

## Hydraulic safety groups for hot water storage heaters SFR NA53M2 - 1/2"

New



- Save space : small size 1/2".
- Direct fitting to water storage heaters of small capacity.
- Fully complies with standard EN1487.
- Approvals : NF EN 1487 (F), BELGAQUA (B).

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**Function :**

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.
  - 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 main 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.

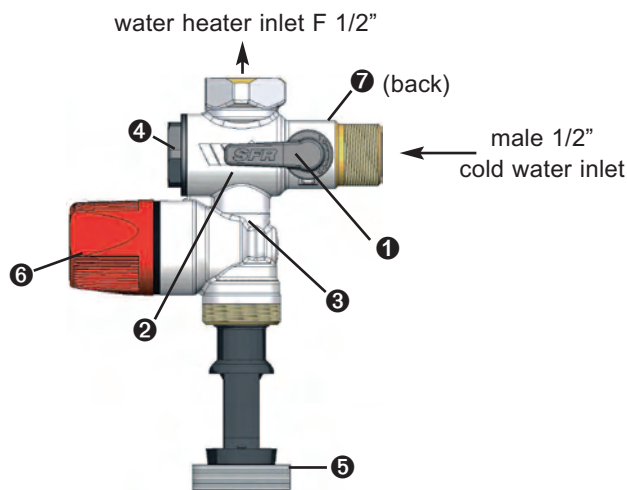
**Features :**

- ① Isolating ball valve
- ② Controllable check valve
- ③ Safety relief valve set at 7 bar
- ④ Plug for access to the check valve
- ⑤ Air gap threaded G1"
- ⑥ Safety knob for manual discharge
- ⑦ Inspection port to check the tightness of the check valve (located back of the drawing)

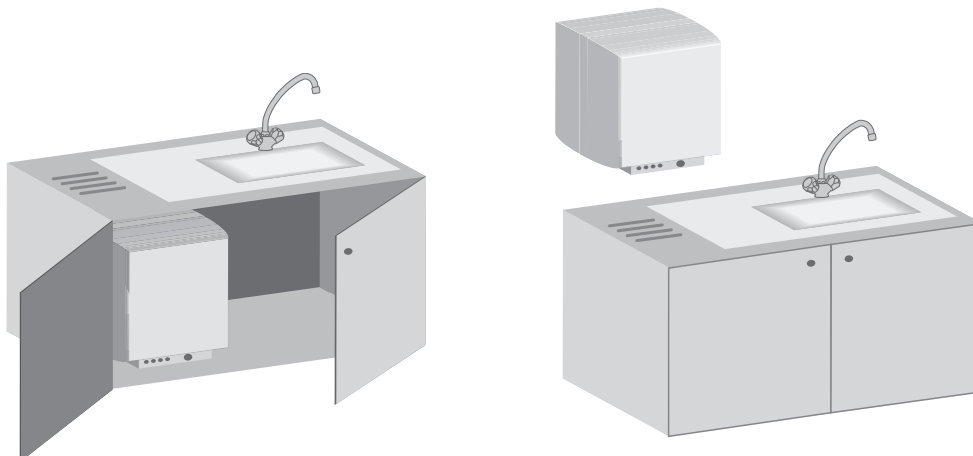
Medium: water

Safety relief valve opening pressure: 7 bar

Max. output of the water heater (1/2"): 4 kW

**Application :**

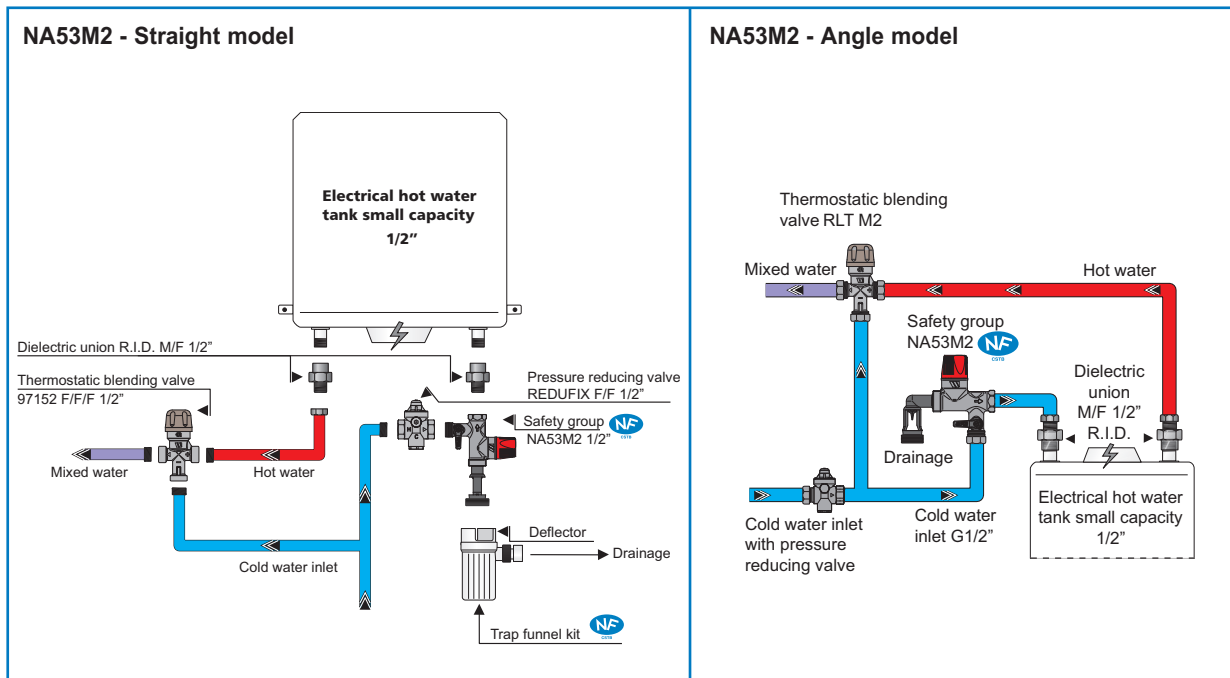
For hot water storage heaters of small capacities (generally from 10 to 50 Litres) with a Male threading in G1/2" (15x21), usually installed on the top of the sink or under sink below the draining board, the safety group NA53 is particularly adapted with this type of configuration.



