



Manufacturer of shut-off and control valves

TECHNICAL DATA SHEET

**Solenoid valve ELEPHANT VS4x-xT-NC-x
DN10-50 10 bar pilot-operated, brass/stainless steel,
threaded**



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1. GENERAL PRODUCT INFORMATION

1.1. Product name: Solenoid valve ELEPHANT VS4x-xT-NC-x DN10-50 10 bar pilot-operated, brass/stainless steel, threaded.

1.2. Manufacturer (supplier): "ELEPHANT", Carrer d'Aragó,264,3-1,08007 Barcelona, Spain.

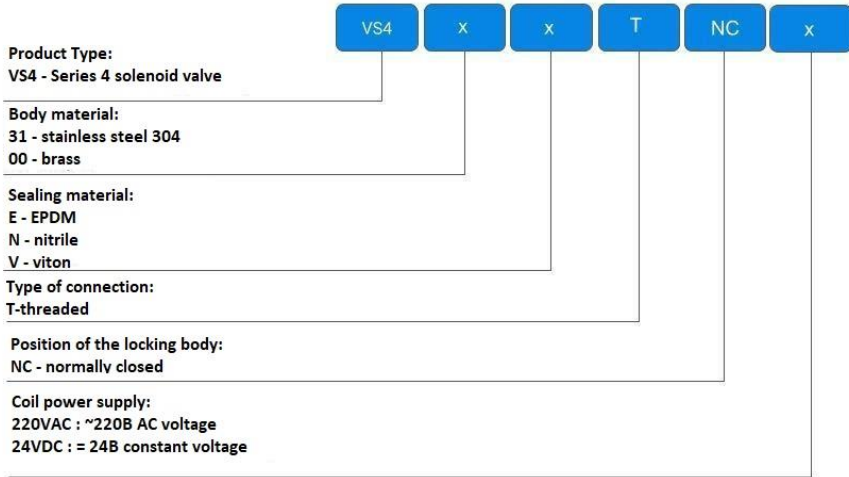
1.3. Purpose: Solenoid solenoid valve is a special device designed for convenient control of the working medium flow. This process is carried out in the pipeline under pressure.

1.4. Working principle: In a normally closed solenoid valve, the closed position is maintained if no control voltage is applied to its induction coil. When the coil is energized, the normally closed valve opens and allows the medium to flow through. When the control voltage is switched off, the valve closes automatically and blocks the flow of medium in the pipeline.

1.5 Operational limitations: The valve is not intended for use in NPP safety systems, as well as in environments containing aggressive components, dust and gases in concentrations destructive to metals.



1.6. Deciphering of the designation:



2. BASIC TECHNICAL DATA AND CHARACTERISTICS

Table 1

DN	Operating medium	Type	Execution	Cross-sectional area (mm)	Cv (m ³ /h)	Connection thread	Medium viscosity
10	water, air, oil	pilot action	normally closed	13	4,5	3/8"	<50CST
15				13	4,5	1/2"	
20				25	12	3/4"	
25				25	12	1"	
32				38	22	1 1/4"	
40				38	30	1 1/2"	
50				50	48	2"	

Table continuation 1

DN	Working pressure (bar)	Maximum pressure (bar)	Operating temperature (°C)	Nominal voltage	Housing material	Sealing material	Degree of protection
10	0,5 – 10	10, water - up to 13	EPDM -5 – 90 NBR -5 – 80 VITON -10 – 150	DC24V AC220V ±10%	brass / steel SS304	NBR, VITON, EPDM	IP65
15							
20							
25							
32							
40							
50							



