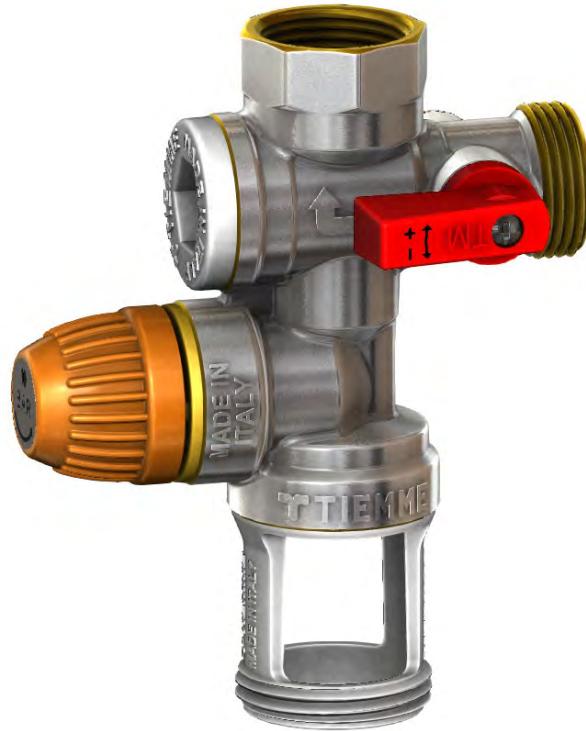


# 3177XSUN

## SAFETY UNIT

### FOR STORAGE WATER HEATERS

### FOR SOLAR THERMAL SYSTEMS



#### DESCRIPTION

The safety unit Art. 3177XSUN is used in domestic systems for the protection of solar storage water heaters.

Three different devices in a one product:

- **Safety device:** prevents the water pressure contained in the storage water heater from reaching high values (below the 10 bar limit value).
- **Anti-pollution check device:** prevents the hot water contained in the storage from returning to the cold water supply network.
- **Shut-off device:** allows the system to be isolated, allowing maintenance to be carried out on the water heater.

These safety units are characterized by resistance to high temperatures in continuous running.

#### ADVANTAGES/STRENGTHS

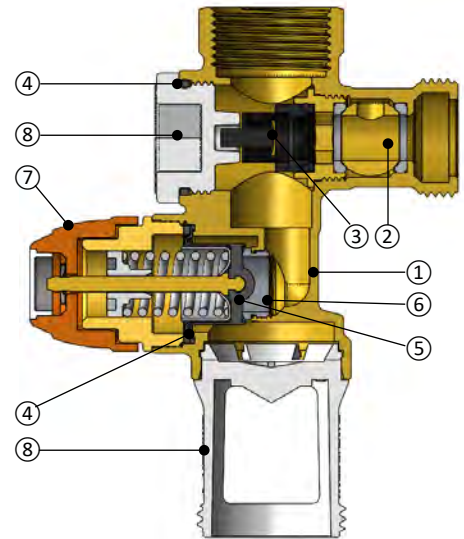
- Three products in one: safety valve - EA type controllable anti-pollution check valve (with integrated control socket) - shut-off valve.
- Suitable for application on storage with maximum power 10 kW.
- Application in solar systems: resistant to high temperatures in continuous running.

#### PRODUCT RANGE

Art.	Code	Connection fittings	Calibration (safety valve)	Sealing seat (safety valve)
3177XSUN	319 0018	G 3/4 "M x G 3/4" F (ISO 228)	10 bar	Stainless Steel

### TECHNICAL SPECIFICATIONS

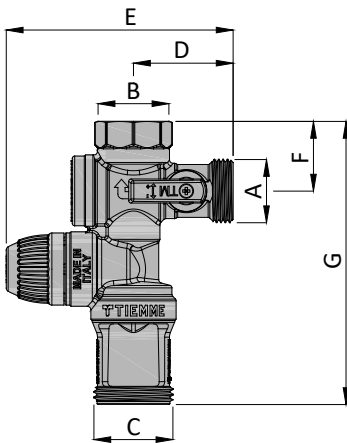
- (1) Body: CW617N chrome plated brass
- (2) Ball valve: CW617N brass
- (3) Check valve: PPO-GF
- (4) O-ring seal: EPDM
- (5) Safety valve membrane: EPDM
- (6) Safety valve seat: AISI 303 stainless steel
- (7) Knob: PA
- (8) Plastic components: PA
- Threads: ISO 228



### TECHNICAL CHARACTERISTICS

- Maximum working temperature: + 120 ° C
- Maximum working pressure: 10 bar
- Safety valve setting pressure: 10 bar
- Maximum allowable power of the water heater: 10 kW
- Fluid Compatibility: Water

