



Braukmann SG162D

Safety group with pressure reducing valve
for pressurised hot water storage units up to 200 litres

APPLICATION

Safety groups of this type are controls to DIN 4753-1 and EN 806-2/DIN 1988-200 for the protection of pressurised hot water storage units with capacities up to 200 litres.

They are composite assemblies which integrate in one unit all necessary safety components, including check valve, shut-off valve, test point and diaphragm-type safety valve.

The safety valve protects the downstream cylinder, pressure vessel etc. by automatically opening when excess pressure occurs. The check valve prevents back pressure, backflow and back syphonage of water from the hot water unit.

In addition, a balanced-seat pressure reducing valve is fitted on the inlet and this reduces the pressure from the inlet supply to the pressure required for the system. It also prevents uncontrolled dripping from the safety valve when the inlet pressure fluctuates.

APPROVALS

- DIN/DVGW approved checkvalve

SPECIAL FEATURES

- Meets UBA regulations for drinking water
- Pressure reducing valve with inlet pressure balancing - inlet pressure fluctuation does not influence the outlet pressure
- Can be fitted on the left or right
- Housing and connection pipes are chrome-plated
- Can be retrofitted with a pressure reducing valve
- Easy venting




TECHNICAL DATA

For closed hot water storage units up to 200 litres according to DIN 4753-1 and EN 806-2/DIN 1988-200.

Media	
Medium:	Water
Connections/Sizes	
Connection size:	1/2"
Pressure values	
Max. inlet pressure:	16 bar
Outlet pressure:	4 bar
Opening pressure:	6.0, 8.0 or 10 bar*
Operating pressure:	Maximum at least below 20 % opening pressure of safety
Operating temperatures	
Max. operating temperature medium:	70 °C
Specifications	
Clearance from wall:	70 and 100 mm
Installation position:	Horizontal and vertical

* Subsequent alteration of the setting is not permitted and is impossible without destroying the security cap

CONSTRUCTION

Overview	Components	Materials
	1 Connection pipework	Chrome-plated hot-pressed brass
	2 Approved safety valve	Chrome-plated hot-pressed brass
	3 Test plug for check valve	High-quality synthetic material
	4 Shut-off valve	High-quality synthetic material
	5 Tundish	High-quality synthetic material
Not depicted components:		
	Check valve	High-quality synthetic material

METHOD OF OPERATION

Safety groups of this type combine pressure reducing valve, check valve, shut-off valve, test point and diaphragm type safety valves in one appliance.

The integral pressure reducing valve operates by means of a force equalising system. The force of a diaphragm operates against the force of an adjustment spring. The inlet pressure does not influence either opening or closing of the valve. Inlet pressure fluctuations do not therefore influence the outlet pressure, thus providing inlet pressure compensation. The check valve has a moving valve disc and flow pushes this open against the force of a spring.

The downstream safety valve is a direct operating safety valve. That is, the opening force operates against the force of a spring.

TRANSPORTATION AND STORAGE

Keep parts in their original packaging and unpack them shortly before use.

The following parameters apply during transportation and storage:

Parameter	Value
Environment:	clean, dry and dust free
Min. ambient temperature:	5 °C
Max. ambient temperature:	55 °C
Min. ambient relative humidity:	25 % *
Max. ambient relative humidity:	85 % *

*non condensing

INSTALLATION GUIDELINES

Setup requirements

- Safety group must be fitted in the cold water supply to the hot water storage unit
- The installation must be carried out so that:
 - There are no shut-off valves or fittings, narrowing of the pipework or strainers between the water heater and the safety valve
 - Good access is provided for service and maintenance
- For safety reasons, during heat up water may emit from the discharge pipework. Do not close!
- It is important that no attempt be made seal off the pipework to stop this discharge!
- If there is no drainage facility in the room where the heater is installed, then the safety valve may be fitted in an adjacent area. DIN 1988-200 is to be observed
- Requires regular maintenance in accordance with EN 806-5

