

USER MANUAL

BOTTOM VALVE zBOT

Fig. 935

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1. PRODUCT DESCRIPTION



Fig.935.01

Fig.935.06

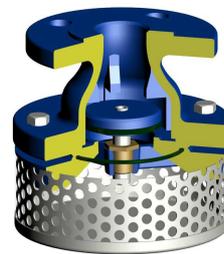
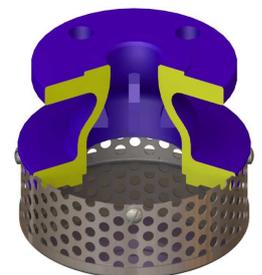
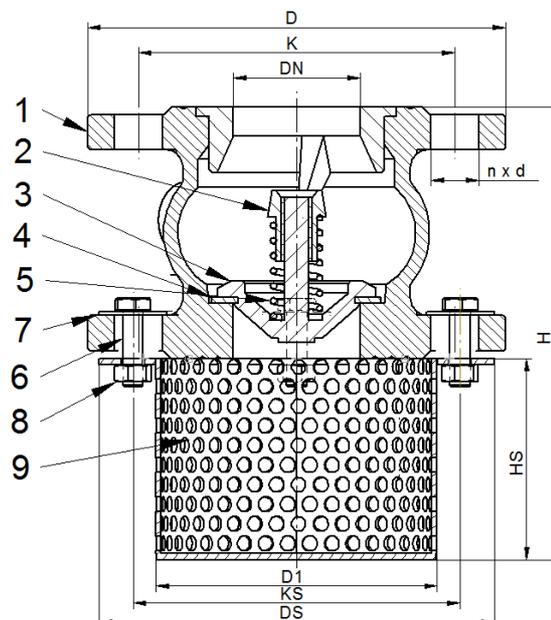


Fig.935.00

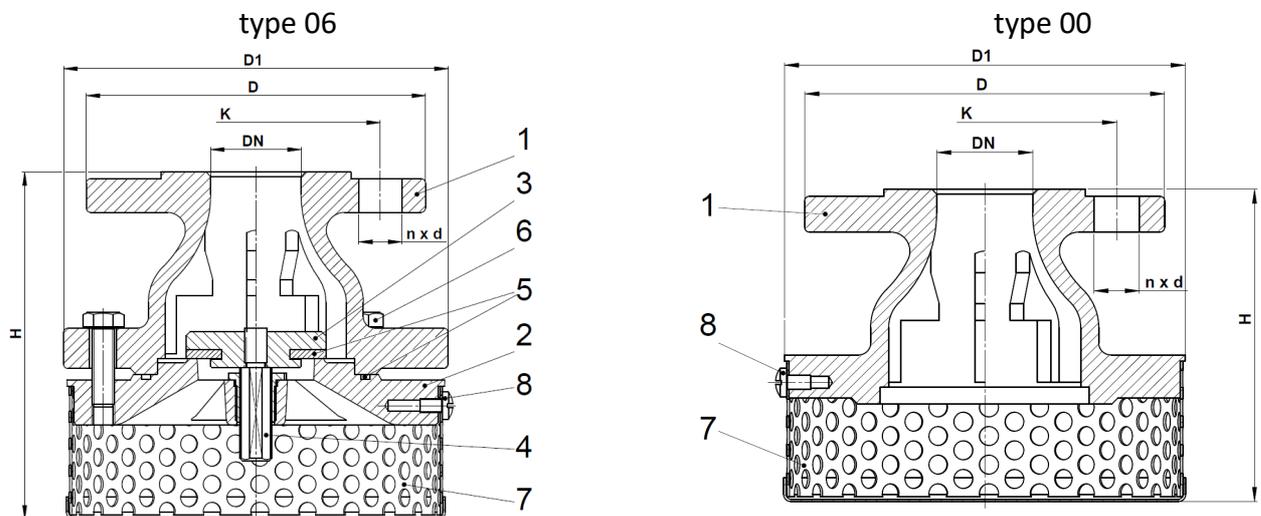


Bottom valves are available with non-return closure Fig. 935.06. and 01, without non-return disc Fig 935.00. The outer and inner coating is epoxidized at least 250 µm, making the valve highly corrosion resistant.

The screen is made of stainless steel AISI 302, its bottom has no perforations. The stainless steel spring allows the valve to be installed in any position. Shape of the body reduces the possibility of turbulence and pressure drops.



