Profactor Armaturen GmbH

EN

PROFACTOR®
DER DEUTSCHE QUALITÄTSSTANDARD

# TECHNICAL DATA SHEET AND USER MANUAL


**PRODUCT CODE**

**PF RBP 566-601**
**PF RBA 600.95 –**
**PF RBA 600.113**
**PF DV 560**
**PF DV 561**
**PF RP 562**
**PF RP 563**
**PF RN 564**
**PF RB 554R-556R**
**PF RB 554L-556L**
**PF RP 557R-557L**
**PF RW 559**
**PF RR 558**
**PF RK 550-553**

## RADIATOR ACCESSORIES

## 1. PURPOSE AND SCOPE

All components are designed for the installation of aluminum and bimetallic radiators with G1" internal connection threads on the upper and lower manifolds.

These products are used in heating systems where the heat carrier is water or other non-aggressive liquids compatible with the materials of the product, as well as in systems using low-freezing heat transfer fluids.

## 2. TECHNICAL SPECIFICATIONS

| Product Code | PF | DV 560, DV 561, RP 562, RP 563 | RP 554 R/L, RP 555 R/L, RP 556 R/L, RP 557 R/L |
|---|---|---|---|
| Maximum working pressure | bar | 10 | 15 |
| Maximum heat carrier temperature | °C | +110°C | |

Maximum permissible load on brackets when mounted in a brick or concrete wall:

| Product Code | PF | RBP 566, RBP 568, RBP 601 | RBP 567, RBP 569 | RBP 570 | RBA 600.95 | RBA 600.100 | RBA 600.113 |
|---|---|---|---|---|---|---|---|
| Maximum load | kg | 35 | 42 | 40 | 31,5 | 30 | 26,5 |

## 3. DESIGN

All cylindrical pipe threads are in an accordance with ISO 228-1:2000, DIN 259, and all metric threads are in an accordance with ISO 261:1998.

The body and shut-off screw of the manual air vent valve, as well as the body of the radiator plug bushing, are made of brass grade CW614N (according to DIN EN 12165-2011), with nickel-plated surfaces.


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The caps of the manual air vent valve and the radiator plug bushings are made of impact-resistant engineering thermoplastic (acrylonitrile butadiene styrene, ABS), while the sealing rings are made of ethylene-propylene rubber (EPDM). A more detailed description of the manual air vent valve is provided in the corresponding technical passport.

The intersection radiator nipple is designed to connect sections of aluminum and bimetallic radiators used in water-based heating systems. The connector is made of carbon steel with zinc galvanic coating and has a right-hand (D) thread on one end and a left-hand (S) thread on the other.

The radiator through bushings and radiator plugs are made of galvanized steel with a 70 μm galvanic coating, finished with white epoxy enamel (RAL 9016). The bushings are designed for connecting pipelines and fittings to aluminum and bimetallic radiators with a nominal bore diameter DN25 mm and a 1" thread.

For sealing the connection with the radiator, the bushings and plugs are equipped with Silastic GP (PF RR 558) silicone O-rings, which can also be purchased separately. Depending on the radiator connection side (left or right), the radiator bushings and plugs are available with either right-hand (D) or left-hand (S) threads.

All brackets are made of galvanized carbon steel coated with white epoxy enamel (RAL 9016). The straight brackets (models PF RBP 566–570) are supplied with polypropylene (PP-R) wall plugs.

The universal key for radiator fittings (PF RW 559) is made of glass fiber-reinforced nylon.

Contents of the universal installation kits for aluminum and bimetallic radiators (PF RK 550, PF RK 551):

1. Manual air vent valve PF DV 560/561 — 1 pc.
2. Radiator plug bushing PF RP 562/563 — 1 pc.
3. Left through radiator bushing with silicone sealing ring PF RB 555L/556L — 2 pcs.
4. Right through radiator bushing with silicone sealing ring PF RB 555R/556R — 2 pcs.
5. Manual air vent valve key 5×5 mm (acrylonitrile butadiene styrene, ABS) — 1 pc.
6. Radiator bracket PF RBP 568 — 2 pcs.
7. Wall plug for bracket — 2 pcs.


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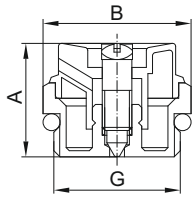
Contents of the universal installation kits for aluminum and bimetallic radiators (PF RK 552, PF RK 553):

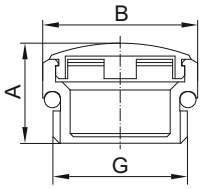
1. Manual air vent valve PF DV 560/561 — 1 pc.
2. Radiator plug bushing PF RP 562/563 — 1 pc.
3. Left through radiator bushing with silicone sealing ring PF RB 555L/556L — 2 pcs.
4. Right through radiator bushing with silicone sealing ring PF RB 555R/556R — 2 pcs.
5. Manual air vent valve key 5×5 mm (acrylonitrile butadiene styrene, ABS) — 1 pc.

