



PROFACTOR®
DER DEUTSCHE QUALITÄTSSTANDARD

EN

TECHNICAL DATA SHEET AND USER MANUAL

PRODUCT CODE

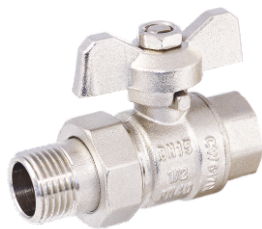
PF UBV 324
PF UBV 325
PF UBV 326
PF UBV 327

PF UBV 324S
PF UBV 325S
PF UBV 326S
PF UBV 327S

PF UBV 324UR
PF UBV 325UR
PF UBV 326UR

PF UBV 324A
PF UBV 325A
PF UBV 326A

PF UBV 324CW
PF UBV 325CW
PF UBV 326CW



**BALL VALVE "STANDARD"
WITH UNION NUT**

1. PURPOSE AND SCOPE

The union ball valve is used as shut-off equipment on pipelines for drinking water, domestic, and industrial applications, hot water supply, heating, compressed air, liquid hydrocarbons, as well as on process pipelines conveying fluids that are non-corrosive to the valve materials. The valve with a union nut enables the creation of easily detachable connections in pipeline plumbing systems.

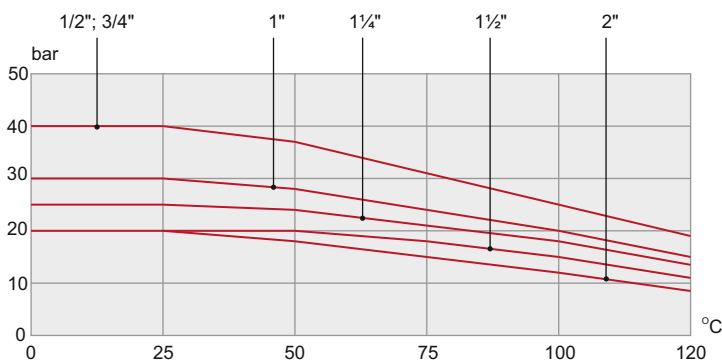
2. TECHNICAL SPECIFICATIONS

Table 1

Parameter	Value	Standard
Nominal Size (DN), mm	DN15 – DN50	ISO 6708
Connection Thread (G)	1/2" – 2"	ISO 228/1, DIN 259
Nominal Pressure (PN), bar	20 – 40 (see Table 3)	—
Operating Temperature, °C	–20°C to +120°C (see chart)	—
Seat Tightness Class	"A"	—
Effective Diameter Ratio (Valve Bore to Pipe Bore), %	>95 Full bore valve	—
Average Service Life, cycles	30 000	—
Repairability	Repairable	IEC 60050 (191):1990-12, NEQ
Average Service Life, years	30	—

The valves are in an accordance with DIN EN 13828.

Chart of Maximum Working Pressure vs. Temperature:



3. DESIGN

The union ball valve may have either a straight or an angle body. The valve body is made of two nickel-plated brass parts (1) and (2), connected by a thread secured with an anaerobic polymer adhesive that has WRAS approval (approved for contact with potable water).

The nickel-plated brass union (12) is connected to the body via a nickel-plated brass union nut (11). An O-ring (10) ensures the seal of this connection. This design results in an easily detachable assembly, which is very convenient for installation and operation.

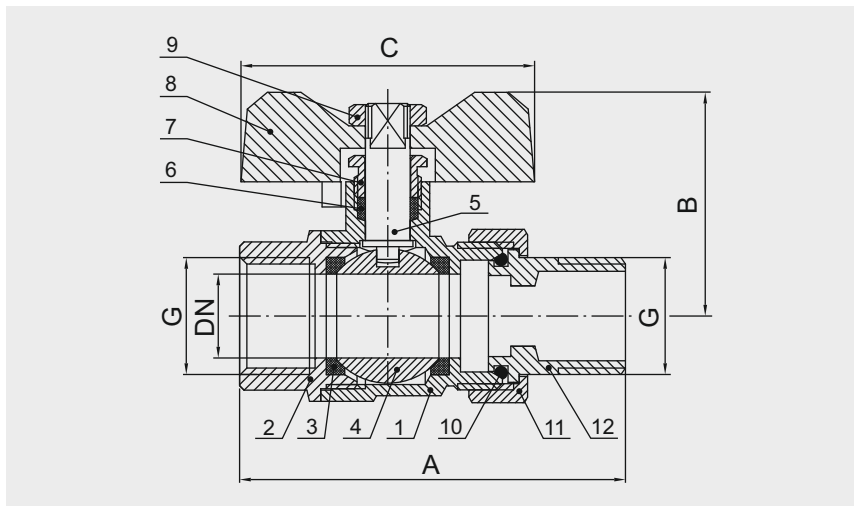
The valve's shut-off mechanism consists of a chrome-plated brass ball (4), actuated by a vertical brass stem (5). The ball seal seats use PTFE rings (3). A PTFE stem packing (6), tightened by a brass threaded gland (7), ensures stem sealing. The valve stem is non-rising, as it is inserted from inside the body (1) and features a positive stop shoulder. A painted aluminum wing-type handle (8) is attached to the protruding end of the stem using a nut (9). The handle has a special provision for sealing/tamper-proofing.

