

8004 – SAFETY RELIEF VALVE



FUNCTION:

These safety relief valves for solar heating systems are used to control the pressure in the primary circuits of solar heating systems. When the pressure in the system reaches the set pressure of the safety relief valve, the product opens to release the fluid automatically. It prevents the pressure in the system from reaching levels that might damage the equipments of the solar heating system. This series of safety relief valves has been specially designed for solar heating systems, and they are suitable to work at high temperature with a glycol solution.

TECHNICAL SPECIFICATIONS:

Medium: water – glycol solution
(max. glycol 50%)
Nominal pressure: PN 10
Opening overpressure: 10%
Closing differential: 20%
Working temperature: -30 —160°C
Power rating (discharge capacity): 50 kW
Connection sizes (AxB): 1/2" F x 3/4" F

Material:

- Body: brass, chrome plated
- Seal: high resistance elastomer
- Spring: stainless steel
- Handle: PA6G30

WORKING DETAILS:

The piston is controlled by the preset spring. When the pressure in the system is higher than the pressure applied by the spring on the piston, the piston is fully opened to discharge the high pressure fluid; when the pressure in the system is lower than the pressure applied by the spring on the piston, the piston closes automatically. The set pressure of the spring defines the maximum working pressure of the system.

SPECIAL CONSTRUCTION:

The piston and the gasket of the spring are made of high resistance elastomer to resist to glycol and high temperatures.

The safety relief valve is made of resistant material because of the changes of temperature and the UV rays outside of the house (where safety valves can be installed).

PRODUCT RANGE:

Code	8004-01	8004-02	8004-03	8004-04	8004-05	8004-06
Pressure (bar)	2,5	3	4	6	8	10

INSTALLATION AND IMPORTANT POINTS:

The safety relief valve must be installed near where the system is filled. It's strongly advised to assemble the valve vertically or horizontally (never upside down), to avoid impurities to be stuck on the piston. The safety relief valves must be installed according to the flow direction indicated by the arrow on the body of the valve.

Important: there shouldn't be any shut-off devices between the safety relief valve and the circulation system. Installation of the discharge pipe: The drain outlet of the safety relief valve must be connected to a discharge pipe. This pipe has to be connected to a specific container. The glycol solution can't be drained off the system and rejected in the culvert (or directly outside of the house).

APPLICATION DIAGRAM: