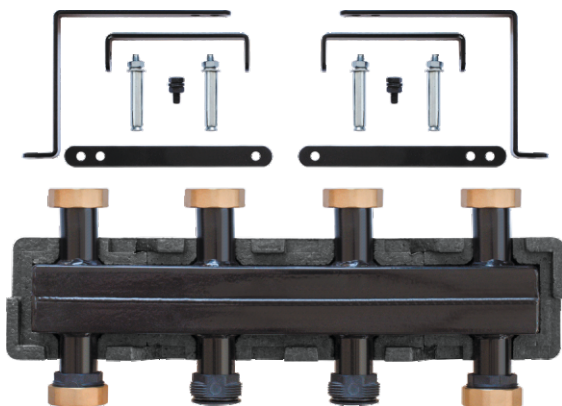




PROFACTOR®
DER DEUTSCHE QUALITÄTSSTANDARD

EN

TECHNICAL DATA SHEET AND USER MANUAL



**PRODUCT
CODE**

PF PU 1057.4
PF PU 1057.6
PF PU 1057.8

DISTRIBUTION MANIFOLD

1. PURPOSE AND SCOPE

PROFACTOR® distribution manifolds with full thermohydraulic separation of the supply and return lines are used in boiler plants where the heat carrier must be distributed to several heat consumers with different parameters (flow, temperature, hydraulic resistance).

The heating system must be closed (without open air access to the heating medium). As a heating carrier, liquids that are not aggressive to the materials of the product can be used: water, glycol-based solutions. The maximum glycol content is up to 40%.

2. TECHNICAL SPECIFICATIONS

Nominal size: DN25

Two types of connection: 1½"F and 1½"M

Maximum working pressure: 6 bar

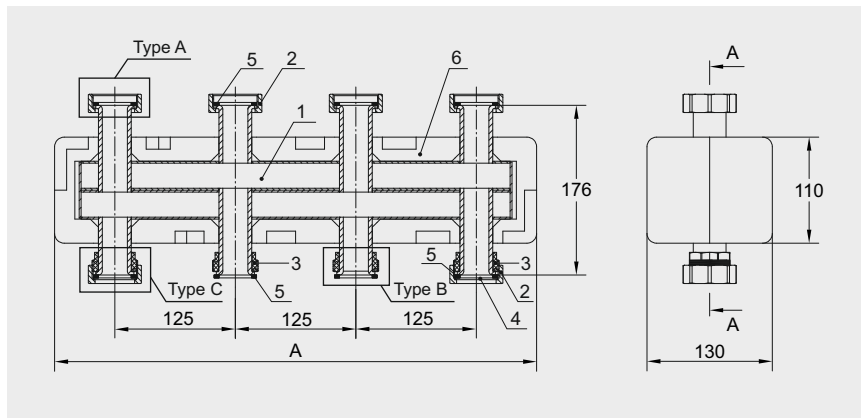
Maximum temperature of heating carrier: 110°C

Maximum flow of heating carrier: 3 m³/h

Maximum heat output $Q_{\max}$, at $\Delta T = 20^\circ\text{C}$: 70 kW

Wall thickness: 3 mm

3. DESIGN



1 – Manifold body

2 – Union nut 1½"

3 – Ring with external thread 1½"

4 – Blind washer

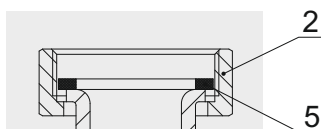
5 – O-ring

6 – Thermal insulation coat

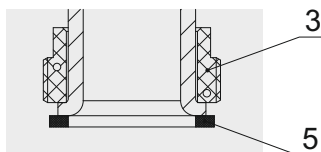
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Number of pipe pairs (feed/return)	4	6	8
Number of circuits	4	6	8
Mounting length A, mm	500	750	1000
Weight, g	6100	8480	10900

The body of the product is made in the form of a welded steel rectangular parallelepiped with welded branch pipes with split flanges at the ends for connection to the manifold of the remaining elements of the boiler plant.

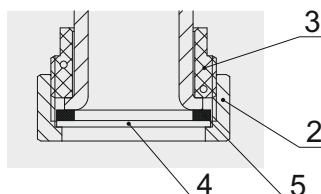
Types of connection included:



Type A — union nut 1½" (2) with flat sealing ring (5), used for connection of PROFACTOR® pump groups.

