

The safety centre contains a connection for an additional cold water application, a double shut-off valve with integrated test capability for the return flow inhibitor, a return flow inhibitor, a pressure relief valve with stainless steel seat and drain funnel, a flow unit with integrated maintenance shut-off valve for the membrane expansion tank as well as a mounting plate with spacer fitting. The special design of the group makes installation possible with an angle type or straight through type configuration, in horizontal or vertical pipes. The diaphragm safety valve adapts to different installation conditions and can be turned through 360°. The mounting plate is designed for safe and rapid installation. The safety centre is tested for sound insulation and meets the requirements of sound insulation class 1.

Materials

The housing is made from low lead content, red brass alloy which is resistant to loss of zinc plating. All wearing parts are made from stainless steel and all pressure bearing plastic parts are made from glass reinforced plastic. Membranes and sealing rings are made from heat and ageing resistant plastics with rubber-elastic properties and the springs are wound from corrosion protected spring steel wire and/or rustproof steel. The membrane expansion tank is constructed from coated steel and the membrane of the tank from Nitril rubber NBR. All plastic parts which come into contact with the drinking water meet the German plastics and drinking water (KTW) recommendations of the German Public Health Department.

Installation

The installation can be carried out either in proximity to the drinking water heaters or in the area where services enter the house. The water supply connection to the building must be fitted with a filter and a pressure reducer. The output pressure adjusted here must not exceed 80% of the response pressure on the pressure relief valve. For wall-mounted installations, the mounting plate provides the required gaps to the wall for the membrane expansion tank as well as the complicated attachment of the membrane expansion tank with the console and mountings. The various installation types make all flow directions possible.

Installation

Before assembly, the piping should be carefully flushed. After this the unit should be installed tension-free. A distance of 80 mm to the wall is achieved using the mounting plate supplied. A spacer fitting can be used to adjust this distance between 80 and 95 mm. The drain funnel of the pressure relief valve has a length spacer which can be extended to 20 mm. In place of this funnel, and in order to extend it, it is possible to use a drain line of (22 mm) copper tube.

Maintenance

The forward gas pressure in the membrane expansion tank must be set 0.2 bar below the static pressure of the installation. To ensure the enduring operation of the safety centre, regular maintenance of the unit's components is required (see DIN 1988, Part 8). Yearly inspection should be performed on the forward pressure of the membrane expansion tank and on the operation of the return flow inhibitor. The pressure relief valve can be cracked open by the turning handle. The sensible construction of the unit allows problem free maintenance or repair of all the individual components.

Components

1) Exchangeable upper part

6 bar
10 bar

2) Niro seat

3) Membrane safety valve, complete

4) Pressure gauge plug

5) Double shut-off valve

6) Assembly spanner for exchanging upper part

Max. torque 15Nm

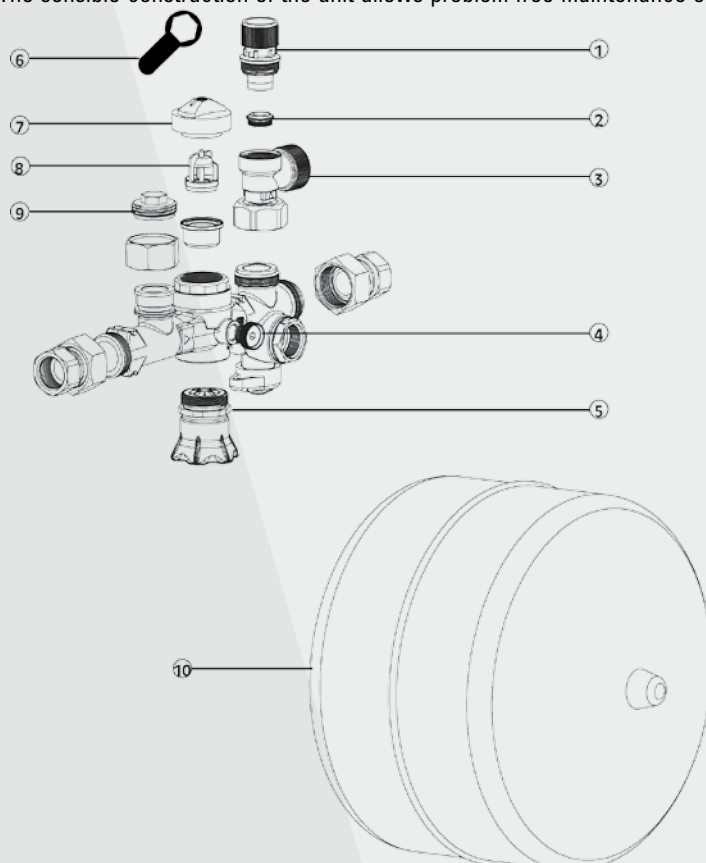
7) Maintenance cap

8) Return flow inhibitor

9) Plug

10) Membrane expansion tank

12 litres
18 litres



Not illustrated: Drain funnel to the pressure relief valve