



PROFACTOR[®]
DER DEUTSCHE QUALITÄTSSTANDARD

EN

TECHNICAL DATA SHEET AND USER MANUAL

PRODUCT CODE

PF FBV 900
PF FBV 901
PF FBV 902
PF FBV 903
PF FBV 904
PF FBV 905
PF FBV 906
PF FBV 907
PF FBV 908
PF FBV 909
PF FBV 910
PF FBV 911
PF FBV 912
PF FBV 913
PF FBV 914
PF FBV 915
PF FBV 916
PF FBV 917
PF FBV 918
PF FBV 919
PF FBV 920
PF FBV 921
PF FBV 922
PF FBV 923



**BALL VALVE
"TREND"**

1. PURPOSE AND SCOPE

The PROFACOR® TREND 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.

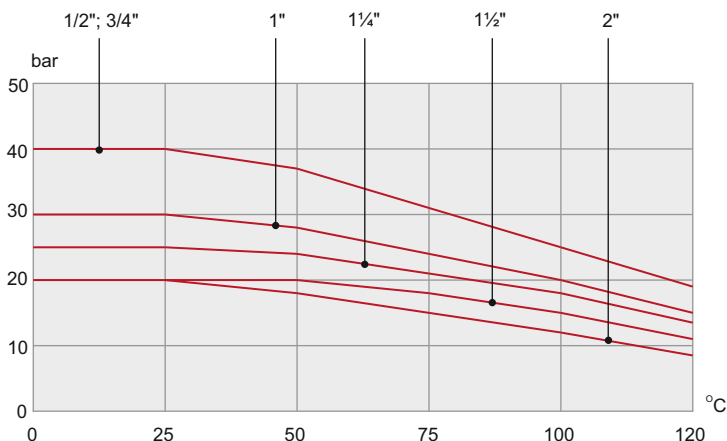
2. TECHNICAL SPECIFICATIONS

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)	20 – 40 (see Table 3)	—
Operating Temperature, °C	–20°C to +120°C (see chart)	—
Seat Tightness Class	"A"	—
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

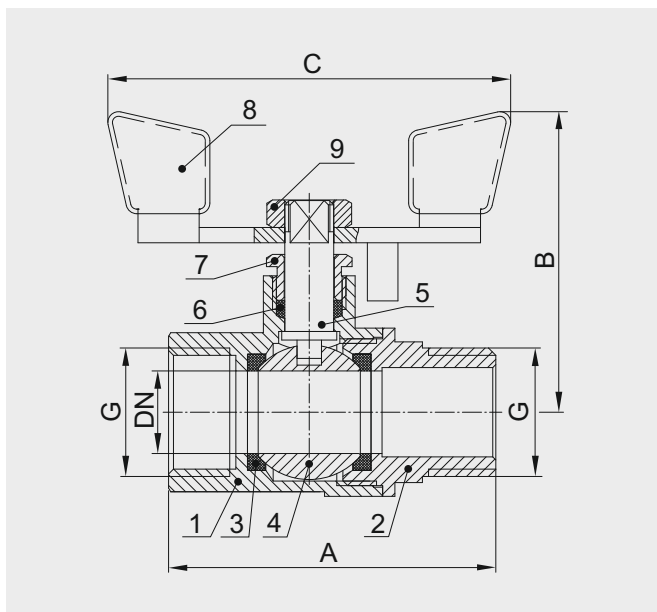
The body of the PROFACTOR® TREND valve consists of two nickel-plated brass parts (1) and (2), connected by a thread secured with an anaerobic polymer adhesive that has WRAS approval (approved for contact with potable water).

The valve's shut-off mechanism consists of a chrome-plated brass ball (4), actuated by a vertical brass stem (5). The 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. The handle (8) is attached to the stem using a nut (9).

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 has knurling.