Flow shut-off is achieved by turning the handle 90° clockwise. For better grip of the thread sealing material during installation, the external connecting thread of the valve union has knurling.

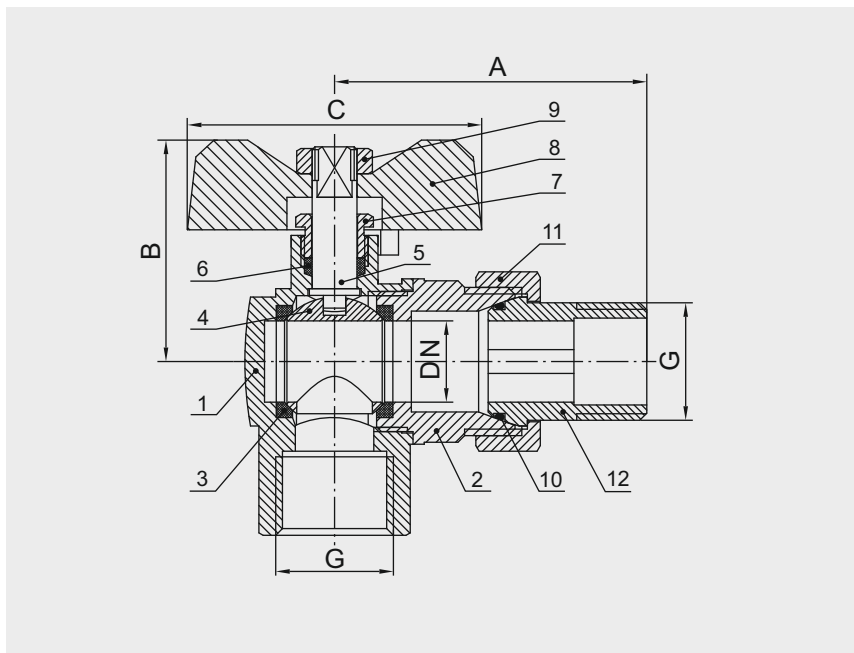
A distinctive feature of the valves PF UBV 324A – PF UBV 326A and PF UBV 324S – PF UBV 327S is the tapered design of the unions (12), which ensures maximum joint sealing via the O-ring (10) and union nut (11).

The ball valves PF UBV 324UR – PF UBV 326UR have a specially designed union with a retaining ring (13) and a sealing ring (14), which eliminates the need for additional sealing materials when installing the union onto a connected appliance or pipe fitting. Such valves are often used in heating systems for radiator connections.

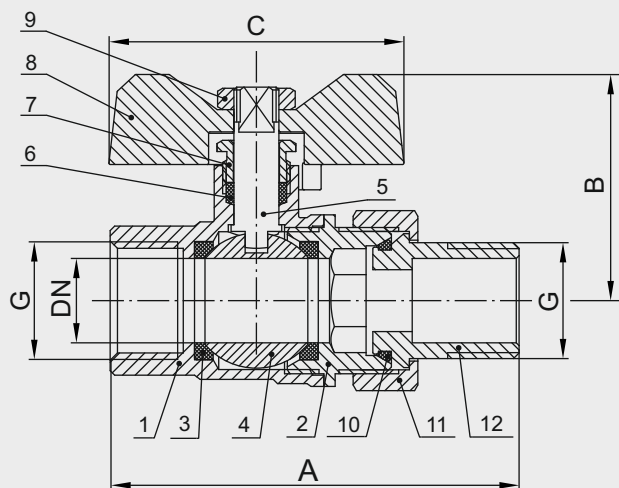
Straight Union Ball Valve PF UBV 324 – 327; PF UBV 324CW – 326CW