Installation Example

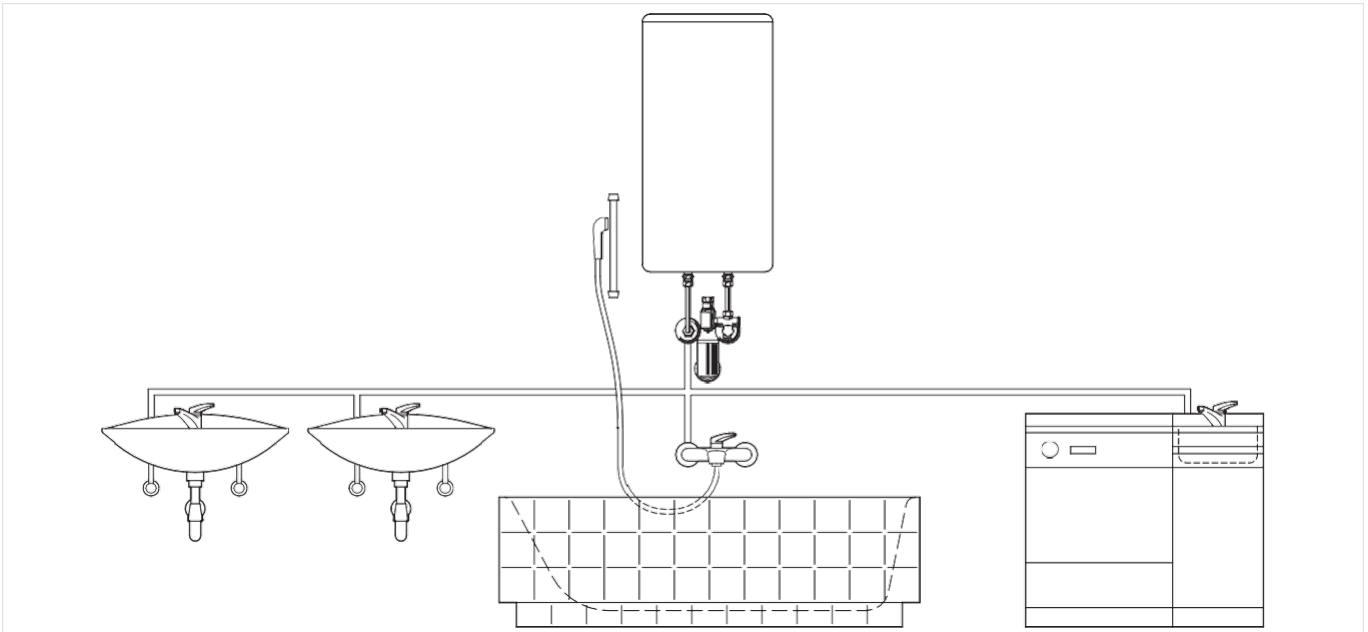
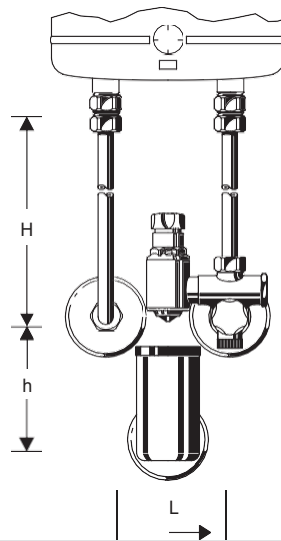


Fig. 1 Standard installation example for the safety group

DIMENSIONS

Overview



Parameter		Values
Connection size:	R	1/2"
Nominal size:		DN 15
Dimensions:	mm	
	L	100
	H	100
	h	100

ORDERING INFORMATION

The following tables contain all the information you need to make an order of an item of your choice. When ordering, please always state the type, the ordering or the part number.

Options

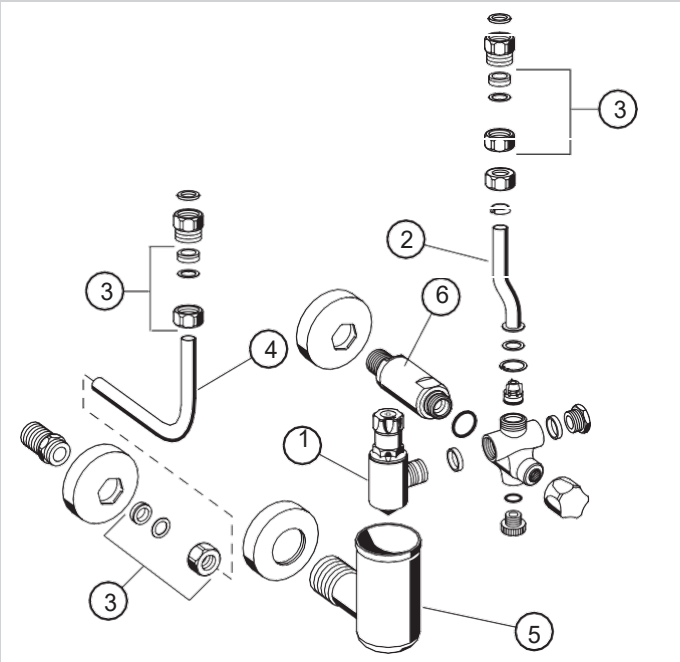
The valve is available in the following sizes: 1/2"

- standard
- not available

		SG162D-1/2A	SG162D-1/2C
Opening pressure:	6 bar	•	–
	10 bar	–	•

Spare Parts

Safety Group SG162D, from 1998 onwards

Overview	Description	Dimension	Part No.
	1 Safety valve exchange		
	6 bar	1/2"	A162-BA
	10 bar	1/2"	A162-BC
	2 Flanged offset angled tube		
		1/2"	2596600
	3 Connection set complete		
	1/2"	0900625	
4 Angle tube O			
	1/2"	2597200	
5 Tundish			
	1/2"	0901768	
6 Pressure reducing valve			
	1/2"	D162-1/2A	