TECHNICAL DATA SHEET

Butterfly valve ELEPHANT WBV4242E-2W-Fb-ISO DN50-200 10 bar UPVC, interflange, with ISO flange and bare square stem

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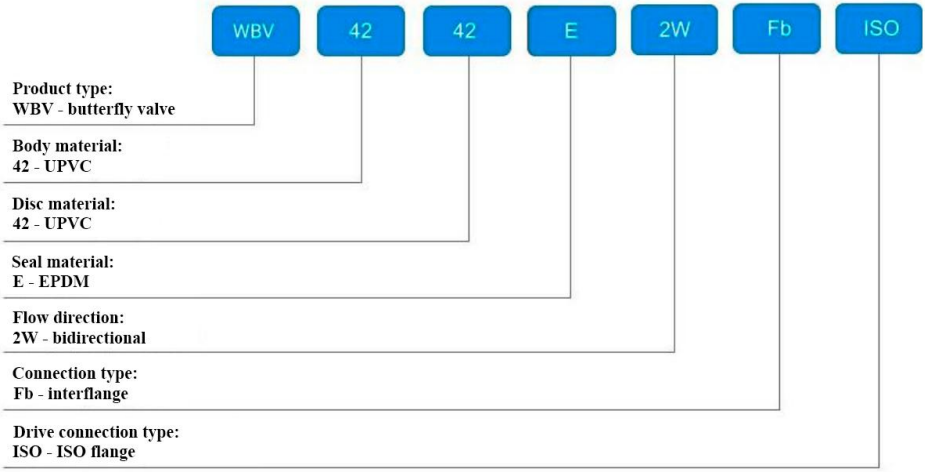
1. GENERAL INFORMATION ABOUT THE PRODUCT

1.1. Product name: Disc rotary valve Elephant WBV4242E-2W-Fb-ISO DN50-200 10 bar UPVC, interflange, with ISO flange and bare square stem.
1.2. Purpose: The butterfly valve made of UPVC (unplasticized polyvinyl chloride) is designed to reliably shut off and regulate the flow of aggressive and neutral liquids at moderate pressures and temperatures. Due to its high chemical resistance and corrosion resistance, it is widely used in the chemical industry, water treatment systems and municipal infrastructure.
1.3. Description: UPVC (unplasticized polyvinyl chloride) has high chemical resistance, but is sensitive to impact loads, especially at low temperatures. Installation should exclude mechanical stress in the pipeline to prevent damage to the body. The material is subject to aging and cracking with prolonged exposure to ultraviolet (UV) radiation. It is recommended to use the fittings indoors or to use protective casings/coatings for outdoor installation. UPVC is resistant to most acids, alkalis, salts and aqueous solutions, which contributes to an increased service life of the fittings. However, the material is not recommended for use with aromatic hydrocarbons, chlorinated solvents and a number of organic compounds.
1.4. Operating principle: The valves are opened and closed by turning the disk 90.

1.5. Decoding of the designation:



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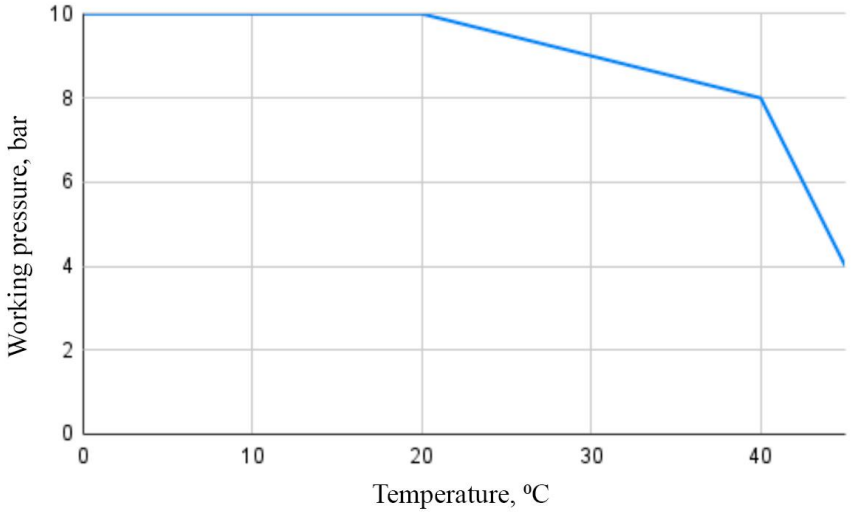
2. KEY TECHNICAL DATA AND CHARACTERISTICS

