

SYRobloc-Safety Group 25

for water heaters, with pressure reducing valve and wear-resistant stainless steel seat



Field of application

The SYRobloc-Safety Group type 25 optimally protects pressurised (unvented) water heaters against excess pressure according to international standards. It also fulfils the highest European acoustic requirements. It includes all necessary components in a compact form. The pressure relief valve

protects the water heater located downstream; the check valve prevents the back-flow of heated drinking water. In addition, a pressure reducing valve located upstream regulates the required system pressure.

Design

The SYRobloc Safety Group type 25 is composed of a pressure reducing valve, a shut-off valve, a check valve with a test port (DN 20 supplied with 2nd shut-off valve), a manometer connection, a diaphragm pressure relief valve as well as a drain tundish with a pipe interrupter that pre-

vents back-siphonnage of drain water. The diaphragm pressure relief valve with a wear-resistant stainless steel seat is very simple to exchange; a screw connection allows to rotate it by 360° in order to adapt to various installation conditions.

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Materials

All materials used for the SYRobloc-Safety Group type 25 fulfil the highest requirements of international standards. All synthetic components getting in contact with water are approved by the German Public Health Office (KTW). The corrosion resistance in particular is guaranteed for all materials. The body, internal parts and unions are made of high-quality low-lead brass alloy. The spring cap of the pressure relief valve

is made of glass fibre reinforced synthetic material; the spring of the pressure relief valve is made of spring steel wire and the spring of the check valve of stainless steel. All rubber parts in the pressure reducing valve are made of ageing-resistant elastomers and the screw cap of glass fibre reinforced synthetic material. Reinforced diaphragm.

Installation

The opening pressure of the pressure relief valve shall not exceed the permissible operating pressure of the drinking water heater. The dimensioning of the safety group depends on the volume and heating

capacity of the water heater (ref. table). SYRobloc 25 is used when the supply pressure exceeds 80% of the opening pressure of the pressure relief valve. The pressure reducing valve reduces the inlet pressure.

Always install the SYRobloc-Safety Group upstream of the water heater under consideration of the direction of flow; it has to be fitted without applying stresses in the cold water pipe that has been thoroughly flushed beforehand. The particular design of the group allows to install it in angle or in-line way in horizontal and - provided the direction of flow runs upwards - also in vertical pipes. There shall be no shut-off valves, narrowings or strainers between the pressure relief valve and the water heater. Install the

safety group above the water heater to ensure that the group is readily accessible in order to facilitate servicing and maintenance works. When the safety group is installed as mentioned above, the pressure relief valve can be easily exchanged without having to drain the water heater beforehand. When particular installation conditions do not allow fitting the group that way, use the soldering connection set (accessories) to extend the connection pipe to the pressure relief valve.

Technical data

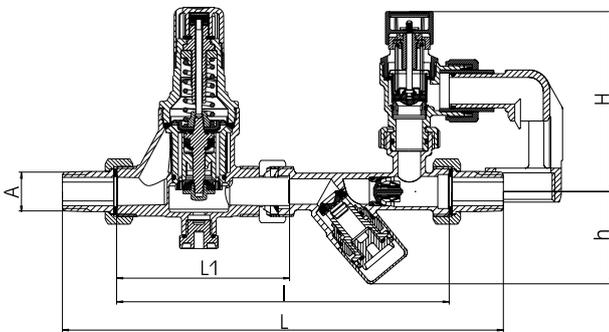
Inlet pressure (pressure reducing valve):	10 bar according EN 1488
Inlet pressure:	16 bar
Service temperature:	max. 30 °C inlet temperature
Fluid:	potable water
Opening pressure:	6, 8 or 10 bar
Mounting position:	any
ABP-Number:	P-IX 6736/I (PRV), PA-IX 1794/I
DVGW-Number:	NW-6330BR0050 (PRV); DVGW NW-6311AP2713 (SG)
Serial number:	0024...

Maintenance

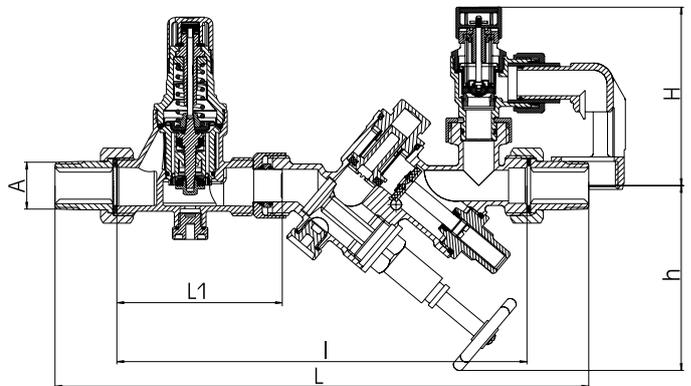
It is recommended for a durable function of the SYRobloc Safety Group to carry out maintenance works on a regular basis. The seat and sealing of the pressure relief valve can be cleaned without altering the pressure. The stainless steel seat is very simple to exchange. The nominal size DN 20 allows the exchange of the check valve without

having to drain the water heater. The exchangeable pressure relief valve 2115.1 can be replaced without having to disassemble the whole group from the pipe. The maintenance of the pressure reducer cartridge can be carried out when mounted and without special tools.

