



PROFACTOR®
DER DEUTSCHE QUALITÄTSSTANDARD

EN

TECHNICAL DATA SHEET AND USER MANUAL



PRODUCT CODE

PF BS 573
PF BS 573-1.5

PF BS 574
PF BS 574-1.5

PF BS 606
PF BS 607

BOILER SAFETY GROUPS

1. PURPOSE AND SCOPE

Boiler safety group is designed to protect heating systems against exceeding of maximum allowed operating pressure and to discharge air from them.

2. TECHNICAL SPECIFICATIONS

Connection to system, G:

PF BS 573, PF BS 574: 1" F

PF BS 606: 3/4" F/M

PF BS 607: 3/4" F

Maximum boiler thermal rating, $Q_{\max}$: 70 KW (DIN EN 297:2005)

Maximum operating medium temperature, $T_{\max}$: 95°C

Safety relief valve pressure:

PF BS 573, PF BS 574: 1.5 or 3 bar

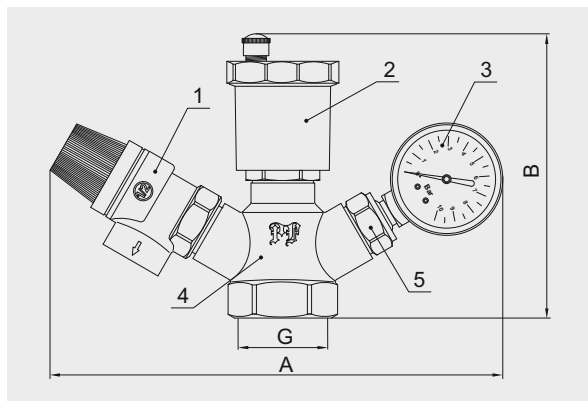
PF BS 606, PF BS 607: 3 bar

3. DESIGN

PROFACTOR® boiler safety groups include safety relief valve (1), automatic air vent valve (2) and pressure gauge (3), installed at common base — console (4).

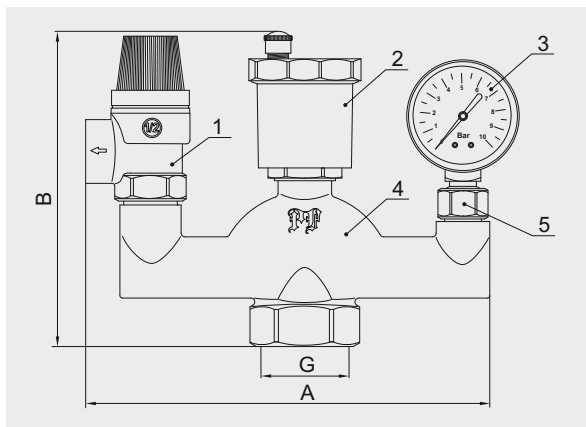
PF BS 573, PF BS 574, PF BS 607 consoles of safety groups are made of CW614N (DIN EN 12165-2011) brass, using hot forging and turning machining.

PF BS 573 boiler safety group



- 1 – Safety relief valve
- 2 – Automatic air vent valve
- 3 – Radial pressure gauge
- 4 – Base (console)
- 5 – Shut-off valve

PF BS 574 boiler safety group

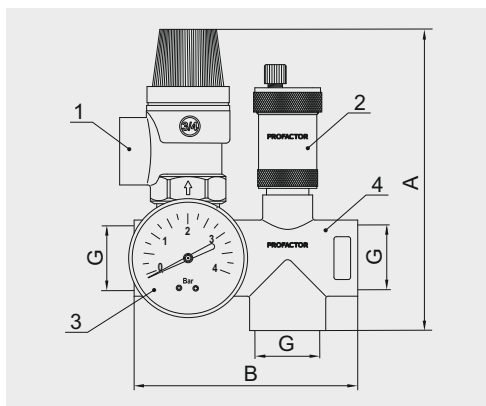


- 1 – Safety relief valve
- 2 – Automatic air vent valve
- 3 – Radial pressure gauge
- 4 – Base (console)
- 5 – Shut-off valve

PF BS 573 and PF BS 574 safety groups cantilever constructions have one bore with 1" internal pipe cylinder thread for connection to system.

Pressure gauge of PF BS 573 and PF BS 574 safety groups is connected to console with shut-off valve (5), enabling to perform gauge installation and dismantling without draining the system.

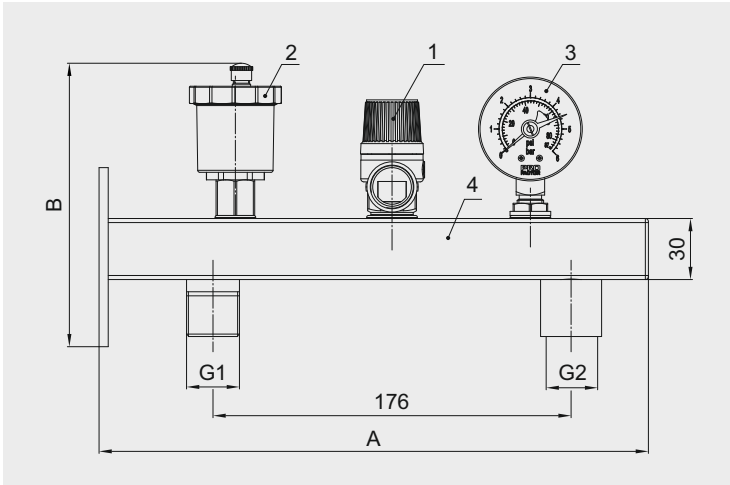
PF BS 607 passed through boiler safety group



- 1 – Safety relief valve
- 2 – Automatic air vent valve
- 3 – Axial pressure gauge
- 4 – Base (console)

PF BS 607 passed through boiler safety group console has three bores to connect to the system with 3/4" internal pipe cylinder thread, as well as two bores to connect pressure gauge (one on each side), one of which is sealed with a plug.