Table 1. Key parameters

Nominal diameter DN, mm	50-200
Nominal pressure, bar	10
Working environment temperature, ºC	from 0 to +45
Working environment	water, air without impurities of oil and fat, waste water and other media neutral to the material
Ambient temperature, ºC	from 0 to +40
Flow direction	bilateral
Sealing class	A
Connection to the pipeline	interflange
Body material	UPVC
Disc material	UPVC
Seal material	EPDM
Application	water supply systems, water treatment, sewerage, industrial pipelines
Average service life, years	30 (in a non-aggressive environment and average pressure and temperature values)
Average resource, opening/closing cycles	70 000

«Temperature-pressure» graph



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3. MAIN MATERIALS OF PARTS

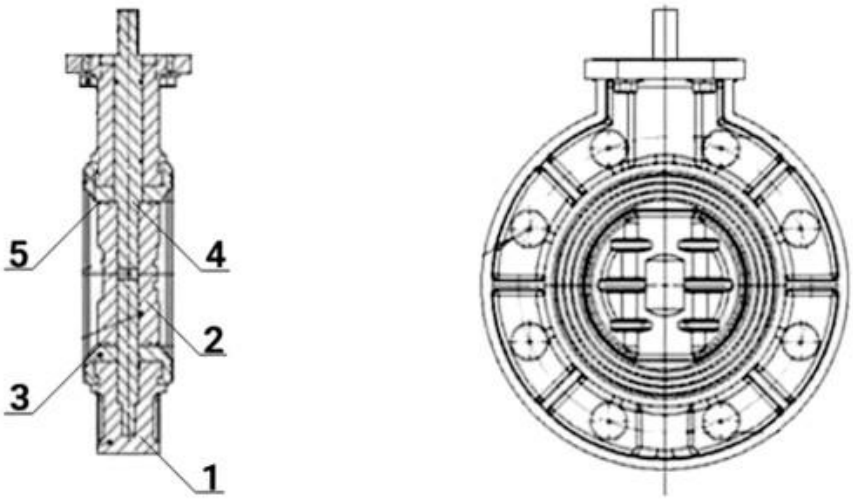

Figure 1 - Detailing

Table 2. Parts specification

№	Part name	Material
1	Body	UPVC
2	Disc	UPVC
3	Seat seal	EPDM
4	Rod	Steel 45
5	Rod seal	EPDM