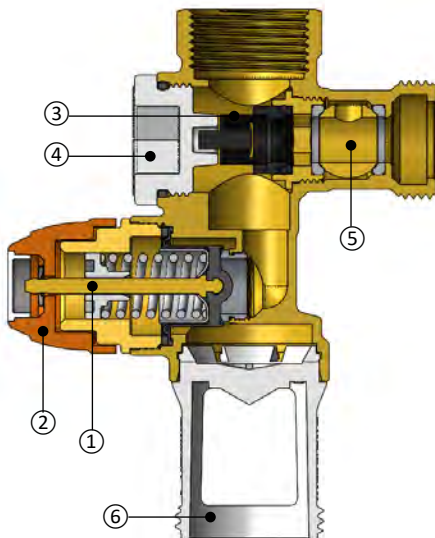
### DIMENSIONAL CHARACTERISTICS



Art.	Code	A	B	C	D	E	F	G
3177XSUN	319 0018	G 3/4" M	G 3/4" F	G 1" M	41.5	94.5	29	89

Dimensions in mm

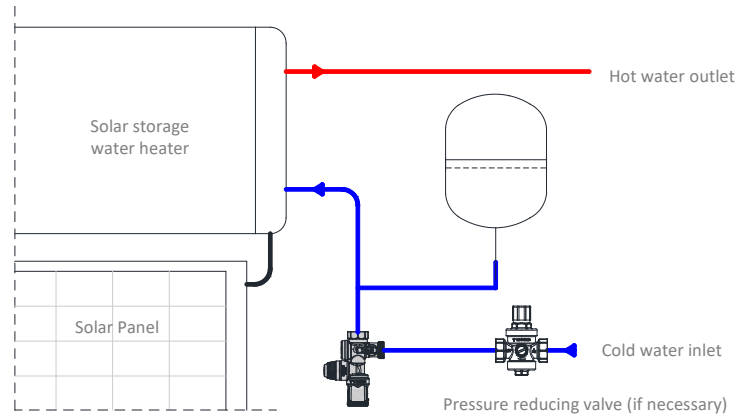
### DESCRIPTION OF COMPONENTS



- 1) **Safety valve:** prevents the water pressure contained in the storage water heater from reaching high values (below the 10 bar limit value).
- 2) **Drain knob:** a manual activation allows the pressure in the system to be released.
- 3) **Controllable check valve:** prevents the hot water contained in the storage tank from returning to the cold water supply network.
- 4) **Cap for inspection of the check valve.**
- 5) **Ball shut-off valve:** allows the system to be isolated, allowing maintenance to be carried out on the water heater.
- 6) **Drain:** positioned in the lower part of the unit, it conveys drained system water in case of intervention of the safety valve. The 1" M threaded connection allows connection to an accessory siphon (not supplied by Tiemme).

## INSTALLATION / WARNINGS

- The safety unit art. 3177XSUN is applied on the domestic cold water supply line, at the inlet of the water heater. In case of high inlet water pressures (> 3 bar), it is recommended to install a pressure reducing valve.
- Install the safety unit only in a **vertical position**, with the drain funnel facing downwards.
- To avoid leaks due to increased water volume, install an expansion vessel on the cold water pipe.



- It is recommended to convey the safety valve drain by connecting it directly to the sewer system.

### WATER TEMPERATURES ABOVE 50 °C MAY CAUSE SERIOUS BURNS.

**DURING THE INSTALLATION AND MAINTENANCE OF THE SAFETY UNIT, TAKE THE NECESSARY MEASURES SO THAT THESE TEMPERATURES DO NOT PRESENT HAZARD FOR PEOPLE.**

*TIEMME RACCORDERIE SpA declines all responsibility in the event of failures and/or accidents deriving from non-compliance with these indications or improper use of the system. The information shown does not exempt the user from scrupulously following the regulations and good technical standards in force.*

## MAINTENANCE

In normal operating conditions the safety unit does not require any maintenance.

- It is recommended periodically (at least monthly) to check the correct functioning of the safety valve by opening the manual knob.
- At least once a year, inspect and verify the correct functioning of the anti-pollution device. For the operations, it is sufficient to intercept the ball valve of the unit and unscrew the lateral inspection cap.

## SPARE PARTS



Art. 3177VR  
Code 040 0267  
Check valve.

## ITEM SPECIFICATIONS

### Art. 3177XSUN

Safety unit for storage water heaters for solar systems **with a safety valve seat in stainless steel**, consisting of safety valve complete with drain, controllable check valve, and shut-off valve.

Made of: body in CW617N chrome plated brass, ball valve in CW617N brass, check valve in PPO-GF, O-ring seal in EPDM, safety valve membrane in EPDM, safety valve seat in stainless steel AISI 303, knob in PA, plastic components in PA, ISO 228 threads.

Maximum working temperature + 120 °C. Maximum working pressure 10 bar. Safety valve setting pressure 10 bar. Maximum allowable power of the water heater: 10 kW. Fluids compatibility water. Connection fittings G 3/4 "M x G 3/4" F. Drain connection G 1 "M.

## CERTIFICATIONS

