HYDRAULIC SAFETY GROUP







The fruit of much work with plumbing contractors and manufacturers of electrical hot water storage heaters, the SFR will be of great interest to professionals and fully meet the most demanding expectations.

◆ SFR 3/4" STAINLESS STEEL for calcareous, hard and aggressive waters:

This top-of-the-range safety goup features a <u>stainless steel seat</u> to prevent corrosion from impairing the valve seal. SFR STAINLESS STEEL is recommended especially where water is aggressive, hard or even calcareous.







APPLICATION

The hydraulic safety groups are used in domestic water systems to protect hot water storage heaters.

They combine different components with the following functions:

• Safety function to prevent the pressure of the water in the storage heaters reaching dangerous levels.

ADVANTAGES

- 1. Fast filling rate of more than 4000 L/h under 1 bar.
- 2. Less head loss, greater convenience for users.
- 3. Valve knob designed for excellent grip.
- 4. New valve seat limits risk of leaks by efficient clearance of foreign matter.

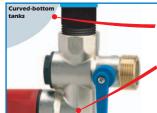
- Backflow prevention to prevent hot water return into the cold water mains supply – the check-valve can be controlled with a special gauge port,
- A shut-off function to isolate the mains supply for maintenance or inspection of the heater system,
- To drain the storage water heater: draining is ensured by the relief valve which can be actuated manually.
 Once opened pressurised water contained in the storage heater is evacuated.
- 5. Dimensions make the group interchangeable with the major safety groups on the market.
- Swivelling air gap designed to protect the wall from water splashes regardless of the type of mounting.
- 7. For water tanks up to 10 kW maximum useful power.



New safety group with ball valve

Polished brass ball → less subject to scaling than chromed ball

Flat-face cold water connection G3/4", is also specifically machined (copper pipe up to 16/18) for quick connection fittings ("GRIPP" type or other).



Dimensions compatible with curved-bottom tanks

New valve seat : for easier clearance of foreign matter below the valve diaphragm.



Ref.: 52350 under blister for self-service

SFR 3/4"

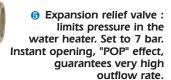
STAINLESS STEEL NF

- + Trap funnel kit NF
- + Pressure reducing valve Redufix



- Female port, Ø 3/4" 20x27 for mounting on the water heater with a Dielectric Insulating Connection (WATTS INDUSTRIES "RID").
- 2 Check valve inspection port.
- 6 Check valve : built into safety group to allow intake of cold water into hot water system and stop return of hot water into the mains.
- 4 Quarter-turn isolating ball valve.

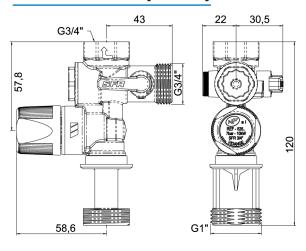




- **6** Water guide: nozzle profile prevents any risk of splashing.
- Safety valve discharge port with air gap. 1" thread (26 x 34).



DIMENSIONS (in mm)



♦ PARTS LIST

Material
Brass CW617N
_DIASS CWO I / IV
_VIRGIN PTFE
EPDM 70Sh
PA 6
_Stainless steel 304L
_PA 6.6 30% GF
Brass CW614N
POM
_Grivory HTV
_0,360 kg

♦ REFERENCE

Type: SFR STAINLESS STEEL Reference: 52570

CONNECTIONS

Inlet 3/4" M, outlet 3/4" F, discharge 1" M.

♦ RECOMMENDATIONS / INSTALLATION

Water heater working normally

The stop valve is in the "open" position and the valve is in the "on" position under normal working.

During heating, pressure rises inside the water heater and the nonreturn valve closes.

When the pressure reaches 7 bar, the safety valve opens slightly and allows some water to escape and this occurs intermittently throughout the heating time.

Exhausting water like this is normal; it proves that the Safety Group is working correctly.

There is no need for troubleshooting and remedies.

Water heater working abnormally

The water heaters thermostat can malfunction and fail to cut off the heat source.

This causes pressure and temperature to rise which lifts the valve in the safety group allowing steam to escape with a characteristic whistle.

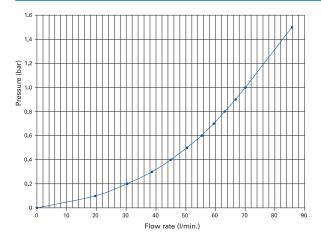
You should cut off the water heater power source immediately and contact the installer who will change the thermostat.

The safety group should be replaced: the temperature of steam at 7 bar is 165°C and could damage the valve seals.

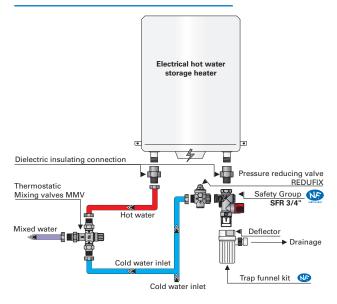
Frost

If you are using your water heater when there is a risk of frost, it is recommended that you empty it: turn off the power source, close the Safety Group stop valve, open one of the hot water taps of the system and open the drain valve.

PRESSURE DROP CURVE / HEADLOSS



♦ TYPICAL INSTALLATION



Impurities

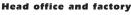
If the Safety Group keeps on emptying itself, the drain valve should be opened several times to blow off the impurities blocking the seal.

Maintenance

If properly fitted, the safety group needs no maintenance. However, we recommend that the drain valve be opened at least once a month.

Recommendations / Installation

- Make sure there is no seal mastic, oakum or other waste preventing its proper working.
- 2 Operate the isolating valve and safety valve at least once a month.
- 3 The drain pipe should be 25 mm minimum. A suitable tundish/airgap (not supplied) should be fitted.
- 4 If the cold water supply pressure exceeds 3 bar, a pressure reducing valve should be fitted UPSTREAM of the safety group. Please refer to the range available from Watts Industries.
- 5 This Safety Group may be fitted to a water heater of maximum 10 kW working power.
- 6 Subject to plumbing regulations.
- 7 To prevent the two metal corrosion phenomenon, fitting Dielectric Unions on piping between the water heater and the safety group as well as the water heater hot water outlet is recommended. Please refer to the range available from Watts Industries.



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