

TECHNICAL DATA SHEET

**Flush strainer ELEPHANT FMTWR0031-T DN15-25
16 bar T-shaped, brass, threaded, with pressure gauge and
with reducer**



1. GENERAL PRODUCT INFORMATION

1.1. Product Name: Flush strainer ELEPHANT FMTWR0031-T DN15-25 16 bar T-shaped, brass, threaded, with pressure gauge and with reducer.

1.2. Purpose: Flush strainers (hereinafter referred to as FSP) are designed for installation before control valves, flow meters and other devices with high requirements to the purity of water passing through them in heating, heat supply, technical hot and cold water supply systems, for mechanical cleaning of the working medium from dirt, rust, chips, etc.

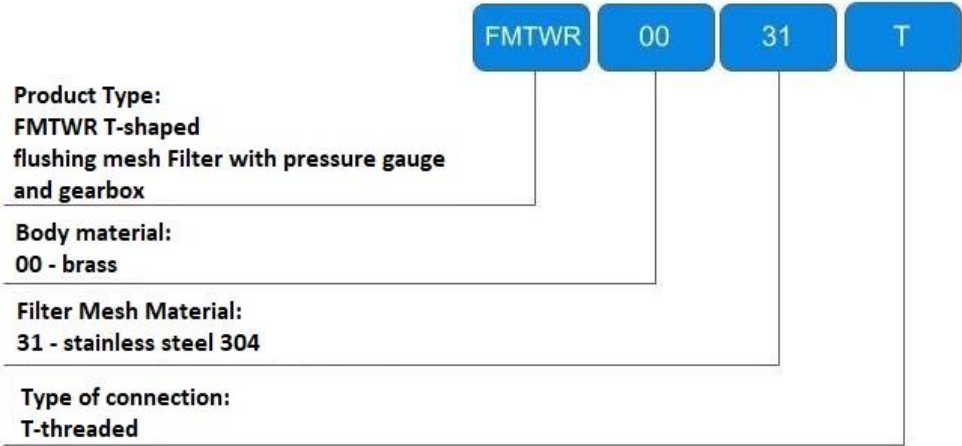
1.3. Operating principle: The mesh filter detains solid particles in the working medium, the size of which exceeds the size of the filter mesh. The pressure gauge included in the filter set makes it possible to control the pressure in the system in static mode, as well as the pressure up to the filter in dynamic mode. A tap located at the bottom of the filter is used for washing the filter. The water supply is not interrupted even during filter flushing. The integrated pressure reducing reducer operates according to the principle of force balance, where the force developed by the diaphragm is balanced by the force generated by the spring. The inlet pressure has no effect on the opening or closing of the valve. Therefore, inlet pressure fluctuations do not affect the outlet pressure.



** the image may differ from the original*



1.4. Deciphering of the designation:



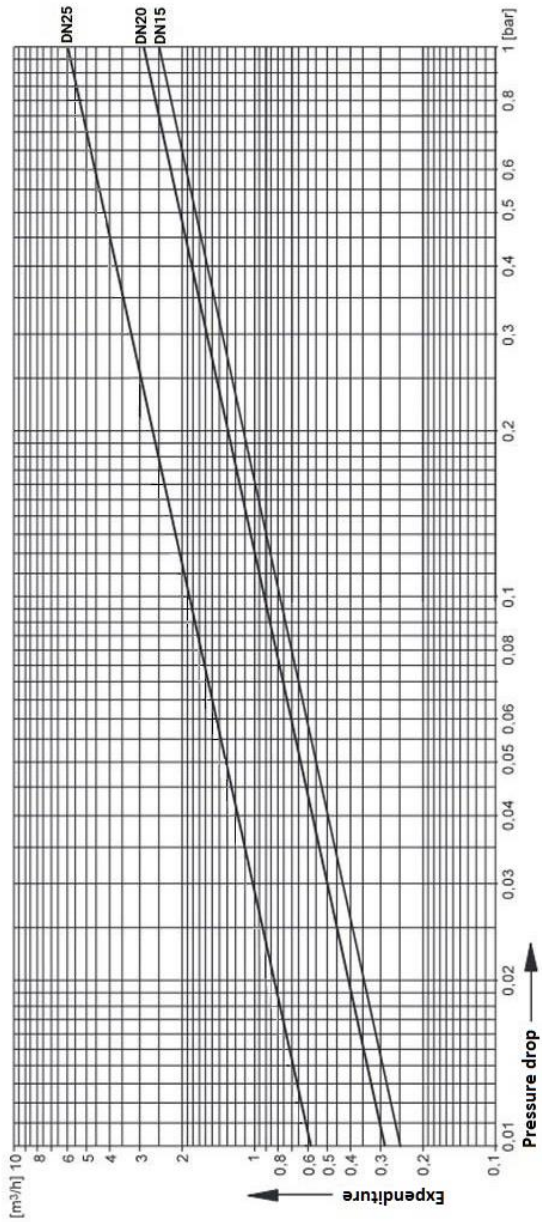
2. BASIC TECHNICAL DATA AND CHARACTERISTICS

