



Manufacturer of shut-off and control valves

TECHNICAL DATA SHEET

**Vibration-resistant axial pressure gauge ELEPHANT
MB-311-Ax 0,6-6 MPa
stainless steel, accuracy class 1,0-1,5**



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1. GENERAL PRODUCT INFORMATION

1.1. Product name: Vibration-resistant axial pressure gauge ELEPHANT MB-311-Ax 0,6-6 MPa stainless steel, accuracy class 1,0-1,5.

1.2. Purpose. The vibration-resistant pressure gauge is designed to measure overpressure of non-crystallizing, non-aggressive to copper alloy media.

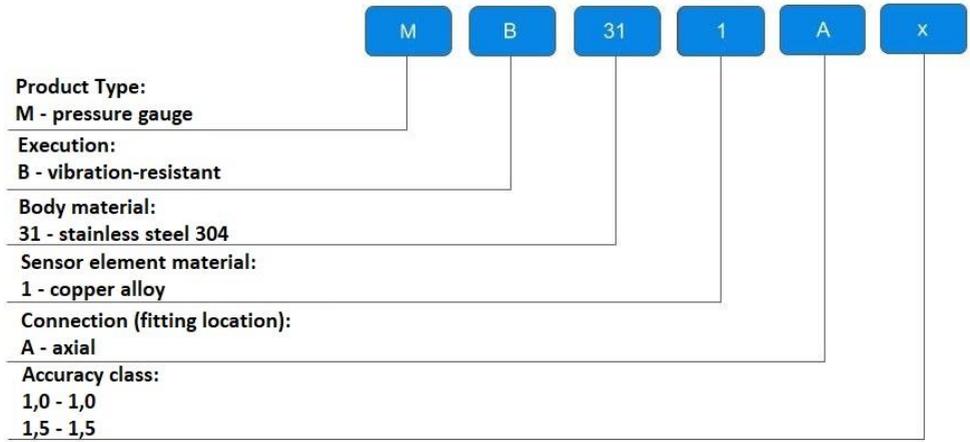
1.3 Principle of operation. The principle of operation of manometers is based on the dependence of the deformation of the sensitive element on the measured pressure. A Bourdon tube is used as a sensitive element. Under the influence of the measured pressure, the free end of the tube is moved by a special mechanism and rotates the arrow of the manometer. The gauge can be used in conditions of high vibration and when measuring variable pressure.



** the image may differ from the original*



1.4. Deciphering of the designation:



2. BASIC TECHNICAL DATA AND CHARACTERISTICS

Table 1

Body diameter, mm	63 — 100
Nominal pressure, MPa	0,6 — 6
Manometer design	vibration-resistant
Connection	end-axial
Hydraulic filling	glycerine
Operating temperature range t, °C	-20 to 100
Ambient temperature, °C	-20 to 60
Relative humidity	not more than 80%
Type of enclosure dust and moisture protection	IP65
Operating medium	liquids, gases and vapors
Accuracy class	1,0 — 1,5
Connection	threaded G 1/4 "
Body material	stainless steel 304
Sleeve material	copper alloy
Service life, years	10
Scope of application	metrological control and supervision, heat supply, water supply, power engineering, machine building and other industries



3. TECHNICAL DATA AND PARAMETERS

Table 2

Body diameter, mm	Connection threads, inch	Nominal pressure range, MPa	Accuracy class
63	1/4	0 ÷ 0,6	1,5
		0 ÷ 1	
		0 ÷ 1,6	
		0 ÷ 2,5	
		0 ÷ 4	
		0 ÷ 6	
100	1/4	0 ÷ 0,6	1,0
		0 ÷ 1	
		0 ÷ 1,6	
		0 ÷ 2,5	
		0 ÷ 4	
		0 ÷ 6	



4. WEIGHT AND DIMENSIONAL PARAMETERS

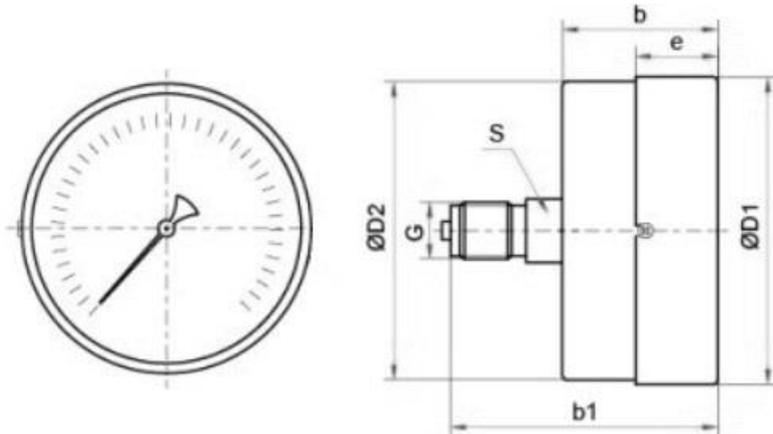


Table 3

	D1, mm	D2, mm	b, mm	b1, mm	e, mm	S, mm	G, inch	Weight, kg	Weight with filling, kg	Volume of liquid to be filled, ml
DN63	68	62	30	52	6	14	1/4	0,13	0.18	60
DN100	111	99	45	84	16	22	1/4	0,51	0.82	260



5. INSTALLATION AND OPERATING INSTRUCTIONS

5.1. Installation of pressure gauges should be performed in the absence of pressure in the pipeline.

5.2 Pressure gauges should be located in places accessible for visualization and maintenance;

5.3 The gauge shall be screwed into a boss or a special three-way valve in a position convenient for observing the gauge readings.

5.4 The instrument shall be installed either in the normal operating position (instrument position with the manometer dial vertical ($\pm 5^\circ$ tolerance in either direction), or in accordance with the operating position mark indicated on the dial.

5.5 When measuring the pressure of a medium with a temperature higher than the permissible operating temperature, it is necessary to install a loop tube in front of the gauge. The loop tube can also be installed to protect the gauge from the influence of pulsations of the medium and to reduce the influence of the medium temperature on the accuracy of the gauge readings.

5.6 A typical sampling unit for connection of a pressure gauge consists of a welded boss with a pad for sealing gasket, loop tube, three-way valve. It is recommended to use vapor, fluoroplastic or copper gasket as a seal in threaded connections between the welded boss, valve and manometer

5.7 The pressure gauge should be screwed in only by the hexagonal part of its fitting, using a wrench, without applying any force to the body of the gauge. Tightening torque during installation should not exceed 20 Nm.

5.8 When conducting hydraulic tests of the system with pressure exceeding the gauge measurement limit, the gauge shall be disconnected from the system for the period of such tests or dismantled with the installation of a temporary plug.

5.9 The gauge should be pressurized gradually and avoid sudden pressure spikes, as well as not to exceed the measuring range.

5.10. The instrument shall be excluded from operation if:

5.10.1. the pressure gauge does not work; the gauge glass is broken or damaged; 5.10.2. the pointer moves in jumps or does not return to the zero mark; 5.10.3. the reading error exceeds the permissible value.

5.11. In the absence of pressure, the pointer should be within the zero mark area.



6. TRANSPORTATION AND STORAGE CONDITIONS

6.1. Transportation and storage conditions - in the manufacturer's packaging in accordance with the procedure established at the enterprise.

6.2 Mechanical damage and contamination of internal surfaces during transportation are not allowed.

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__yr. Caption _____