Angle Union Ball Valve PF UBV 324A – 326A



Straight Union Ball Valve PF UBV 324S – 327S



Straight Union Ball Valve with O-ring Seal PF UBV 324UR – PF UBV 326UR

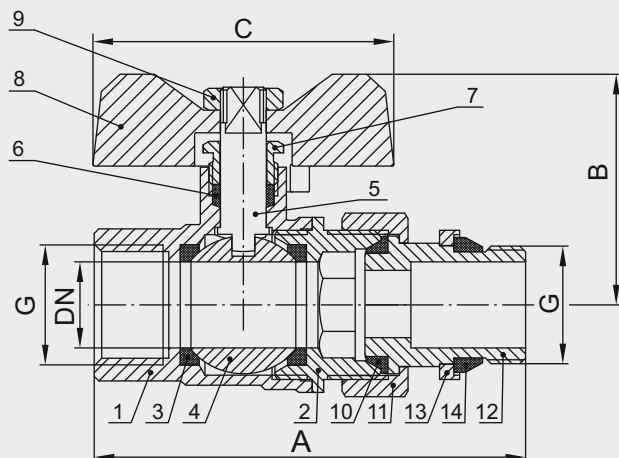


Table 2

Pos.	Name	Material	Standard
1	Body	Brass CW617N	DIN EN 12165
2	Body Insert	Brass CW617N	DIN EN 12165
3	Ball Seat Rings (O-rings)	PTFE	FDA21 CFR177.1550
4	Ball	Brass CW614N	DIN EN 12165
5	Stem	Brass CW614N	DIN EN 12165
6	Stem Packing	PTFE	FDA21 CFR177.1550
7	Gland Nut	Brass CW614N	DIN EN 12165
8	Wing Handle	Aluminum Al	DIN EN 1676
9	Handle Nut	Steel S235JR	DIN EN 10025
10	Union O-ring	EPDM	DIN ISO 3601
11	Union Nut	Brass CW617N	DIN EN 12165
12	Union	Brass CW617N	DIN EN 12165
13	Retaining Ring	Brass CW614N	DIN EN 12165
14	Sealing Ring (O-ring)	EPDM	DIN ISO 3601

4. NOMENCLATURE AND DIMENSIONS

Straight Union Ball Valve PF UBV 324 – 327; PF UBV 324CW – 326CW

Table 3.1

Product Code	DN	G	PN, bar	A, mm	B, mm	C, mm	Weight, g
PF UBV 324 PF UBV 324CW	15	1/2"	40	71	40	52,5	220
PF UBV 325 PF UBV 325CW	20	3/4"	40	81	43,5	52,5	330
PF UBV 326 PF UBV 326CW	25	1"	30	90	54,5	63	530
PF UBV 327	32	1¼"	25	110,5	62,5	74,5	830

The models PF UBV 324CW, PF UBV 325CW, and PF UBV 326CW are identical in their specifications to the models PF UBV 324, PF UBV 325, and PF UBV 326, respectively, but are produced with a full chrome-plated finish, including internal surfaces and the handle.

Angle Union Ball Valve PF UBV 324A – 326A

Table 3.2

Product Code	DN	G	PN, bar	A, mm	B, mm	C, mm	Weight, g
PF UBV 324A	15	1/2"	40	56	40	52,5	252
PF UBV 325A	20	3/4"	40	65	43	52,5	402
PF UBV 326A	25	1"	30	78	53,5	63	680

Straight Union Ball Valve PF UBV 324S – 327S

Table 3.3

Product Code	DN	G	PN, bar	A, mm	B, mm	C, mm	Weight, g
PF UBV 324S	15	1/2"	40	72,7	40	52,5	225
PF UBV 325S	20	3/4"	40	81	43,5	52,5	340
PF UBV 326S	25	1"	30	99	54,5	63	575
PF UBV 327S	32	1¼"	25	114	62,5	74,5	855

Straight Union Ball Valve with O-ring Seal PF UBV 324UR – 326UR

Table 3.4

Product Code	DN	G	PN, bar	A, mm	B, mm	C, mm	Weight, g
PF UBV 324UR	15	1/2"	40	75,5	40	52,5	230
PF UBV 325UR	20	3/4"	40	84,5	43,5	52,5	345
PF UBV 326UR	25	1"	30	100	54,5	63	585

5. INSTALLATION INSTRUCTIONS

The valve may be installed in any orientation. 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 valve 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.

Sealing of threaded connections must be performed using PTFE-tape (fluoropolymer sealing material — polytetrafluoroethylene), polyamide thread with silicone, flax with special pastes, or other sealing materials that ensure joint tightness at the design temperature and pressure of the working medium, and which are approved for use according to established procedures.

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

6. OPERATING AND MAINTENANCE

The valve must be operated without exceeding the pressure and temperature specified in p. 2. Operating the valve with a loose handle attachment nut is not permitted, as this may damage the stem end.

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.

If a minor leak occurs from the stem seal under the handle during operation, the handle must be removed, and the gland packing nut must be tightened until the leak stops.

7. WARRANTY OBLIGATIONS

The warranty period is 84 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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