4. WEIGHT AND DIMENSIONAL PARAMETERS

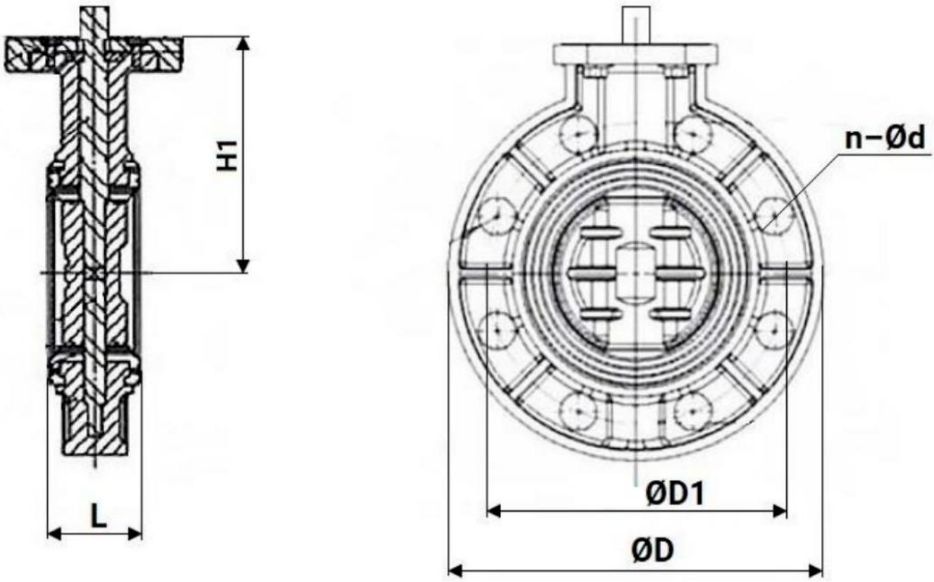

Figure 2 – Dimensions

Table 3. Dimensions and weight

	ØD, mm	ØD1, mm	L, mm	H1, mm	n-Ød, pcs-mm	Weight, kg
DN50	158	120,5	45	98	4-Ø19,3*24,5	0,85
DN65	179	130,5	45	110	4-Ø19,3*24,5	1,00
DN80	195	154	48	131	8-Ø20*24	1,37
DN100	226,5	181	54	155	8-Ø20*27	2,02
DN125	253,5	208	63	169	8-Ø23*27,5	3,26
DN150	280	234	69	185	8-Ø23*28	3,95
DN200	340	291,5	89	231	8-Ø23*28,5	6,90

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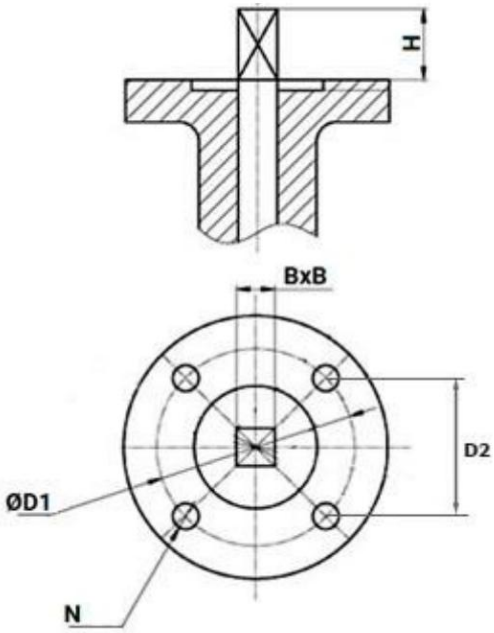

Figure 3 – ISO flange dimensions

Table 4. ISO flange specifications and Torques

	ØD1, mm	D2, mm	H, mm	BxB, mm	N, pcs	Torque	ISO 5211
DN50	50/70	36/49,5	13	11x11	4	8	F05/F07
DN65	50/70	36/49,5	13	11x11	4	8	F05/F07
DN80	50/70	36/49,5	17	11x11	4	13	F05/F07
DN100	50/70	36/49,5	17	14x14	4	23	F05/F07
DN125	70/90/102	49,5/63,5/72	22	17x17	4	38	F07/F10
DN150	70/90/102	49,5/63,5/72	22	17x17	4	40	F07/F10
DN200	70/90/102	49,5/63,5/72	22	17x17	4	52	F07/F10

5. INSTALLATION AND OPERATION INSTRUCTIONS

5.1. Only personnel who have studied the design of the valves, safety rules, and the requirements of the installation, adjustment, operation, and maintenance manual, and who have been certified for the relevant type of work, are permitted to install, operate, and maintain the valves.
5.2. Valves must be installed on pipelines for media and parameters specified in the product passport.
5.3. Before installation, it is necessary to clean (blow out) the pipelines of dirt, sand, and scale.
5.4. Rotary valves should only be installed between collar flanges.
5.5. The inner diameter of the flanges must correspond to the nominal diameter of the disc rotary valve.
5.6. The flanges must be positioned parallel to each other at a distance that allows the valve to be placed between them freely (without excessive effort). The sealing surfaces of the flanges must be free of pits, shells, burrs, and other surface defects.
5.7. Before starting installation, the disc of the rotary valve must be slightly opened, but so that the disc does not protrude beyond the body of the disc rotary valve.
5.7.1. Center the rotary valve and slightly tighten the bolts (studs), but do not tighten them completely. Open the rotary valve disc to the «fully open» position.
5.7.2. Tighten the bolts (studs) so that the flanges and the body (metal part) of the valve are in contact. Flange connections should be tightened evenly in three or even four passes, in a «crosswise» sequence.
5.7.3. The bolts on the interflange connections must be tightened evenly around the entire perimeter. Next, slowly close and open the disc rotary valve. If the valve has been installed correctly, it should open and close freely.
5.8. Leak tests must be carried out in accordance with the procedure established at the enterprise.
5.9. During operation, periodic inspections (scheduled maintenance) should be carried out at intervals specified in the schedule, depending on the operating mode of the system (unit), but not less than once a month.
5.10. During inspections, it is necessary to check: the general condition of the valve; the condition of the fastening connections; tightness of rod seals.
5.11. To ensure occupational safety, it is strictly forbidden to carry out work to eliminate defects when there is pressure from the working medium in the pipeline.