3. WEIGHT AND DIMENSIONAL PARAMETERS

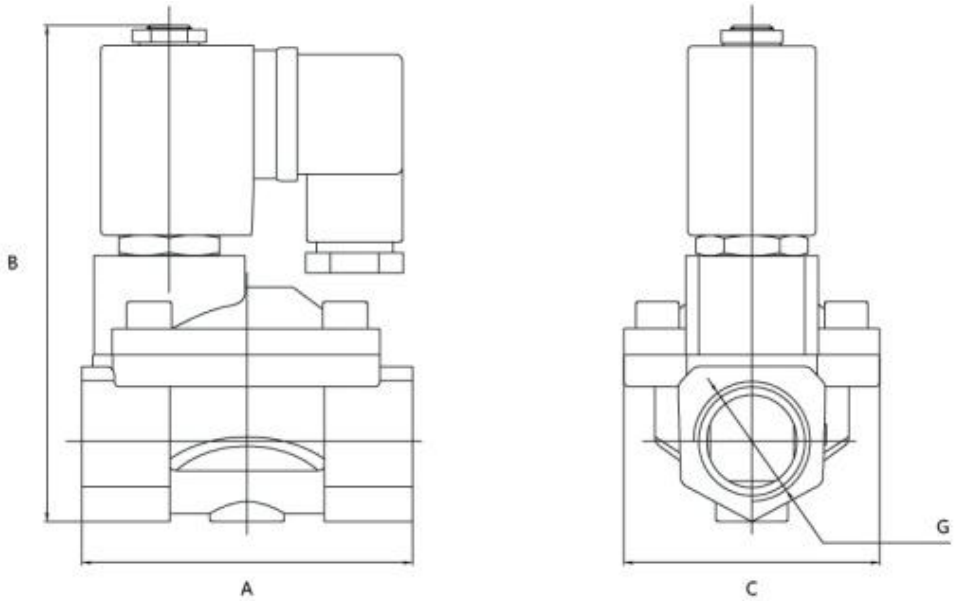


Table 2

DN	A (mm)	B (mm)	C (mm)	G (inch)	Weight (kg)	
					brass	steel SS304
10	66,5	106,5	48	3/8"	0,72	0,62
15	66,5	106,5	48	1/2"	0,69	0,59
20	96	126	70	3/4"	0,85	0,75
25	96	126	70	1"	1,11	1,01
32	131	145,5	96	1 1/4"	2,45	2,35
40	131	145,5	96	1 1/2"	2,35	2,25
50	160	160	112	2"	4,1	3,96



4. INSTALLATION AND CONNECTION

- 4.1. Due to the heating of the coil during operation, it is recommended to install the valve away from heat sources in a dry and ventilated area.
- 4.2. There should be enough space around the valve to allow the coil to cool down and for the replacement of a failed coil without removing the valve from the pipeline. When installing outdoors, it is recommended to use a canopy or protective box to avoid precipitation on the coil.
- 4.3. **Attention!** Pilot-acting valves can be installed **ONLY** on a horizontal pipeline section.
- 4.4. Valves must not be installed with the coil facing downwards.
- 4.5. The valve must be installed in such a way that the direction of the arrow on the body coincides with the direction of the medium flow.
- 4.6. Installation of valves in places where water leaks are possible, as well as under pipelines, which during operation fogging or freezing, is not allowed.
- 4.7. It is recommended to install a mechanical filter with mesh size not more than 500 microns before the valve.
- 4.8. To avoid hydrostroke should not narrow the diameter of the pipeline with adapters before and after the solenoid valve.
- 4.9. The connecting wire of the valve should have a grounding conductor connected to the lower terminal of the coil.
- 4.10. The cross-section of the mains conductor at 220V AC supply should not be less than 1.5 mm².
- 4.11. The electric power supply cable to the solenoid valve coil should be installed with the formation of a U-shaped loop (the wire should not be stretched), ensuring the flow of possible drops of condensing moisture.
- 4.12. It is strictly forbidden to energize a coil that is not mounted on the valve.
- 4.13. During installation, mechanical impact on the coil must be avoided.
- 4.14. in accordance with the procedure established by the company, the valve must not experience loads from the pipeline (bending, compression, stretching, torsion, distortion, vibration, misalignment of spigots, uneven tightening of fasteners). Connection points should ensure tightness of internal cavities in relation to the external environment.
- 4.15. After installation, the system in which the valve is installed must be hydrotested with a pressure 1.5 times the design working pressure of the system. The test shall be carried out in accordance with the company's established procedure.



5. OPERATION AND MAINTENANCE

- 5.1. The valve may be operated at the parameters set out in section 4 of this data sheet.
- 5.2. It is not allowed to operate the valve with loose or removed body cover screws.
- 5.3. The working medium must not freeze inside the valve.
- 5.4. Valve maintenance should be performed only when the coil is de-energized.
- 5.5. Maintenance of the valve consists in removing the body cover and washing the body chambers, impulse channel and diaphragm.
- 5.6. To avoid accidents, the general safety requirements for installation and operation must be observed during installation and operation in accordance with the company's established procedures.

6. STORAGE AND TRANSPORTATION

- 6.1. Products shall be stored in the company's packaging in accordance with the procedure established at the company.
- 6.2. The transportation of products must be carried out in accordance with the procedure established at the enterprise.

7. UTILIZATION

- 7.1. The product is disposed of in accordance with the procedure established at the enterprise (remelting, burial, resale).



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.



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__r. Caption _____

