COMPACT SAFETY VALVE FOR SOLAR THERMAL SYSTEMS
R140C

CE 0425

R140C

Descrizione

The Giacomini R140C safety valves series are used in solar thermal systems using or glycol solutions (max. 50 %), with closed expansion tank, in order to guarantee that the pressure of the fluid of the circuits does not exceedthe project limits. In copliance with Directive "PED" 2014/68/UE, cat. IV.

Versions and product code

Series	Product code	Connections	Pressure [bar]
R140C	R140CY006	G 1/2"F x G 3/4"F	4 (green cap)
	R140CY009		6 (yellow cap)

CONFORMITY DECLARATION
Frame the QR code with your smartphone or tablet to view the conformity declaration.

Technical data

- Fluids: water and glycol solutions (max. 50 %)
- Min. allowable temperature (Ts min): 5 °C (-20 °C only with 50% glycol solutions)
- Max. allowable temperature (Ts max): 160 °C
- Max. allowable pressure (Ps): 10 bar
- Opening overpressure: 20 %
- Closure range 20 %
- PED cat.: IV

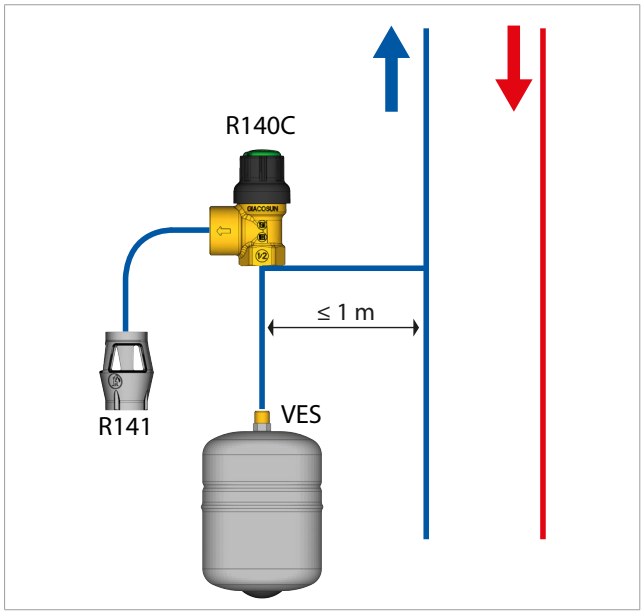
Materials

- Body: brass UNI EN 12165 CW617N
- Membrane: EPDM
- Separator: brass UNI EN 12164 CW614N
- Rod: brass UNI EN 12164 CW614N
- Gasket: synthetic fibre
- Spring: steel
- Spring presser: brass UNI EN 12164 CW614N
- Bonnet: IXEF
- Knob: POM
- Cap: ABS or MABS

Installation

Before installing any safety valve, it is necessary thet the specialist technical personnel in charge of the system carries put the corrected sizing, in accordance with the local codes.

The R140C safety valves series must be mounted in vertical positions, in order to avid the deposit of the impurities contained in the system, and in line with the sense of fliw indicated from the arrow on the body. The safety valves, moreover, must be installed in the coldest part of the system (corresponding to the solar manifolds delivery, as showed in figure), cleary visible and easy controllable. The connecting pipework of the safety valve must be a maximum of 1 m long, without any restriction, and its diameter not lower than the one of the inlet connection. The discharge of the safety valve must be cleary visible and carried in pipework with diameter not lower than one of the outlet connection.



Warning.
In order to avoid situations of danger for property and/or individuals, during the installation, commissioning and maintenance of the safety valves, it is important to respect all the technique norms and the indications contained in the present document.

Maintenance

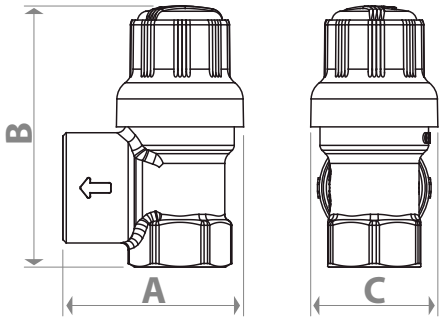
The inspection of the valve must be carried out at least once per year, increasing the pressure of the system until the discarge. If this were not possible, the handle can be turned and the discharge controlled at sight. The eventual impurities formed on the seat can be removed by means of periodic cleaning.

Prestations

Product code	Connections	Orifice diameter [mm]	Net cross section [mm²]	Outflow coefficient K	Calibration pressure [bar]	Nominal discharge press. [bar]	Closing pressure [bar]	Drainage capacity [kg/h]	Max. generator potential [kW]	Max. generator potential [kcal/h]
R140CY006	G 1/2"F x G 3/4"F	13	132,665	0,318	4	4,8	3,2	141,16	81,9	70396
R140CY009					6	7,2	4,8	172,88	100,3	86217

Data calculated in accordance with UNI EN ISO 4126-1. Maximum generator power calculated as the product of the drainage capacity multiplied by the fluid vaporisation heat, at ambient pressure W = 1,013 bar

Dimensions



Series	Product code	Connections	Dimensions (A x B x C) [mm]	Relief funnel
R140C	R140CY006	G 1/2"F x G 3/4"F	53 x 76 x 37	R141Y014 R141CY004
	R140CY009			

Accessories

It should channel the discharge of safety valves using the appropriate funnels exhaust R141, R141C (to be ordered separately).

Relief funnel R141	Relief funnel R141C	For safety valve with drainage of:
		
R141Y014	R141CY004	3/4"

Note.
The use of the R141, R141C relief funnels (plus curved couplings R19 and R189 if necessary) prevents any spray from reaching the electric components.

Additional information
For further information, visit the website www.giacomini.com or contact the technical service: ☏ +39 0322 923372 🖷 +39 0322 923255 ✉ consulenza.prodotti@giacomini.com