



PROFACTOR®
DER DEUTSCHE QUALITÄTSSTANDARD

EN

TECHNICAL DATA SHEET AND USER MANUAL



PRODUCT
CODE

PF BBC 399.10
PF BBC 399.15

**DRAIN BALL VALVE
WITH HOSE CONNECTOR AND CAP**

1. PURPOSE AND SCOPE

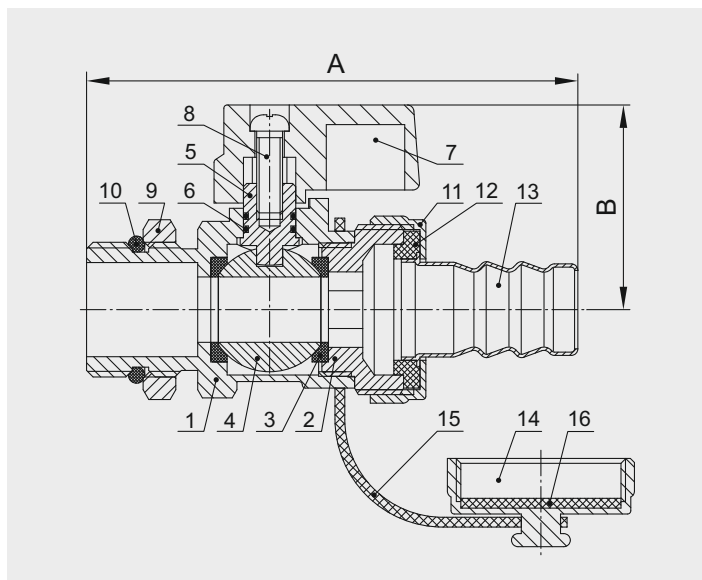
The drain ball valve with cap is used as water-drawing equipment in pipelines of cold (drinking, domestic, and industrial) and hot water supply systems, heating systems, as well as in process pipelines transporting liquids that are non-aggressive to the materials of the valve.

The valve is equipped with a removable hose connector for connecting a drain hose.

2. TECHNICAL SPECIFICATIONS

Product code	PF BBC	399.10	399.15
Nominal size	DN	10	15
	G	3/8"	1/2"
Nominal (rated) pressure PN	bar	16	
Average service life	cycles	4000	
Pressure of the sealed connection between hose connector and hose under artificial flow shut-off	bar	not more than 4	
Working medium temperature	°C	0°C to 75°C	
A	mm	72	73
B	mm	30,5	
Weight	g	125	135
Average service life	year	15	

3. DESIGN



- | | |
|-------------------------|-------------------------------|
| 1 – Body | 9 – Packing nut |
| 2 – Body bushing | 10 – Sealing ring |
| 3 – Ball seat rings | 11 – Hose connector union nut |
| 4 – Ball | 12 – Hose connector gasket |
| 5 – Stem | 13 – Hose connector |
| 6 – Sealing rings | 14 – Cap |
| 7 – Handle | 15 – Strap |
| 8 – Handle fixing screw | 16 – Cap gasket |

The connection between the body (1) and the body bushing (2) is secured with a polymer anaerobic adhesive that has a WRAS approval (approved for use in contact with drinking water). The valve's shut-off mechanism consists of a chrome-plated brass ball (4) operated by a vertical brass stem (5) and sealed with seat rings (3).

The valve design allows it to be connected to the system without the use of additional sealing materials. Tightness of the connection is ensured by the sealing ring (10) and the packing nut (9).

The removable hose connector (13) for connecting a drain hose is attached to the body using the union nut (11). When the valve is not in use, the hose connector with the union nut can be removed, and the opening can be closed with the cap (14).

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

4. MATERIALS

Body (1), Body bushing (2), Packing nut (9), Union nut (11), and Cap (14) are made of Brass CW617N (DIN EN 12165-2011) with nickel-plated surfaces.

Ball seat rings (3) are made of elastic, high-temperature-resistant PTFE (polytetrafluoroethylene).

Ball (4) is made of Brass CW614N (DIN EN 12165-2011) with chrome-plated surfaces.

Stem (5) is made of Brass CW614N (DIN EN 12165-2011).

Handle (7) is made of Aluminum with a paint coating (DIN EN 1676-2010).

Screw (8) is made of Structural steel S235JR (DIN EN 10025-2005).

Hose connector (13) is made of Stainless steel AISI 304 (DIN EN 10088).

Sealing elements (6, 10, 12, 16) and Strap (15) are made of wear-resistant NBR rubber.

5. OPERATING PRINCIPLE

Flow shut-off is achieved by turning the handle 90° clockwise.

6. INSTALLATION INSTRUCTIONS

The drain ball valve with cap can be installed in any position. Before installation, the pipeline must be cleaned of rust, dirt, scale, sand, and other foreign particles that may affect the valve's performance. After the installation of hot and cold water supply systems, they must be flushed with water until the discharged water is free of mechanical impurities.

The valve must be installed so that free access to the shut-off handle is ensured. The product must be securely fixed on the pipeline, and no leakage of the working fluid through the threaded connection is allowed. When installing the valve, it is prohibited to use pipe lever wrenches (KTR) larger than size No. 2. The wrench should only be applied to the hexagonal section of the valve body.

The use of additional sealing materials during installation is not required. Tightness of the connection is ensured by the sealing ring (10) and the packing nut (9).

Check the correctness of installation. After installation, the components of the plumbing systems must be tested for tightness. They should be subjected to testing by hydrostatic (hydraulic) or bubble (pneumatic) methods.

7. OPERATING AND MAINTENANCE

The drain ball valve with cap must be operated without exceeding the pressure and temperature limits specified in the technical specifications table. Installation and removal of the valve must be carried out only when there is no pressure in the system. Allow the equipment to cool down to ambient temperature before performing any work.

It is not allowed to operate the valve with a loose handle fixing screw, as this may damage the stem tailpiece. The valve is not recommended for use with media containing abrasive particles, as this can significantly reduce its service life. Therefore, when the valve is used in systems transporting media with a high content of mechanical impurities, an additional filter must be installed at the inlet.

To ensure long-term reliable operation, it is recommended to open and close the valve once a month as preventive maintenance. Flexible hoses should be attached to the valve fitting using standard screw clamps. The use of any kind of wire to fasten hoses is strictly prohibited.

8. WARRANTY OBLIGATIONS

The warranty period is 60 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



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