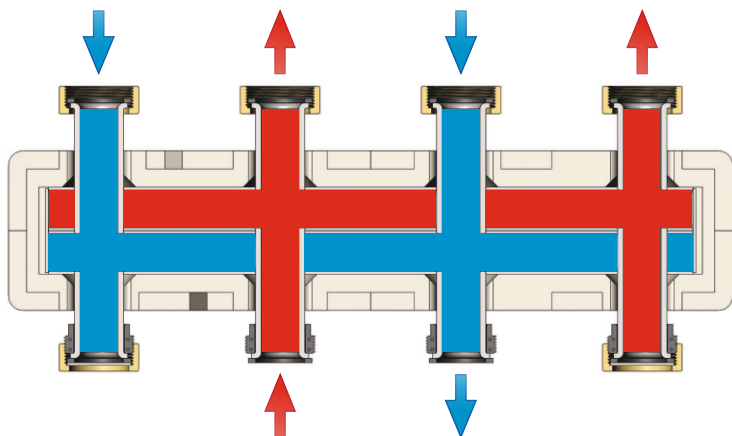


Type B is a ring with 1½" male thread (3) with a flat O-ring (5), used to connect the hydraulic separator PROFACTOR® PF PU 1054.



Type C — blind connection: the plug is formed from the union nut (2) and the washer (4) and screwed onto the ring (3) with the O-ring (5).

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



4. MATERIALS

The body of the manifold, the connection pipes — anti-rust plated carbon steel with black color enamel coating.

Folding nuts — brass CW614N (DIN EN 12165-2011).

Rusk with external thread — polyamide (PA), reinforced with fiberglass.

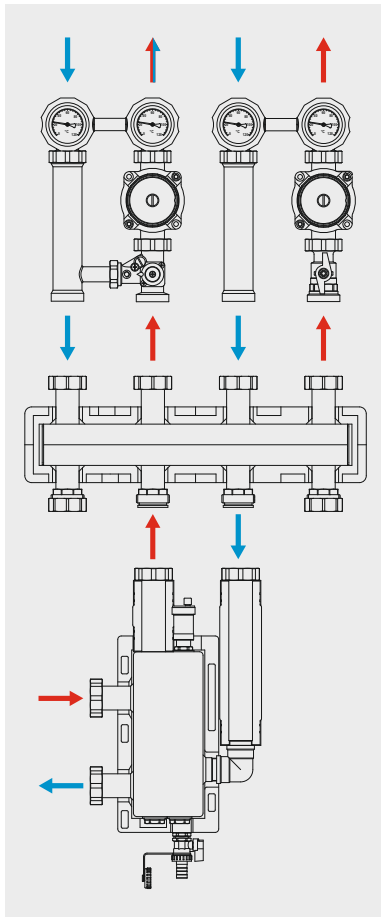
All Seals — EPDM.

5. INSTALLATION INSTRUCTIONS

The PROFACTOR® distribution manifolds can only be installed in room with a temperature above 0°C! Installation and commissioning should be made only by a specialized installation organization.

The distribution manifold must be fixed horizontally to the wall! Installation of the manifold on the wall is made with the help of anchors and brackets included in the kit. Then the rest of the system is installed on the distribution manifold (pumping groups, hydraulic separator).

During installation, make sure that the supply line of the manifold coincides with the supply lines of the pump groups and the water separator, and the return line of the manifold with the reverse line of these elements. By default, the header line is located on the right. If a supply from the left is required for easy installation, the manifold must be rotated 180° around the vertical axis.



It is recommended to connect the shunting unit to the two lower central nozzles of the manifold, this pair is considered preferable from the point of view of the uniformity of the heat carrier distribution. But for convenience of connection to or for the possibility of connecting pumping groups to the lower nozzles of the manifold, it is allowed to connect the hydraulic separator to any two adjacent lower nozzles. Thus it is necessary to watch, that the feeding line of the hydraulic separator is attached to the supply line of the manifold, and the reverse to the return line.

Do not allow mechanical damage to the manifold and its contamination with building compounds.

The misalignment of the connected pipelines should not exceed 3 mm with a length of up to 1 m plus 1 mm for each subsequent meter.

After installation, a manometric leak test must be carried out. This test helps to protect the system from leaks and damage associated with them.

Before carrying out the test, make sure that all union nuts are tightened tightly.

6. OPERATION AND MAINTENANCE

The PROFACTOR® distribution manifolds must be operated without of the pressure and temperature exceeded in paragraph 2 of this technical of the passport.

Installation and disassembly of the product, as well as any repair operations should be performed in the absence of pressure in the system. Allow the equipment to cool to ambient temperature.

7. WARRANTY OBLIGATIONS

The warranty period is 24 months from the date of sale to the end consumer. Throughout the entire warranty period, the manufacturer guarantees the proper functioning of the product and its compliance with safety requirements, provided that the consumer follows the rules for storage, transportation, installation, operation, and maintenance of the product. The warranty covers all defects arising through 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 materials of the product;
- Signs of mechanical damage;
- Damage caused by fire, natural disasters, or other force majeure circumstances;
- Damage caused by improper actions of the user;
- Evidence of unauthorized interference with the product design.

The product described in this technical manual is a technically complex device that must be installed by a qualified specialist with appropriate experience working 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 changes to the product design that do not affect its technical characteristics or functional features.



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