TECHNICAL DATA SHEET

Double leaf lobe check valve
ELEPHANT VCL2-1111E-Fb DN40-300 16 bar cast iron, compact flanged

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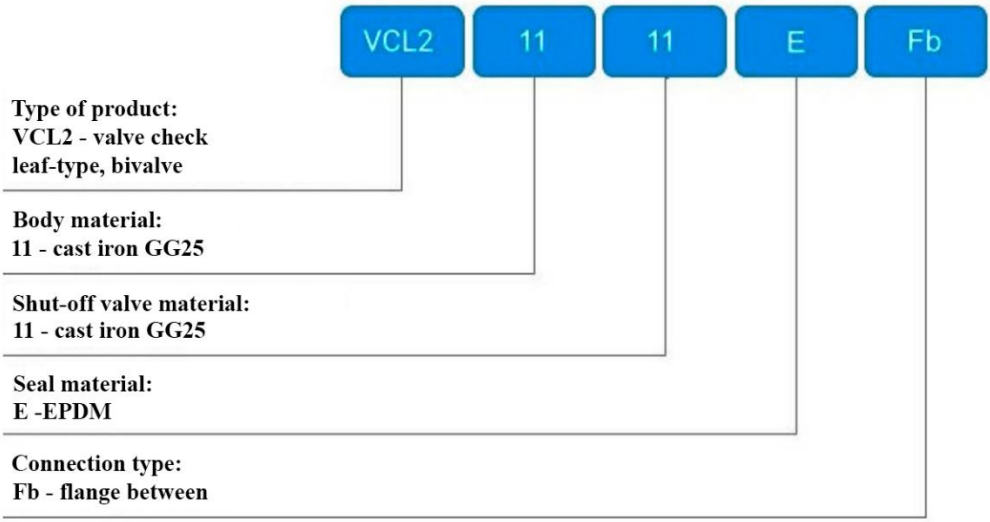
Carrer d'Aragó,264,3-1,08007 Barcelona, Spain

1. GENERAL INFORMATION ABOUT THE PRODUCT

1.1. Product name: Double leaf lobe check valve ELEPHANT VCL2-1111E-Fb DN40-300 16 bar cast iron, compact flanged.
1.2. Purpose: The double-leaf check valve is designed to prevent the flow direction of the working medium in the pipeline from changing in the opposite direction.
1.3. Operating principle: Under the action of the direct flow of the working medium, the locking flaps rise, opening the passage. When the pressure drops, the spring force returns the flaps to their original position, closing the passage and not allowing the working medium to pass in the opposite direction.

*image may differ from original

1.4. Decoding of the designation:



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2. KEY TECHNICAL DATA AND CHARACTERISTICS

Table 1. Key parameters

Nominal diameter DN, mm	40-300
Nominal pressure, bar	16
Working environment temperature, ºC	from -20 to +120
Working environment	hot water; cold water; other liquids that are not aggressive to the materials of the product
Device type	bivalve
Direction of supply of working medium	arrow on the valve body
Sealing class	A
Minimum opening pressure, bar	0,5
Connection to the pipeline	flange between
Body material	cast iron GG25
Disc material	cast iron GG25
Application	cold and hot water supply systems; treatment facilities; industrial pipelines
Service life, years	5

Table 2. Flow capacity

	Nominal flow capacity Kv (for water with a density of 1000 kg/m3), m3/h
DN40	23
DN50	36
DN65	78
DN80	133
DN100	245
DN125	478
DN150	688
DN200	1200
DN250	2050
DN300	3180