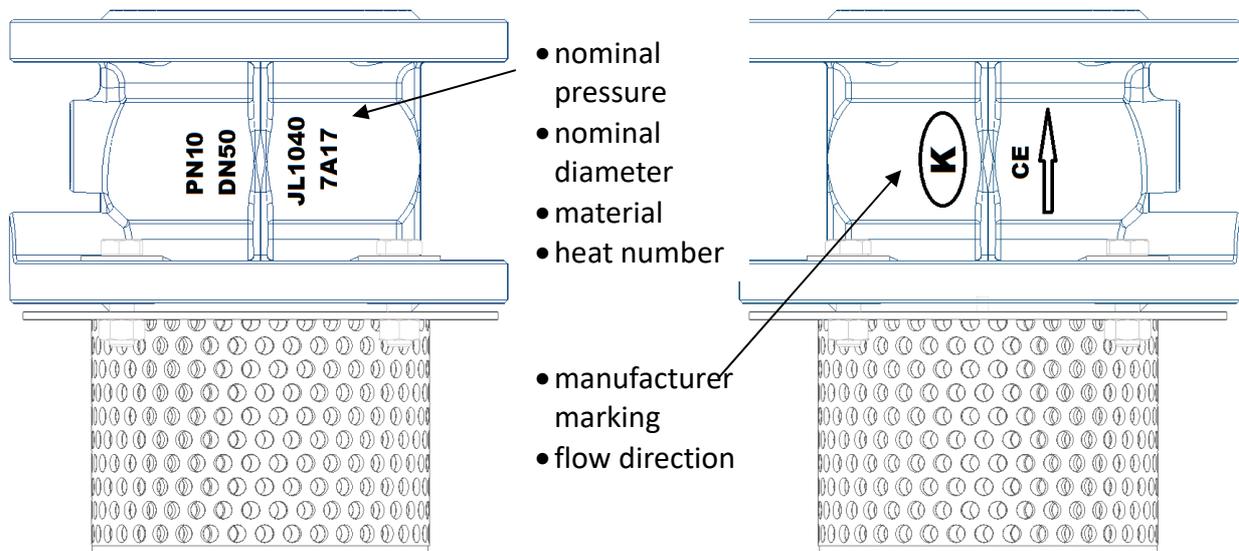
	Body material	A
	Type	06
1	Body	EN-GJL-250 5.1301 (ex. JL1040)
2	Guide	EN-GJL-250 5.1306 (ex. JL1030)
3	Closing assembly	EN-GJL-250 5.1306 (ex. JL1030)
4	Gasket	EPDM
5	Spring	AISI 302
6	Hexagon bolt	A2
7	Enlarged washer	A2
8	Hexagon nut	A2
9	Screen	AISI 302
Max. temperature		80°C



	Body material	A	
	Type	06	00
1	Body	EN-GJL-250 5.1301 (ex. JL1040)	
2	Cover	EN-GJL-250 5.1301 (ex. JL1040)
3	Disc	EN-GJL-250 5.1301 (ex. JL1040)
4	Stem	X20Cr13 1.4021
5	Gaskets	EPDM
6	Hexagon bolt	5.6 – A3A
7	Screen	X5CrNi18-10 1.4301	
8	Screw	A2-70	
Max. temperature		80°C	

Bottom valves are provided with casted marking according to requirements of PN-EN19 standard. The marking facilitates technical identification and contains:

- nominal diameter DN (mm),
- nominal pressure PN (bar),
- body and bonnet material marking,
- arrow indicating medium flow direction,
- manufacturer marking,
- heat number,

