



Manufacturer of shut-off and control valves

TECHNICAL DATA SHEET

Disc rotary valve Elephant WBV_{x32x}-2W-Fb-H DN40-300
16 bar stainless/carbon steel, wafer-type, with handle



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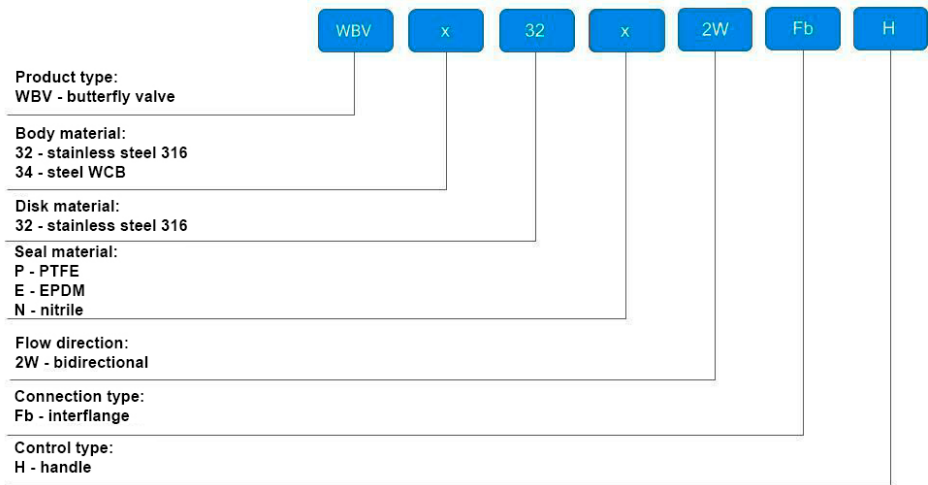
1. GENERAL INFORMATION ABOUT THE PRODUCT

1.1. Product name: Disc rotary valve Elephant WBVx32x-2W-Fb-H DN40-300 16 bar stainless/carbon steel, wafer type, with handle.

1.2. Purpose: The rotary disc valve is designed for use as a shut-off or control valve for flow control in heating, water supply systems, and in technological processes in the food, chemical, oil and gas, pulp and paper, and other industries.



1.3. Decoding of the designation:



2. KEY TECHNICAL DATA AND CHARACTERISTICS

Table 1. Key parameters

Nominal diameter DN, mm	40 – 300
Nominal pressure, bar	16
Flow direction	bilateral
Working medium temperature, ° C	from -20 to +85 for NBR from -20 to +120 for EPDM from -29 to +180 for PTFE
Ambient temperature, °C	from -40 to +120
Tightness in the gate	A
Working environment	EPDM: cold and hot water, air without oil and grease impurities, other media neutral to the material PTFE: water, alkalis, acids, solvents, and oxidizers NBR: water, mineral oils, hydrocarbons, oils, and fats
Body material	WCB steel or AISI 316L stainless steel
Disc material	AISI 316L stainless steel
Connection to the pipeline	between flanges
Control type	handle
Average service life, years	10
Average resource, opening/closing cycles	10 000



3. MAIN MATERIALS OF PARTS

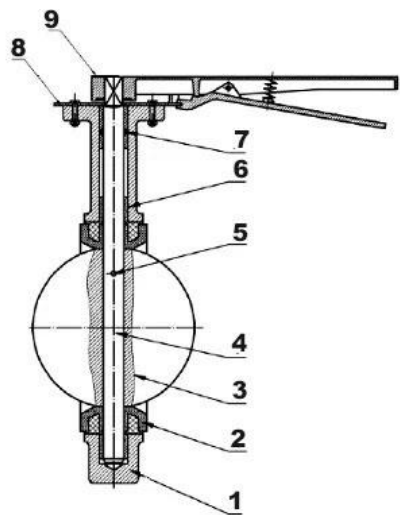


Figure 1 – Detailing

Table 2. Parts specification

Nº	Name	Material
1	Housing	WCB steel or AISI 316L stainless steel
2	Cuff	EPDM, PTFE, NBR
3	Disc	AISI 316L stainless steel
4	Rod	SS 416/2Cr13 stainless steel
5	Pin	AISI 316L stainless steel
6	Bushing	EPDM
7	Sealing ring	EPDM
8	Fixing plate	Carbon steel
9	Handle with lock	Carbon steel