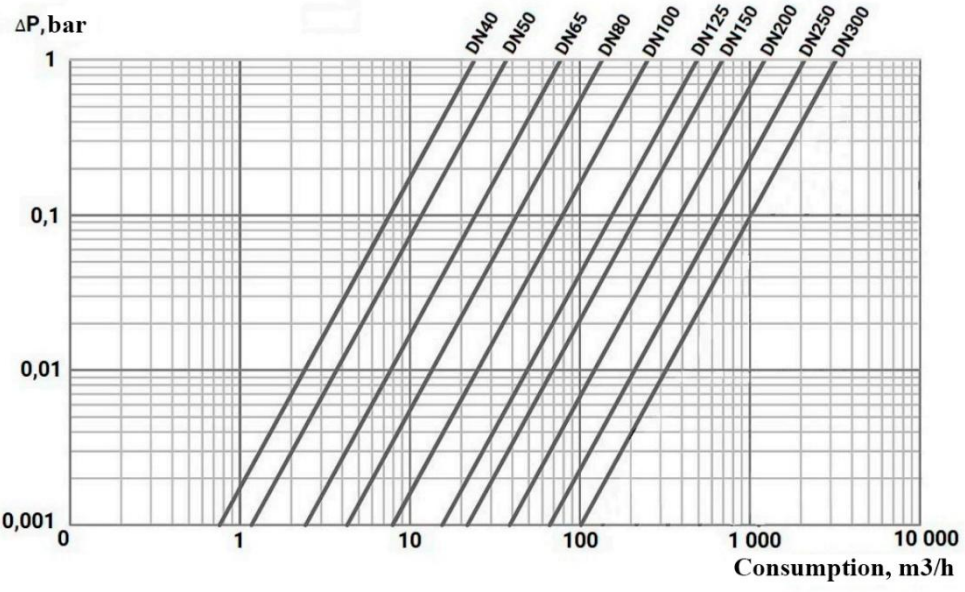

Figure 1 - Pressure loss diagram

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3. MAIN MATERIALS OF PARTS

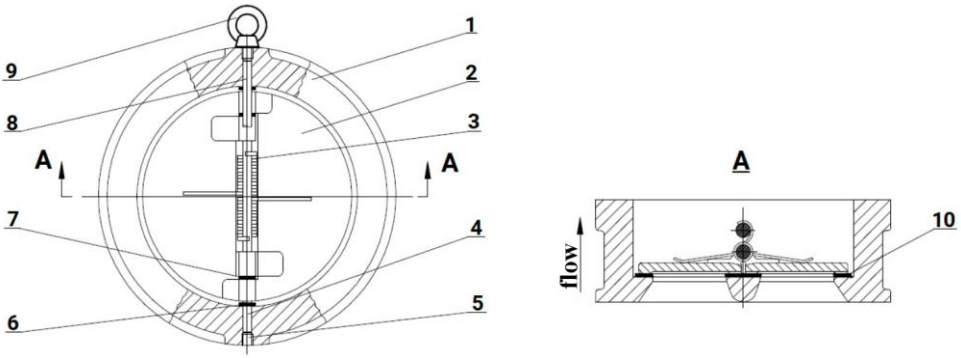

Figure 2 - Detailing

Table 3. Parts specification

№	Part name	Material
1	Body	cast iron GG25
2	Disc	cast iron GG25
3	Spring	stainless steel AISI 304
4	Hinge pin	stainless steel AISI 416
5	Cork	high carbon steel
6	Housing bushing	PTFE
7	Washer	PTFE
8	Locking pin	stainless steel AISI 416
9	Mounting hook (for models DN200-300)	high carbon steel
10	Sealing	EPDM

4. WEIGHT AND DIMENSIONAL PARAMETERS

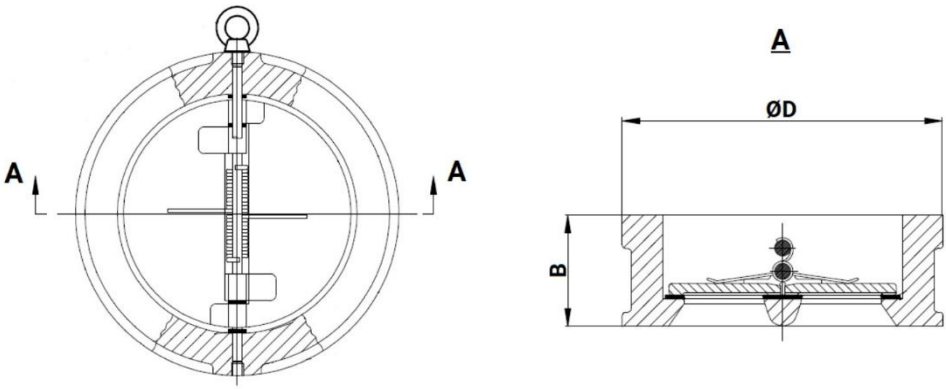

Figure 3 – Dimensions

Table 3.1. Dimensions and weight

	ØD, mm	B, mm	Weight, kg
DN40	92	43	1,18
DN50	107	43	1,52
DN65	127	46	2,12
DN80	142	64	3,15
DN100	162	64	4,48
DN125	192	70	5,72
DN150	218	76	8,71
DN200	273	89	14,02
DN250	328	114	25,4
DN300	382	114	36,47