## 4. NOMENCLATURE AND DIMENSIONS



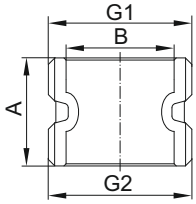

Manual air vent valve

| Product Code | G | A, mm | B, mm | Weight, g |
|---|---|---|---|---|
| PF DV 560 | 1/2" | 19 | 24 | 19 |
| PF DV 561 | 3/4" | 19 | 28 | 28 |



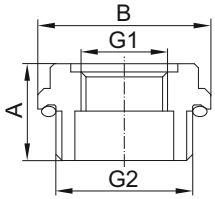

Radiator plug bushing

| Product Code | G | A, mm | B, mm | Weight, g |
|---|---|---|---|---|
| PF RP 562 | 1/2" | 17 | 24 | 14 |
| PF RP 563 | 3/4" | 18 | 28 | 20 |



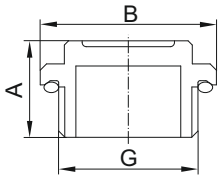

Galvanized intersection radiator nipple

| Product Code | G1xG2 | A, mm | B, mm | Weight, g |
|---|---|---|---|---|
| PF RN 564 | 1"Dx1"S | 25 | 25 | 48 |



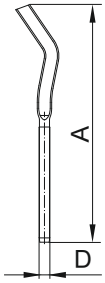

Radiator bushing

| Product Code | G1xG2 | A, mm | B, mm | SW, mm | Weight, g |
|---|---|---|---|---|---|
| PF RB 554R | 3/8"x1"D | 23,5 | 42 | 32 | 85 |
| PF RB 554L | 3/8"x1"S | 23,5 | 42 | 32 | 85 |
| PF RB 555R | 1/2"x1"D | 23,5 | 42 | 32 | 80 |
| PF RB 555L | 1/2"x1"S | 23,5 | 42 | 32 | 80 |
| PF RB 556R | 3/4"x1"D | 23,5 | 42 | 32 | 60 |
| PF RB 556L | 3/4"x1"S | 23,5 | 42 | 32 | 60 |



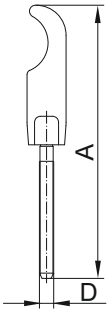

Right/left radiator plug

| Product Code | G | A, mm | B, mm | SW, mm | Weight, g |
|---|---|---|---|---|---|
| PF RP 557R | 1"D | 23 | 42 | 28 | 90 |
| PF RP 557L | 1"S | 23 | 42 | 28 | 90 |




Radiator bracket (set of 2 pcs.)

| Product Code | A, mm | D, mm | Weight, g |
|---|---|---|---|
| PF RBP 568 | 165 | 7 | 115 |
| PF RBP 569 | 170 | 9 | 165 |
| PF RBP 601 | 230 | 9,2 | 230 |




Flat radiator bracket (set of 2 pcs.)

| Product Code | A, mm | D, mm | Strip thickness, mm | Weight, g |
|---|---|---|---|---|
| PF RBP 570 | 180 | 9 | 2,5 | 155 |



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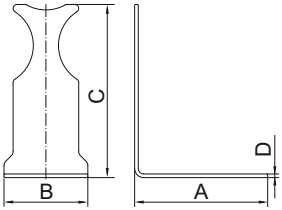


Angled radiator bracket (set of 2 pcs.)

| Product Code | A, mm | B, mm | C, mm | D, mm | Weight, g |
|---|---|---|---|---|---|
| PF RBA 600.95 | 73 | 47 | 95 | 2 | 180 |
| PF RBA 600.100 | 73 | 47 | 100 | 2 | 185 |
| PF RBA 600.113 | 73 | 47 | 113 | 2 | 195 |

Radiator brackets

| Product Code | Length, mm | Diameter, mm | Weight (in packaging), g |
|---|---|---|---|
| PF RBP 566 | 165 | 7 | 140 |
| PF RBP 567 | 170 | 9 | 190 |

Silicone ring for radiator bushings and plugs

| Product Code | Outer diameter, mm | Inner diameter, mm | Diameter, mm | Weight g |
|---|---|---|---|---|
| PF RR 558 | 38 | 31 | 2,5 | 1 |

Radiator installation kit with brackets

| Product Code | Size, mm | Weight (in packaging), g |
|---|---|---|
| PF RK 550 | 1/2" | 530 |
| PF RK 551 | 3/4" | 460 |

Radiator installation kit

| Product Code | Size, mm | Weight (in packaging), g |
|---|---|---|
| PF RK 552 | 1/2" | 410 |
| PF RK 553 | 3/4" | 330 |

Universal key for radiator fittings

| Product Code | Size, mm | Weight g |
|---|---|---|
| PF RW 559 | 32x28x25x22 | 120 |


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## 5. INSTALLATION INSTRUCTIONS

Connection of bushings, plugs, end caps, and the manual air vent valve to the radiator should be carried out using the plastic key for radiator bushings and plugs (PF RW 559). The tightening torque must not exceed:

18 Nm for the manual air vent valve,
20 Nm for the radiator plug,
25 Nm for the bushings and radiator end caps.

The use of additional sealing materials is not required.

Installation of the intersection nipple should be performed using a radiator spade key with a blade width of 24 mm. The tightening torque must comply with the manufacturer's specifications for the radiators.

Angled brackets should be fixed to concrete or brick walls using screws with a diameter of at least 5 mm and a length of at least 50 mm. Radiator plugs and bushings with silicone gaskets have a special groove for the gasket, therefore the use of other types of gaskets is prohibited.

The connection of the pipeline to the radiator bushings must be made using PTFE-tape (polytetrafluoroethylene), polyamide thread with silicone, or flax fiber as the sealing material.

## 6. OPERATING AND ADJUSTMENT

All products must be operated without exceeding the parameters specified in the technical specifications table.

Air release from the radiator is performed by unscrewing the shut-off screw of the manual air vent valve using a flathead screwdriver or a special 5×5 mm key. It is recommended to turn the valve cap so that the discharge opening is accessible, and place a small container underneath to collect a small amount of the discharged heat carrier.

IMPORTANT: When bleeding air from the radiators, it is strictly forbidden to use an open flame nearby, as the released air may contain a high concentration of hydrogen, which is generated by the reaction between water and aluminum in an alkaline environment.

Air must be released until the heat carrier begins to flow steadily from the outlet, after which the shut-off screw should be tightened.


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## 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.



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# 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 detailes:
- 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** _____

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