THERMO SAFETY VALVE

Thermo safety valve protects the electric thermos against overpressure and malfunctioning where the connection is made by threaded ends. Design based on EN 1489:2001.

- 6 bar, classical opening pressure for regular networks.
- 9 bar, avoid needless openings.
- Hot water backflow prevention system.
- Connection to the 8 mm pipe for discharge.
- Lever for manual discharge or checking, with locking device.

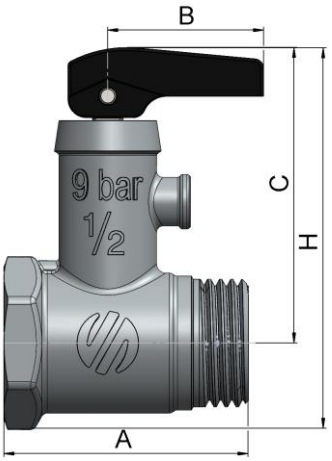
TECHNICAL SHEET THERMO SAFETY VALVE

PRODUCT DESCRIPTION

Safety relief valve for electric thermos is a device to protect and control the flow. Protects the electric thermos against internal overpressures. The built-in check valve prevents hot water back flow to the main supply. The handle allows manual discharge and can be locked in an open position, making the drainage of the thermos easier.

PRODUCT SCOPE

Electric water heaters. The valve should be collocated at the inlet of the electric thermos protecting the thermos and the water network from overpressure.



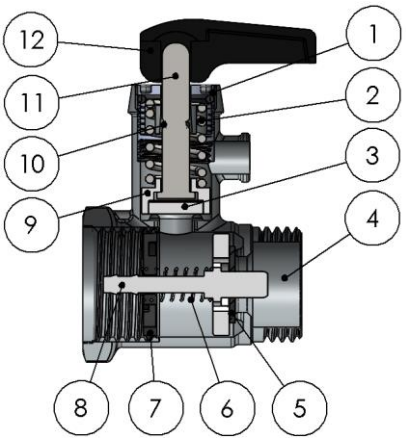
GENERAL DIMENSIONS, PRESSURE AND TEMPERATURE

Code	Size	A (mm)	B (mm)	C (mm)	H (mm)	PN (bar)	Temp. (ºC)*
504510	1/2 F–M	40	26	48	63	9	0 to 95
504506	1/2 F–M	40	26	48	63	6	0 to 95

Threading according to ISO228
* Freezing is excluded.

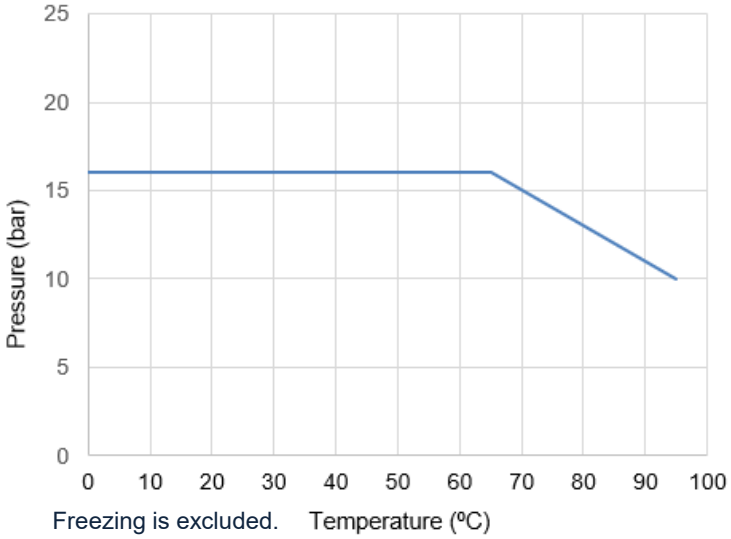
MATERIALS

Item	Component	Material	Finishing
1	Cap	POM	Black
2	Spring	Stainless steel	Stainless steel
3	Flat joint	Silicone rubber	-
4	Body	Brass CW617N	Chrome plated
5	Washer	EPDM	-
6	Check spring	Stainless steel	Stainless steel
7	Check guide	PA	Black
8	Check stem	POM	-
9	Seat	POM	-
10	O-ring	NBR	-
11	Stem	PA	-
12	Handle	PA	Black

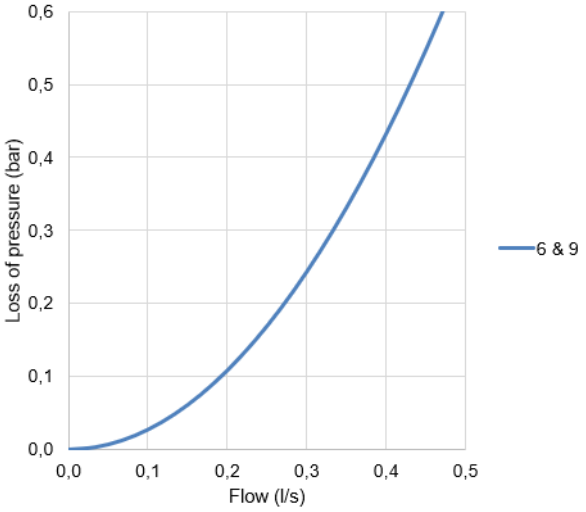


TECHNICAL DATA

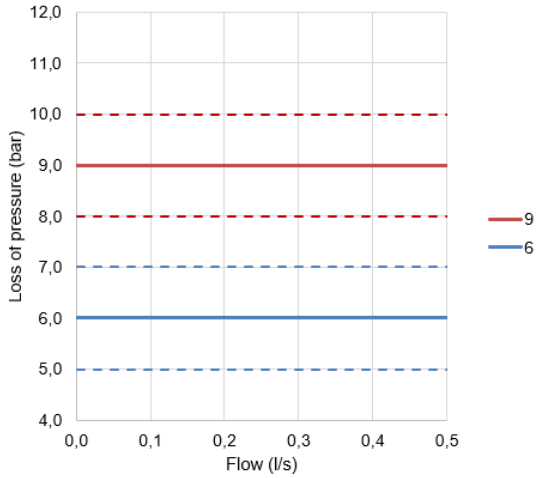
Pressure vs. temperature.



Hydraulic features. Flow vs. loss of pressure.



Flow vs opening pressure.



Size	1/2
Kv	2,18

Kv (m^3/h), cubic meters per hour that flow through the valve generating a loss of pressure of 1 bar.

Compatibility with fluids

Fluid	Compatibility
Drinking water	Excellent

For any other fluid, please contact Arco technical service.

INSTALLATION AND OPERATION INSTRUCTIONS

Before performing any action, the water supply to the installation should be shut off. Make sure there is no dirt or foreign objects in the connection to the network. Apply the appropriate sealing material to the inlet thread of the valve.
It can be installed horizontally or vertically but always following the direction of the engraved arrow.
The valve should be installed with a suitable tool and preferably use the planes located in the inlet part.
The valve should be collocated at the electric thermos inlet and just before a dielectric union. The handle allows to place the valve in the open position and drain the thermos through 8 mm connection, if necessary.
Do not alter the assembly of the valve components; replacement or disassembly of the handle may cause external leaks. Do not block the handle.

FT08110ING – Edition 2024-12

Arco S.L., Avda. del Cid 16,
46134 Foios, Valencia. España.
www.valvulasarco.com