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5. INSTALLATION AND OPERATION INSTRUCTIONS

5.1. Safety precautions during installation and operation of double-leaf check valves (hereinafter referred to as DLCV) must be observed in accordance with the procedures established at the enterprise.
5.2. Only personnel who have studied the design of the DLCV, safety regulations and the requirements of this passport are allowed to install, operate and maintain the DLCV.
5.3. Before installation, the DLCV are inspected and tested, and it is necessary to pay attention to the condition of the internal cavities of the DLCV, accessible for visual inspection, and check the ease and smoothness of the movement of the locking flaps.
5.4. On a horizontal pipeline, the installation position of the DLCV is with the mounting hook upwards. The direction of the direct flow of the working medium through the DLCV must correspond to the arrow on the body. The axis of fastening of the flaps must be located strictly vertically.
5.5. When installed on a vertical pipeline, the direction of the direct flow of the working medium through the DLCV should be from bottom to top and correspond to the arrow on the body.

ATTENTION! Other installation methods are NOT ALLOWED!

5.6. To ensure stable operation of the DLCV, it is necessary to install it on a straight section of the pipeline no closer than 5xDN before or after a narrowing (turn) of the pipeline.

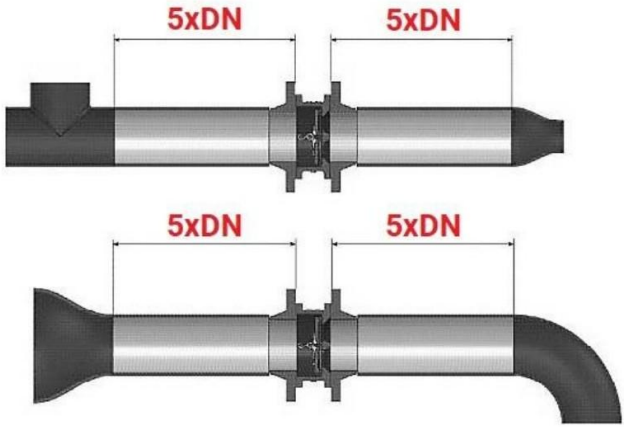

Figure 4 - Installation diagrams

5.7. The installation location of the DLCV must provide free access to it for installation and dismantling work.
5.8. Before installation, it is necessary to thoroughly clean the sealing surfaces of the DLCV and connecting flanges.
5.9. After starting the system, you should make sure that there are no leaks at the connection points.
5.10. During operation, the following conditions must be observed:

5.10.1. use the DLCV for its intended purpose and within the temperature and pressure limits specified in the technical data;

5.10.2. carry out periodic inspections within the timeframes established by the standards and rules of the organization operating the pipeline;

5.10.3. do not carry out work to eliminate defects if there is excess pressure in the pipeline.

5.11. When using OLDK at ambient temperatures below 0° C, it is necessary to maintain the minimum permissible temperature of the working environment to prevent freezing of the sealing unit.
5.12. When draining the system in winter, the OLDK should be left half-open so that the working medium does not remain in the cavities behind the valve.

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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. It is permitted to transport valves without packaging, provided that the manufacturer or supplier ensures reliable installation and fastening of the valves on the vehicle and protection from environmental influences.
6.3. Mechanical damage and contamination of the internal surfaces of the valves during transportation are not permitted.
6.4. Valves stored for a long time are subject to periodic inspection at least once a year. If preservation is violated, perform preservation again. Apply preservation grease to the degreased, clean and dry surface of the parts. Degrease with a clean rag soaked in gasoline.

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, the remaining working medium is removed from the valve. The methods for removing the working medium and deactivating the valve must be approved in accordance with the established procedure at the enterprise operating the valve.

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 _____