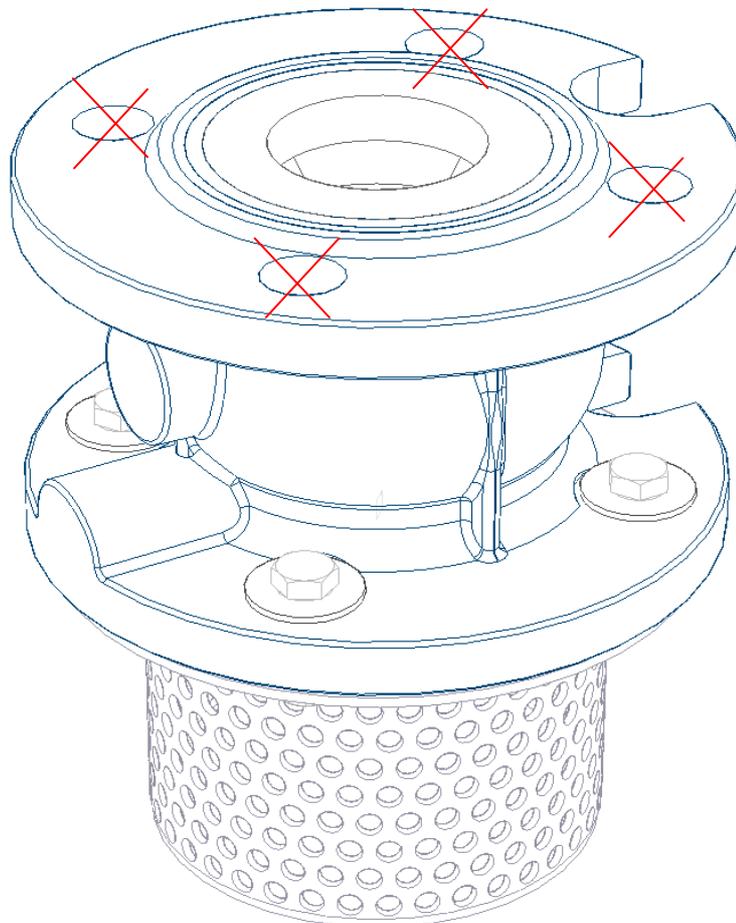


2. REQUIREMENTS FOR MAINTENANCE STAFF

The staff assigned to assembly, operating and maintenance tasks should be qualified to carry out such jobs.

3. TRANSPORT AND STORAGE

Transport and storage should be carried out at temperature from -20°C to 65°C , and bottom valves should be protected against external forces influence and destruction of painting layer as well. The bottom valves should be kept at unpolluted rooms and they should be also protected against influence of atmospheric conditions. There should be applied drying agent or heating at damp rooms in order to prevent condensate formation. Do not use the connection holes for transport, but the part of the valve body between the connection flanges. Use flexible slings.



It is not allowed to fit lifting devices to connecting holes.

4. FUNCTION

Bottom valves are designed to hold medium pollutions and keep column of water between liquid level in the tank and the suction pump.

5. APPLICATION

- industrial water,
 - neutral fluids,
 - glycol
 - drinking water,
- industry.

The kind of working medium makes some materials to be used or to be prohibited for use. Bottom valves were designed for normal working conditions. In the case that working conditions exceed these requirements (for example for aggressive or abrasive medium) user should ask manufacturer before placing an order.

Working pressure should be adapted to maximum medium temperature according to the table as below.

Acc. to EN 1092-2		Temperature [°C]
Material	PN	-10 to 80
EN-GJL250	10	10 bar



The installation designer is responsible for the correct selection of the fitting for the operating conditions.

6. ASSEMBLY

During the assembly of bottom valves following rules should be observed:

- evaluate before an assembly if the bottom valves were not damaged during the transport or storage
- make sure that applied bottom valves are suitable for working conditions and medium used in the plant,
- take off dust caps if the bottom valves are provided with them,
- check if bottom valve body is free of solid particles,
- the bottom valves can be mounted in any position.

7. OPERATION

Bottom valves Fig. 935 require no special maintenance.



In order to assure safety performance, each strainer (especially rarely used) should be inspected on regular basis. Inspection frequency should be laid down by user, but not less than one time per month.

8. SERVICE AND REPAIR



Before taking up any service jobs make sure that medium was removed from the pipeline and plant was cooled down.

- all service and repair jobs should be carried out by authorized staff using suitable tools and original spare parts.
 - personal health protectives in pursuance of existing threat should be used during service and repair works,

- after bottom valve disassembly it is necessary to replace flange connection gaskets between bottom valve and pipeline,
- bolts should be tighten evenly and crosswise by torque wrench,
- before bottom valve reassembly in the pipeline it is necessary to check tightness of all connections. Tightness test should be carried out with water pressure of 1,5 nominal pressure of the valve.

9. REASONS OF OPERATING DISTURBANCES AND REMEDY

- It is essential to comply with the safety regulations when searching for the causes of faulty valve operation

Fault	Possible reason	Remedy
No flow	Flange dust caps were not removed	Remove dust caps
Poor flow	Dirty screen	Clean or replace the screen
	Clogged pipeline	Check the pipeline
Seat leakage (no liquid column)	Medium polluted with solid particles	Clean the valve
	Damaged disc gasket	Replace disc gasket
Broken connecting flange	Bolts tighten unevenly	Replace the valve with new one

10. VALVE SERVICE DISCONTINUITY

All obsolete and dismantled valves must not be disposed with household waste. The valves are made of materials which can be re used and should be delivered to designated recycling centres.

11. WARRANTY TERMS

ZETKAMA grants quality warranty with assurance for proper operation of its products, providing that assembly of them is done according to the user's manual and they are operate d according to technical conditions and parameters described in ZETKAMA's catalogue cards. Warranty period is 18 months starting from assembly date, however not longer than 24 months from the sales date.

Warranty claim does not cover assembly of foreign parts and design changes done by user as well as natural wear.

Immediately after detection the user should inform ZETKAMA about hidden defects of the product.

A claim should be prepared in written form..

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