Table 1

Nominal diameter DN, mm	15÷25
Nominal pressure PN, bar	16
Media temperature t, °C	от +1 до +70
Media	вода
Pipeline connection	резьбовое
Setting range, bar	1,5÷6
Body material (incl. threaded fittings)	латунь 58-3А (аналог ЛС59-1)
Working medium flow direction	стрелка на корпусе фильтра
Position on the pipeline	горизонтальное, колбой фильтра вниз
Filter mesh material	нержавеющая сталь AISI 304 (аналог 08X18H10)
Filter mesh size, mm	0,1
Throughput at clean filter, m ³ /h	DN15 – 2,5 DN20 – 2,9 DN25 – 6,0
Average filter life, years	5
Average drain valve life, closing/opening cycles	4 000

* the filter is not designed to protect against water-soluble substances, solvents, fats, oils and other lubricants.





3. WEIGHT AND DIMENSIONAL PARAMETERS

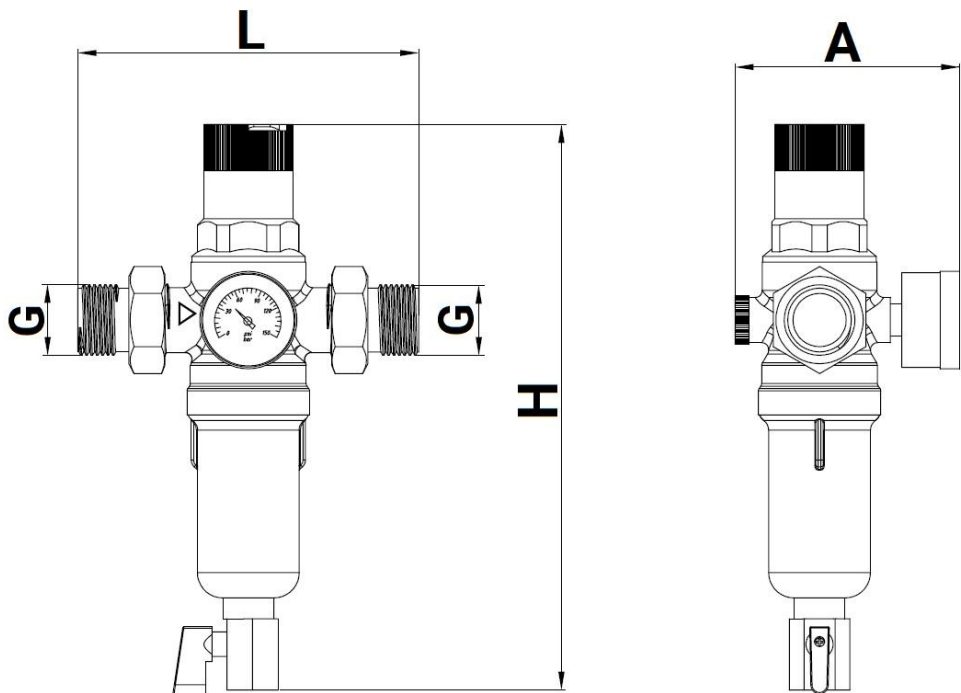


Table 2

	L, mm	H, mm	A, mm	G, mm	Weight, kg
DN15	143,0	250	99	1/2"	1,4
DN20	150,5	250	99	3/4"	1,5
DN25	155,0	250	99	1"	1,6



4. INSTALLATION AND OPERATING INSTRUCTIONS

4.1. The FSP may be installed, operated and serviced by personnel who have studied the FSP device, safety rules and the requirements of this data sheet.

4.2. Safety precautions during installation and operation of the FSP must be observed in accordance with the procedure established at the enterprise.

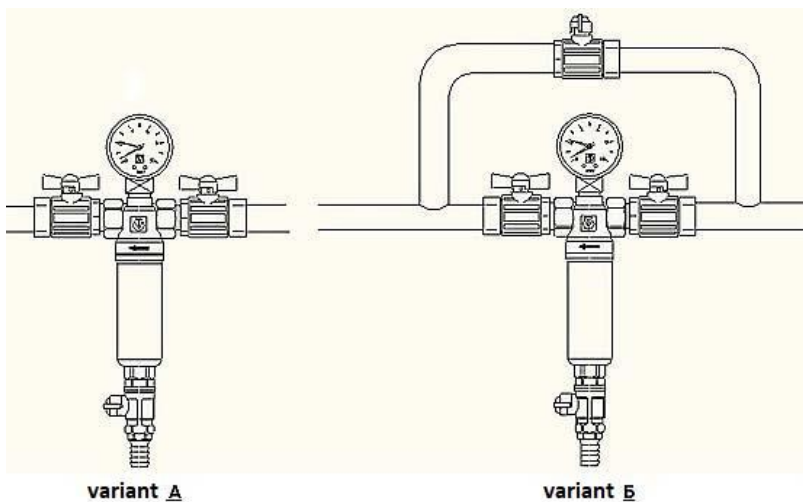
4.3. Before installation on the pipeline the FSP is subjected to inspection and testing, it is necessary to pay attention to the condition of the internal cavities of the FSP, accessible for visual inspection, check the ease and smoothness of rotation of the adjustment cover.

