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PROFACTOR[®]
DER DEUTSCHE QUALITÄTSSTANDARD

TECHNICAL DATA SHEET AND USER MANUAL



PRODUCT
CODE

PF BWV 361

**THREE-WAY BALL VALVE FOR
HOUSEHOLD APPLIANCES**

1. PURPOSE AND SCOPE

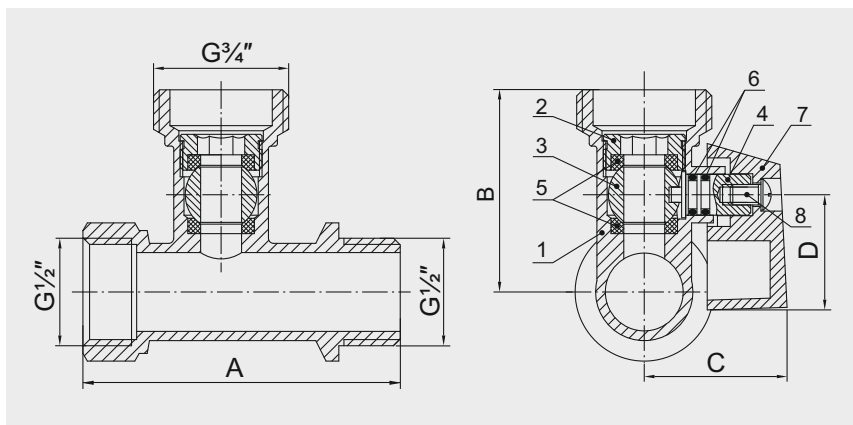
The three-way ball valve is used to connect household appliances (washing machines and dishwashers) to cold and hot water supply pipelines, as well as on any other pipelines conveying media that are non-corrosive to the product materials: water, glycol-based solutions. Maximum glycol content up to 50%.

This valve is installed as an intermediate element in a pipeline line and features a shut-off branch for connecting household appliances with an external 3/4" connection thread.

2. TECHNICAL SPECIFICATIONS

Product Code	PF BWV	361
Nominal Size	DN	15x20x15
	G	1/2"x3/4"x1/2"
Maximum Working Pressure	bar	10
Operating Temperature	°C	-10°C to +100°C
Maximum Ambient Temperature	°C	50°C
Seat Tightness Class	—	"A"
A	mm	62
B	mm	39,5
C	mm	28
D	mm	22,5
Weight	g	133
Average Service Life	years	20

3. DESIGN



- | | | |
|----------------------|-------------------------------|---------------|
| 1 – Body | 4 – Stem | 7 – Handle |
| 2 – Threaded bushing | 5 – Ball seat rings | 8 – Stopscrew |
| 3 – Ball | 6 – Stem seal rings (O-rings) | |

The three-way ball valve consists of a body (1), a threaded bushing (2), a ball (3), a stem (4), and a handle (7). The product body is made of brass grade CW617N (according to the European standard DIN EN 12165-2011), with chrome-plated surfaces.

It is a pipe with a side way housing the valve's ball shut-off mechanism and has a "T" shape. Both ends of the body pipe feature 1/2" connecting parallel threads: internal thread on one end and external thread on the other.

The side way of the body has an external 3/4" parallel thread for connecting a washing machine using a union nut, an internal metric thread for screwing in the threaded bushing (2), as well as a hole for the stem and a recess for the seat ring (5).

The valve's shut-off element is a chrome-plated brass ball (3), sealed by seat rings (5) made of high-temperature resistant elastic PTFE (polytetrafluoroethylene).

The ball is actuated by the stem (4). The valve stem is inserted from inside the body (1) and has a positive stop shoulder. The ball and stem are made of brass grade CW614N (according to DIN EN 12165-2011), with the ball's surfaces chrome-plated.

Stem sealing is ensured by two wear-resistant nitrile butadiene rubber (NBR) O-rings (6). The threaded bushing is made of brass grade CW617N (according to DIN EN 12165-2011) and features a recess for the seat ring (5) and a hexagonal hole in the center. It is screwed into the side way of the body until it stops and clamps the chrome-plated ball (3) between two seat rings (5), ensuring the tightness of the shut-off mechanism. An aluminum handle (7) (according to DIN EN 1676-2010) is attached to the protruding end of the stem using a stopscrew (8).

All 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.

4. OPERATING PRINCIPLE

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

5. INSTALLATION INSTRUCTIONS

The valve may be installed in any orientation. Before installing the valve, the pipeline must be cleaned of rust, dirt, scale, sand, and other foreign particles that could affect the product's performance. The maximum tightening torque for the PF BWV 361 ball valve must not exceed 25 Nm.

Heating systems, heat supply systems, and hot and cold water supply systems must be flushed with water upon completion of installation until the effluent is clear of mechanical suspensions. The valve must not be subjected to loads from the pipeline (bending, compression, tension, torsion, misalignment, vibration, pipe misalignment, uneven tightening of fasteners).

If necessary, supports or compensators must be provided to reduce the load on the product from the pipeline. The misalignment of the connected pipelines must not exceed 3 mm for lengths up to 1 m, plus 1 mm for each subsequent meter.

The valve must be installed in a way that ensures free access to the shut-off handle. The product must be securely fastened to the pipeline; leakage of the working fluid along the threaded connection is not permitted.

Threaded connections must be made using PTFE-tape (polytetrafluoroethylene), polyamide thread with silicone, or flax as sealing thread compound. Care must be taken to ensure that excess material does not enter the ball valve's shut-off mechanism. Verify the installation is correct.

After installation, sanitary system assemblies must be tested for leaks. They must be subjected to hydrostatic (hydraulic) or bubble (pneumatic) testing.

6. OPERATION AND MAINTENANCE

The three-way ball valve must be operated without exceeding the pressure and temperature specified in the Technical Specifications table.

The valve handle must be either in the fully open or fully closed position. The use of ball valves as regulating equipment is not permitted.

Installation and removal of the product must be performed when the system is depressurized. Allow the equipment to cool down to ambient temperature. Using the valve in media containing abrasive components is not recommended, as this may shorten its service life. Therefore, if the valve is used in systems conveying media with a high content of mechanical impurities, the installation of additional filtering equipment upstream is required.

For proper long-term operation, it is recommended to operate (open/close) the valve once a month as a preventive measure.

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