## Reference/code :

diameter	type	presentation	code ref.
1/2" (15x21)	NA53M2	plastic bag	54310M2
1/2" (15x21)	NA53M2 angle body	plastic bag	54311M2
1/2" (15x21)	NA53M2 stainless steel seat	plastic bag	54312M2
1/2" (15x21)	NA53M2 angle body stainless steel seat	plastic bag	54313M2

## Typical installation :



## Recommandation / 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.

### 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.

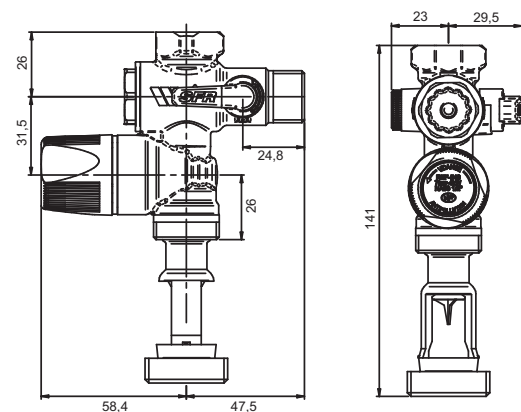
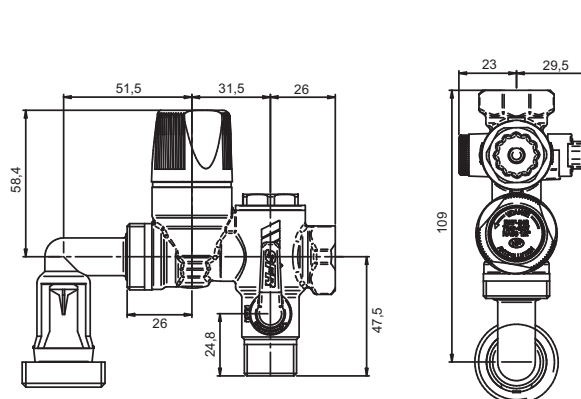
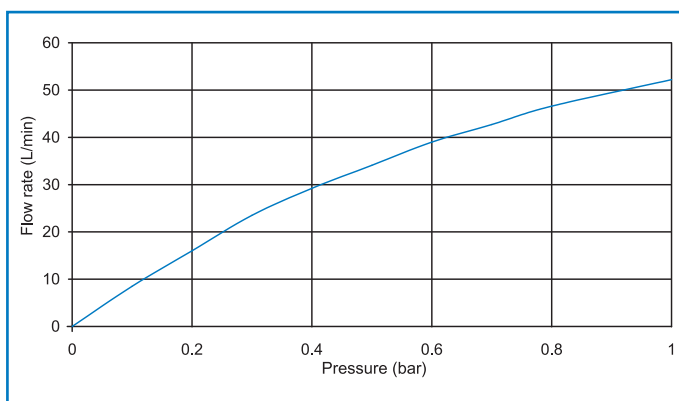
### Installation and obligations


- 1 - 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 4 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.

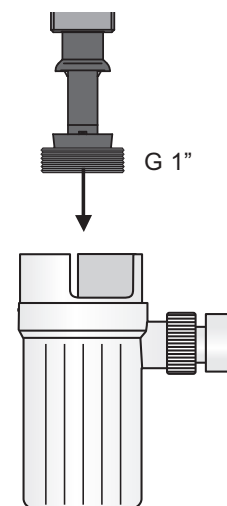
**Materials & weight :**

Designation	material
Body	Brass CW617N
Diaphragm	EPDM 70SH
Safety valve knob	PA6 15% FV
Air gap	Hostaform black

Designation	material
Valve seat	Brass CW617N
Valve seat (stainless steel)	Stainless steel 1.4305
Ball valve	Brass CW617N
Weight	0,360 Kg

**Dimensions (in mm)****NA53M2 - Straight model****NA53M2 - Angle model****Flow curve :**

Direct assembly on the trap funnel kit   
ref. 92315



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