# 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 backflow 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 prevents 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.



#### **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).

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 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.

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): Inlet pressure: Service temperature: Fluid: Opening pressure: Mounting position: Components approval number: ABP-Number: DVGW-Number: Serial number: 10 bar according EN 1488 16 bar max. 30 °C inlet temperature potable water 6, 8 or 10 bar any TÜV-SV-15-545-DN-W-p P-IX 6736/I (PRV), PA-IX 1794/I NW-6330BR0050 (PRV); DVGW NW-6311AP2713 (SG) 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.







DN 15

Nominal size		DN 15	DN 20
		R 1⁄2"	R ¾"
	А	1/2" 3/4"	<sup>3</sup> / <sub>4</sub> " 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	(I)	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 5

Components / Order numbers

 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
 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



DN 20

## 7 Assen

Assembly key for head part exchange 4807.00.906 max. torque 15 Nm

(8)

Pressure reducer cartridge 0312.20.927

9 Dro

4

3

Pressure reducing valve, complete 0315.20.005

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