Ball Valve "TREND", F/M, Butterfly Handle



Ball Valve "TREND", F/F, Lever Handle

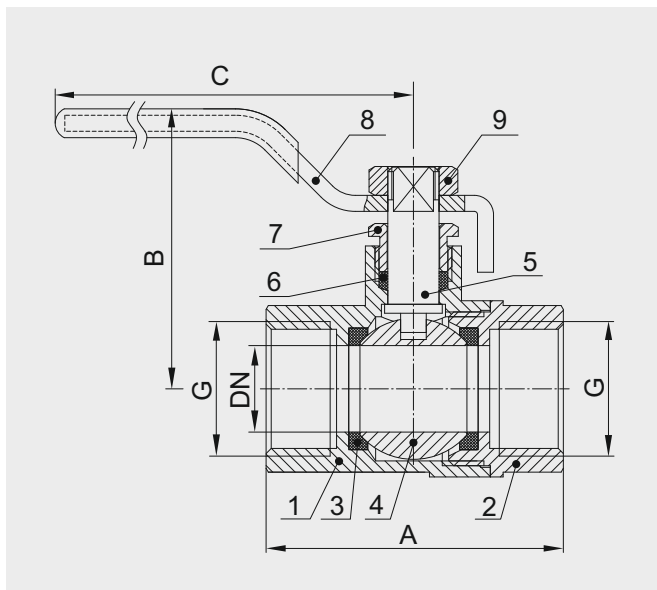


Table 2

Pos.	Name	Material	Standard
1	Body	Brass CW617N	DIN EN 12165
2	Body Insert	Brass CW617N	DIN EN 12165
3	Ball Seals	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	Steel S235JR with polymer coating	DIN EN 10025
9	Handle Nut	Steel S235JR	DIN EN 10025

4. NOMENCLATURE AND DIMENSIONS

Ball Valve "TREND", F/F, Butterfly Handle

Table 3.1

Product Code	DN	G	PN, bar	A, mm	B, mm	C, mm	Weight, g
PF FBV 900	15	1/2"	40	46,5	49	65	155
PF FBV 901	20	3/4"	40	53	52	65	215
PF FBV 902	25	1"	30	61	59	72	332

Ball Valve "TREND", F/M, Butterfly Handle

Table 3.2

Product Code	DN	G	PN, bar	A, mm	B, mm	C, mm	Weight, g
PF FBV 903	15	1/2"	40	53,5	49	65	165
PF FBV 904	20	3/4"	40	58,7	52	65	233
PF FBV 905	25	1"	30	65	59	72	335

Ball Valve "TREND", M/M, Butterfly Handle

Table 3.3

Product Code	DN	G	PN, bar	A, mm	B, mm	C, mm	Weight, g
PF FBV 906	15	1/2"	40	54,7	49	65	160
PF FBV 907	20	3/4"	40	60,7	52	65	230
PF FBV 908	25	1"	30	65,5	59	72	346

Ball Valve "TREND", F/F, Lever Handle

Table 3.4

Product Code	DN	G	PN, bar	A, mm	B, mm	C, mm	Weight, g
PF FBV 909	15	1/2"	40	46,5	48	87,5	165
PF FBV 910	20	3/4"	40	53	52	87,5	226
PF FBV 911	25	1"	30	61	60	104	350
PF FBV 912	32	1¼"	25	75	66	120	621
PF FBV 913	40	1½"	20	85,2	76	150	868
PF FBV 914	50	2"	20	96,5	84,5	150	1368

Ball Valve "TREND", F/M, Lever Handle

Table 3.5

Product Code	DN	G	PN, bar	A, mm	B, mm	C, mm	Weight, g
PF FBV 915	15	1/2"	40	53,5	48	87,5	175
PF FBV 916	20	3/4"	40	58,7	52	87,5	243
PF FBV 917	25	1"	30	65	60	104	350
PF FBV 918	32	1¼"	25	80	66	120	628
PF FBV 919	40	1½"	20	93	76	150	911
PF FBV 920	50	2"	20	103,5	84,5	150	1400

Ball Valve "TREND", M/M, Lever Handle

Table 3.6

Product Code	DN	G	PN, bar	A, mm	B, mm	C, mm	Weight, g
PF FBV 921	15	1/2"	40	54,7	48	87,5	170
PF FBV 922	20	3/4"	40	60,7	52	87,5	242
PF FBV 923	25	1"	30	65,5	60	104	361

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. OPERATION 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 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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