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DN 15



DN 20

Nominal size		DN 15		DN 20	
		R 1/2"		R 3/4"	
A		1/2"	3/4"	3/4"	1"
Dimensions in mm	L (mm)	232	247	290	310
	L1 (mm)	91		91	
	l (mm)	175		225	
	H (mm)	90		100	
	h (mm)	50		115	
max. potable water heater volume	(l)	200		1000	
Heating capacity	(Kw)	max. 75		max. 150	

Accessories

Manometer: Type 11
Soldering connection set:
DN 15: 0024.15.905
DN 20: 0024.20.906

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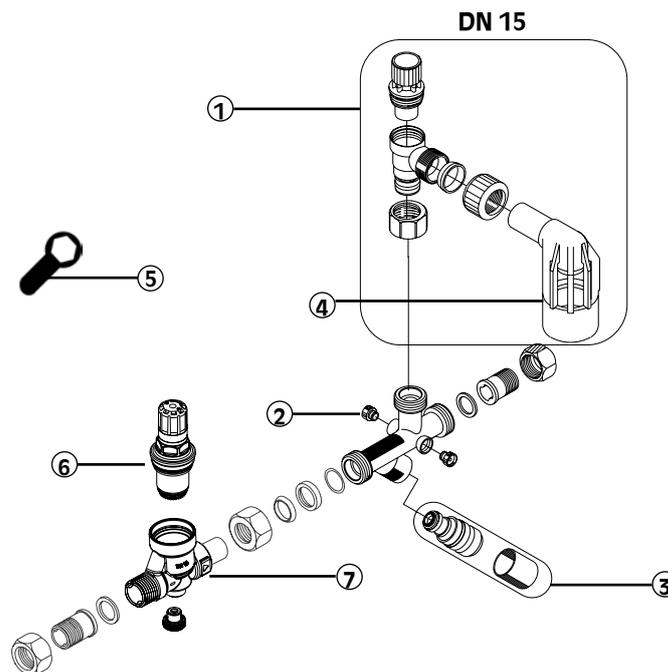
Components / Order numbers

- ① **Exchangeable pressure relief valve 2115.1**
2115.15.018 6 bar
2115.15.019 8 bar
2115.15.020 10 bar

- ② **Manometer plug**
0828.08.000

- ③ **Shut-off valve**
0024.15.900

- ④ **Tundish**
0214.00.902



- ⑤ **Assembly key for head part exchange**
4807.00.906
max. torque 15 Nm
- ⑥ **Pressure reducer cartridge**
0312.20-927
- ⑦ **Pressure reducing valve, complete**
0315.15.009

- ① **Exchangeable pressure relief valve 2115.1**
2115.20.015 6 bar
2115.20.016 8 bar
2115.20.017 10 bar

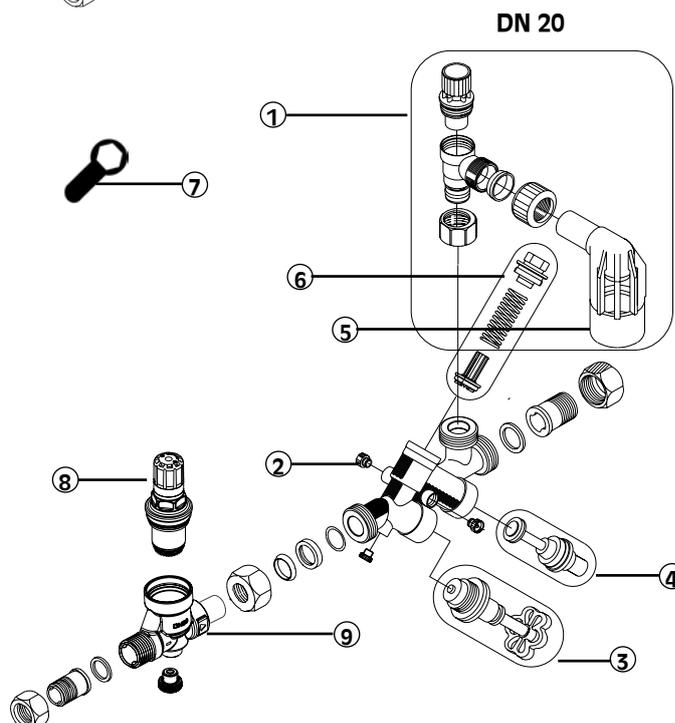
- ② **Manometer plug**
0828.08.000

- ③ **1st shut-off valve**
0024.20.903

- ④ **2nd shut-off valve**
0024.20.902

- ⑤ **Tundish**
0214.00.902

- ⑥ **Check valve**
0024.20.901



- ⑦ **Assembly key for head part exchange**
4807.00.906
max. torque 15 Nm
- ⑧ **Pressure reducer cartridge**
0312.20.927
- ⑨ **Pressure reducing valve, complete**
0315.20.005