4.4. FSP should be installed on a horizontal section of the pipeline in a vertical position (drain cock downwards), and the direction of flow should correspond to the direction of the arrow on the filter body.

4.5. The FSP should not experience loads from the pipeline (bending, compression, stretching, torsion, distortion, vibration, misalignment of spigots, uneven tightening of fasteners). If necessary, supports or compensators shall be provided to reduce the load on the FSP from the pipeline.

4.6. Before and after the filter it is necessary to install shut-off valves. For better efficiency of filter washing (backwashing) it is preferable to install a bypass section with a valve (bypass).

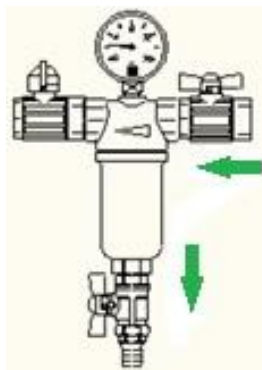




4.7. To protect the gauge from pressure surges, it is recommended to install a water hammer damper in the system.

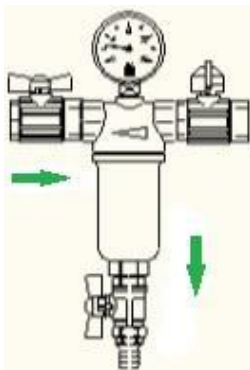
4.8. The FSP can be flushed in four ways:

4.8.1. Method 1. Close the outlet cock. Open the drain valve of the FSP and drain the sediment together with some amount of water.



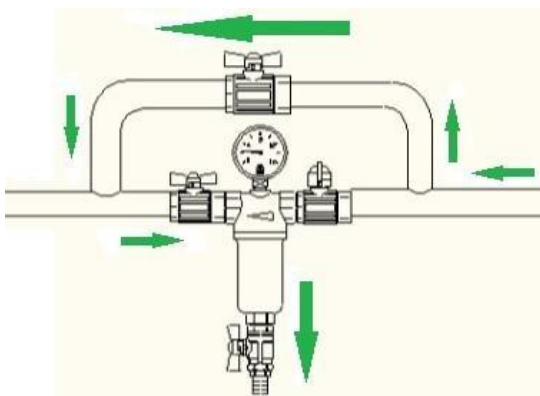
The disadvantage of this method is that the particles left on the mesh are mostly not removed from the filter. Only the sludge settled at the bottom of the flask is removed.

4.8.2 Method 2. Make sure that all water outlets are closed. Close the inlet and outlet cocks of the FSP. Open the FSP drain cock, at that the pressure in the flask will drop and water will be completely removed from the flask.



Open the outlet valve of the filter. In this case the residual pressure in the pipelines after the filter will to some extent remove the particles stuck on the mesh.

4.8.3 Method 3. At zero water discharge close the filter inlet tap and open the outlet tap and bypass tap.



When the drain cock is opened by the mains flow, the FSP is backwashed for 4-5 seconds. This method is the most effective among the listed methods.



4.8.4. Method 4: Used if normal flushing is not sufficient. This can happen if about 80% of the cells are tightly clogged with impurities, or if the water contains a large amount of organic iron salts with a jelly-like consistency. In this case, when the inlet and outlet taps are closed, the bulb is unscrewed from the housing with a gas wrench. The filter elements are removed and washed with a brush. In many cases it is possible to restore the filtering ability of the mesh by placing the filter elements (without Teflon sleeve) for 2-3 hours in 10% solution of oxalic or citric acid. Then the filter elements should be thoroughly washed and put back in place.

4.8.5 For preventive purposes, as well as to prevent the formation of karst deposits on the surface of the ball of the drain valve, it is required several times a year to perform 2-3 cycles "open-closed".

4.8.6 It is forbidden to allow freezing of the working medium inside the FSP and the drain valve.

4.8.7 It is forbidden to operate the FSP in conditions and at parameters that do not correspond to the nameplate values.

5. TRANSPORTATION AND STORAGE CONDITIONS

5.1. Transportation and storage of strainers is carried out in accordance with the procedure established at the enterprise.

5.2. Filters should be stored in an uncontaminated room and protected from atmospheric precipitation. In rooms with humidity, dehumidifying agents should be used to prevent condensation.

6. UTILIZATION

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



7. WARRANTY OBLIGATIONS

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

7.2. The warranty applies to equipment installed and used in accordance with the installation instructions and product specifications described in this data sheet.

7.3. The manufacturer guarantees compliance of the product with safety requirements, provided that the consumer complies with the rules of transport, storage, installation and operation.

7.4. The warranty covers all defects caused by the fault of the manufacturer.

7.5. 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.

8. WARRANTY TERMS

8.1. Claims to the quality of the goods may be made during the warranty period.

8.2. 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'.

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

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

8.5. 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 _____

