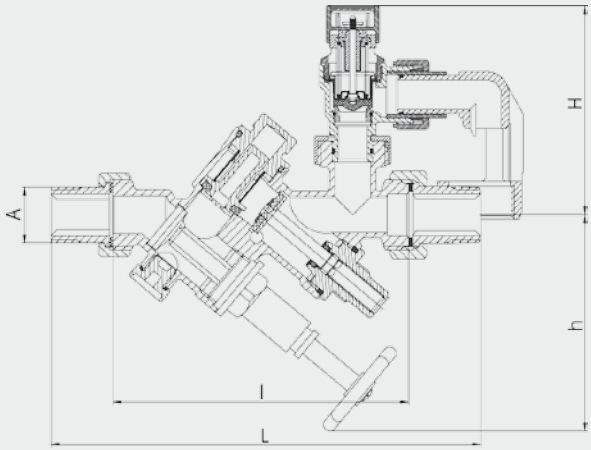
TANK ACCESSORIES

BOILER SAFETY GROUP

DVGW Certified



DN 20

Nominal size		DN 20
		G 3/4"
	A	3/4"
Unit dimensions	L (mm)	205
	l (mm)	140
	H (mm)	100
	h (mm)	115
Max. nominal volume of the drinking water heater (TWE)	(l)	1000
TWE heating power	(Kw)	max. 150

Boiler safety group

Safety Group 24 serves to provide optimum protection against pressure excesses in closed drinking water heaters (TWE), in compliance with DIN 1988, part 2; DIN 4753, part 1 and DIN EN 1488. It meets noise protection standards in compliance with DIN 4109 (noise protection in high-rise construction) class 1 and contains, in compact form, all the components that must be fitted to drinking water heaters as stipulated by DIN 1988 and DIN EN 1488. The pressure relief valve protects the downstream drinking water heater and the return flow inhibitor prevents the heated drinking water from flowing back.

Specifications

Type	**BSG 3/4 "**
Item no.	**1610487**
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	Factory-set 6 bar
Component test no.	TÜV-SV-05-545-DN-W-p
Installation position	Any
Flow rate	4.0 m3/h at Δp 1.0 bar
ABP-No.	PA-IX 1794/I
DVGW-No.	DVGW NW-6311AP2713
Pressure relief valve response pressure	6 bar

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Design
The safety group consists of a shut-off valve and a return flow inhibitor with testing device (2. shut-off valves with DN 20), pressure gauge connection and diaphragm safety valve as well as drain funnel with pipe interrupter, which prevents siphoning back of the draining water. The easily exchangeable diaphragm safety valve, with wear-resistant stainless steel seat adapts to different installation conditions thanks to a threaded connection that can be turned by 360 degrees.

Materials
All materials used for the safety group, meet the high requirements of DIN 1988. Plastics and elastomers coming into contact with water conform to the German plastics and drinking water (KTW) recommendations of the German Public Health Department. In particular, all materials are corrosion resistant. Housings, internal components and screw connections are manufactured from high-quality, low-lead brass alloy. The sprung caps of the pressure relief valves are made from glass reinforced plastic, the springs of the pressure relief valves are made from spring steel wire and the return flow inhibitors from stainless steel.

Installation
The response pressure of the pressure relief valve may not exceed the permissible operating pressure of the drinking water heater. The dimensions of the safety group depend on the volume and heating power of the drinking water heaters. The safety group is engaged if the supply pressure does not exceed 80% of the response pressure on the pressure relief valve.

Installation
The safety group must always be installed, tension-free, upstream of the drinking water heater, paying attention to the flow direction, in the cold water inlet line which has been well flushed beforehand. The special design of the group makes installation possible with an angle type or straight through type configuration, in horizontal or vertical pipes. The installation is carried out so that no shut-off valves, filters or narrowing of the pipe are located between the pressure relief valve and the drinking water heater. The fitting should be easily accessible for maintenance and service work. Therefore, the safety group should be arranged above the drinking water heater. This location facilitates straightforward exchange of the pressure relief valves without the necessity of first emptying the drinking water heaters. Should this not be possible, due to the particular installation conditions, then the soldered fittings set (accessories) enables an extension of the connecting pipe to the pressure relief valve.

Maintenance
To achieve a long operating life for the safety group it is advisable to carry out regular maintenance work in accordance with DIN 1988, part 8. The seat and seals on the pressure relief valves can be cleaned without altering the pressure. Exchange of the stainless steel seats is equally problem free. The nominal size DN 20 allows replacement of the return flow inhibitors without emptying the drinking water heaters. The component-tested, exchangeable pressure relief valve makes replacement possible without dismantling the complete fitting.

Components

1) Integrated pressure relief valve
6 bar

2) Pressure gauge plug

3) 1st shut-off valve

4) 2nd shut-off valve

5) Funnel

6) Return flow inhibitor

7) Assembly spanner for exchanging upper part
Max. torque 15 Nm