4. WEIGHT AND TECHNICAL SPECIFICATIONS

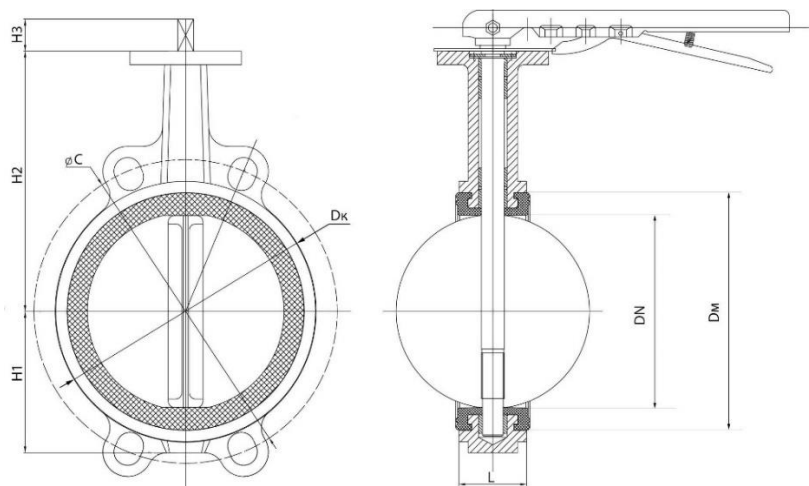


Figure 2 – Dimensions

Table 3. Dimensional characteristics WBV3432x-2W-Fb-H, WCB steel body for DN40

DN	Diameter of the passage section, mm	H1	H2	H3	ØDm	ØDk	L	ØC
		mm						
40	50	66	126	25	73	90	43	125

Table 3.1. Dimensions of WBV3232x-2W-Fb-H, 316L stainless steel housing for DN40

DN	Diameter of the passage section, mm	H1	H2	H3	ØDm	ØDk	L	ØC
		mm						
40	50	62	126	25	73	90	43	125



Table 3.2. Dimensional characteristics WBV3432x-2W-Fb-H, WCB steel body for DN50-300

DN	H1	H2	H3	ØDm	ØDk	L	ØC
	mm						
50	66	126	25	73	90	43	125
65	74	137	25	85	103	46	145
80	91	146	25	100	116	46	160
100	105	166	25	131	151	52	180
125	121	182	25	155	174	56	210
150	134	198	25	184	205	56	240
200	169	223	35	234	255	60	295
250	200	270	35	288	315	68	355
300	240	299	35	340	375	78	410

Table 3.3. Dimensions of WBV3232x-2W-Fb-H, 316L stainless steel housing for DN50-300

DN	H1	H2	H3	ØDm	ØDk	L	ØC
	mm						
50	62	126	25	73	90	43	125
65	72	133	25	85	103	46	145
80	91	142	25	100	116	46	160
100	107	165	25	131	151	52	180
125	121	183	25	155	174	56	210
150	134	195	25	184	205	56	240
200	171	236	35	234	255	60	295
250	197	276	35	288	315	68	355
300	240	315	35	340	375	78	410



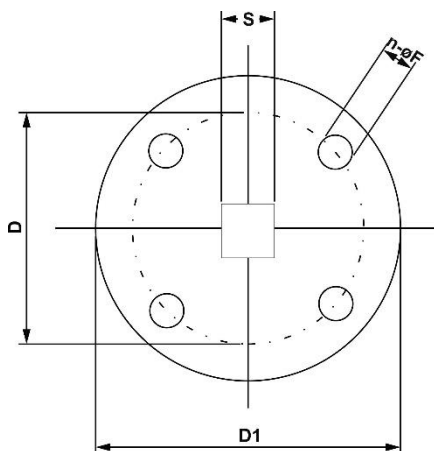


Figure 3 – ISO flange dimensions

Table 4. ISO dimensions and type, connection flange data, and weight

DN	D1	D	S (stem)	n-ØF, pcs-mm	ISO 5211	Diameter and number of holes in pipeline connection flanges, pcs-mm	Weight, kg
	mm						
40	74	50	9x9	4 - Ø8	F05	4 - Ø19	2
50	74	50	9x9	4 - Ø8	F05	4 - Ø19	2
65	74	50	9x9	4 - Ø8	F05	4 - Ø19	2.3
80	74	50	9x9	4 - Ø8	F05	8 - Ø19	2.6
100	90	70	11x11	4 - Ø10	F07	8 - Ø19	4.1
125	90	70	14x14	4 - Ø10	F07	8 - Ø19	5.2
150	90	70	14x14	4 - Ø10	F07	8 - Ø23	6.6
200	113	102	17x17	4 - Ø12	F10	12 - Ø23	11.5
250	113	102	22x22	4 - Ø12	F10	12 - Ø28	17.3
300	138	102	22x22	4 - Ø12	F10	12 - Ø28	27.8



Table 5. Maximum torques

DN	Torque at $\Delta P=16$ bar, Nm		
	EPDM	NBR	PTFE
40	16	24	42
50	16	24	45
65	18	30	50
80	25	65	55
100	85	130	128
125	95	145	150
150	110	235	272
200	185	240	400
250	285	370	410
300	420	460	600

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. 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.

5.10. Types, scope, and frequency of maintenance.

5.10.1. 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.

5.10.2. During inspections, it is necessary to check:

- a) the general condition of the valve;
- b) the condition of the fastening connections;
- c) the tightness of the connection points relative to the external environment;
- d) the operability and ability of the valve to perform its functions.

5.10.3. To ensure a long service life of the valve, it is necessary to periodically open and close it completely or partially during prolonged “downtime” of more than three months.

5.10.4. Inspections and checks shall be carried out by personnel servicing the system or unit who have the necessary competence and qualifications.



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'.

15.3. Costs related to dismantling, installation and transport of the defective product during the warranty period shall not be reimbursed to the Buyer.

15.4. If the claim is unfounded, the Buyer shall pay the costs of diagnostics and expertise of the product.

15.5. Products are accepted for warranty repair (as well as for return) fully assembled.



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 _____