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6. TRANSPORTATION AND STORAGE CONDITIONS

6.1. Transportation and storage conditions - in accordance with the procedures established at the enterprise.
6.2. Valves can be transported by any means of transport. However, the installation of valves on vehicles must exclude the possibility of mechanical damage, and the internal surfaces must be protected from contamination.
6.3 During transportation and storage, the valve must be in a partially closed position, i.e., the shut-off disc must not be in close contact with the surface of the cuff, without deforming the rubber.
6.4. When loading and unloading, the valves should be slung by the body.
6.5. Valves should be stored in dry warehouses, protected from direct sunlight and at least 1 m away from heat-emitting devices, and should not be exposed to oils or gasoline.
6.6. During long-term storage, the gate valve must be inspected periodically (at least twice a year), external dirt and rust must be removed, and, if necessary, the seat seal must be treated with silicone grease spray.

7. DISPOSAL

7.1. Disposal of the product (remelting, burial, resale) is carried out in accordance with the procedure established at the enterprise.
7.2. Before sending for disposal, any remaining working medium must be removed from the fittings. Methods for removing the working medium and decontaminating the fittings must be approved in accordance with the established procedure at the enterprise operating the product.

8. WARRANTY OBLIGATIONS

8.1. Warranty period - 12 months from the date of commissioning, but not more than 18 months from the date of sale.
8.2. The warranty applies to equipment installed and used in accordance with the installation instructions and product specifications described in this data sheet.
8.3. The manufacturer guarantees compliance of the product with safety requirements, provided that the consumer complies with the rules of transport, storage, installation and operation.
8.4. The warranty covers all defects caused by the fault of the manufacturer.
8.5. The warranty does not apply:

- parts and materials of the product subject to wear and tear;
- for cases of damage caused by:
    - modifications to the original design of the product;
    - violation of general installation recommendations;
    - faults caused by improper maintenance and storage; improper operation and use of the equipment.

9. WARRANTY TERMS

9.1. Claims to the quality of the goods may be made during the warranty period.
9.2. Defective products are repaired or exchanged for new ones free of charge during the warranty period. ELEPHANT decides whether to replace or repair the product. The replaced product or its parts resulting from the repair shall become the property of 'ELEPHANT'.
9.3. Costs related to dismantling, installation and transport of the defective product during the warranty period shall not be reimbursed to the Buyer.
9.4. If the claim is unfounded, the Buyer shall pay the costs of diagnostics and expertise of the product.
9.5. Products are accepted for warranty repair (as well as for return) fully assembled.

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WARRANTY CARD №____

№	Product Name	Packs

Name and address of the trading organisation

_____

Date of sale _____ Seller's signature _____

Stamp or seal of the trading organisation Acceptance stamp

I agree with the terms and conditions of the warranty:
Buyer _____ (signature)

Warranty period - 12 months from the date of commissioning, but not more than 18 months from the date of sale.

For warranty repairs, complaints and product quality claims, please contact ELEPHANT at: Carrer d'Aragó,264,3-1,08007 Barcelona, Spain E-mail address: sales@valveelephant.com.

When making a complaint about the quality of goods, the buyer shall present the following documents:

1. A free-form application, which shall specify:
   - name of the organisation or full name of the buyer, actual address, contact telephone numbers;
   - name and address of the organisation that carried out the installation;
   - basic parameters of the system in which the product was used;
   - a brief description of the defect.
2. Document confirming the purchase of the product (delivery note, receipt)..
3. Act of hydraulic test of the system in which the product was installed.
4. This completed warranty card.

A note on the return or exchange of goods _____

Date: «___»_____202__yr. Caption _____