PF BS 606 boiler safety group for wall installation



1 – Safety relief valve

3 – Radial pressure gauge

2 – Automatic air vent valve

4 – Base (console)

PF BS 606 safety group console is made as welded rectangular parallelepiped with welded fittings and a bracket for the product installation on the wall, and has 2 bores with 3/4" internal and external pipe cylinder thread for connection to the system. Console material — galvanized steel.

All pipe cylinder threads are in accordance with ISO 228-1:2000, DIN 259.

Refer to relevant product technical passport for detailed description of boiler safety groups components.

4. NOMENCLATURE AND DIMENSIONS

Boiler safety group

Product Code	Pressure relief, bar	A, mm	B, mm	G	Weight, g
PF BS 573	3	187	112	1"	535
PF BS 573-1.5	1.5	187	112	1"	535

Boiler safety group

Product Code	Pressure relief, bar	A, mm	B, mm	G	Weight, g
PF BS 574	3	158	120	1"	675
PF BS 574-1.5	1.5	158	120	1"	675

Passed through boiler safety group

Product Code	Pressure relief, bar	A, mm	B, mm	G	Weight, g
PF BS 607	3	126	94	3/4"	595

Boiler safety group for wall installation

Product Code	Pressure relief, bar	A, mm	B, mm	G1	G2	Weight, g
PF BS 606	3	270	140	3/4"	3/4"	1169

5. INSTALLATION INSTRUCTION

Safety group shall be installed vertically at any point of heating system above boiler, but preferably at location with minimum possible temperature. It is not allowed to install valves, filters and other elements, reducing flow area of pipeline section from boiler to safety group.

Drain hose shall fit to safety valve outlet diameter, and shall be laid to avoid creating obstructions for hot water or steam discharge and not to incur danger for people.

PTFE — polychlorotrifluoroethylene, polyamide thread with silicone, flax along with special pastes, as well as other packing materials, providing connections sealing at heat transfer medium design temperature and pressure, and approved according to established procedure, shall be used for threaded joints packing.

Upon completion of installation the safety group shall be leak-tested. It shall be tested using hydrostatic (hydraulic) method.

6. OPERATION AND MAINTENANCE

To bring safety group in the standard operating mode it is required to crack open (without removing) a cap of automatic air vent valve, located at its cover.

In the course of operation it is recommended to check periodically (at least once a year) safety valve operability.

Fouling between seat and disc may form in a valve not being functioning for a long time, resulting in leaks, and subsequently, pressure drop in the heating system. To prevent this the valve shall be periodically flushed, turning its rotating cover in the arrow direction.

Safety group may be used in the systems using customized heat transfer medium with ethylene glycol content not exceeding 50%

7. SAFETY PROVISIONS INSTRUCTIONS

In the course of installation, testing, maintenance and operation of this product please follow the safety requirements to gas boilers per EN 297:1994.

8. WARRANTY OBLIGATIONS

The warranty period is 12 months from the date of sale to the end user. During the warranty period, the manufacturer guarantees the proper operation of the product and its compliance with safety requirements, provided that the consumer observes the prescribed rules for storage, transportation, installation, operation, and maintenance. The warranty covers all defects resulting from the manufacturer's fault.

The warranty does not cover defects resulting from:

- Violation of storage, transportation, installation, operation, or maintenance conditions;
- Exposure to substances aggressive to the product materials;
- Evidence of mechanical damage;
- Damage caused by fire, natural disasters, or other force majeure circumstances;
- Damage resulting from improper actions by the user;
- Evidence of unauthorized interference with the product design.

The product described in this technical passport is a technically sophisticated device that must be installed by a qualified specialist experienced with this type of equipment.

Installation and commissioning must be carried out by an authorized and certified company.

Profactor Armaturen GmbH reserves the right to make design modifications that do not affect the technical characteristics or functional features of the product..



INTERNATIONAL WARRANTY CARD

NAME OF THE PRODUCT

PRODUCT CODE, SIZE

QUANTITY

SELLER NAME AND ADDRESS

DATE OF PURCHASE

SELLER STAMP

SELLER SIGNATURE

For the warranty term refer to the Warranty obligation clause in the technical manual

FOLD LINE

FOLD LINE

In case of any claims to the product quality the following documents should be submitted:

1. Application with customer and product details:

- Name of the customer, actual address and phone number
- Article of the product
- Reason for the claim and photo
- Plumbing system where installed (name, address, phone number)

2. Invoice copy and receipt

3. Warranty card

RETURN/EXCHANGE COMMENTS

DATE

SIGNATURE



Profactor Armaturen GmbH

Ruffinallee 9, c/o Kanzlei Antegra, 82166 Gräfelfing, Germany;
Tel.: +49 89 21546092; info@pf-armaturen.de; www.profactor.de