

USER MANUAL

zCHE CHECK VALVE

Fig. 402

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CONTENTS

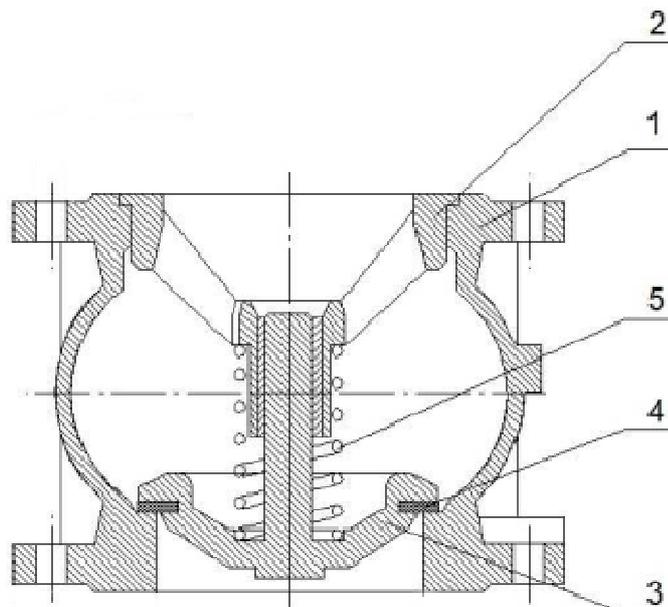
1. Product description
2. Requirements for maintenance staff
3. Transport and storage
4. Function
5. Application
6. Assembly
7. Operation
8. Service and repair
9. Reasons of operating disturbances and remedy
10. Decommissioning
11. Warranty terms



Fig.402

1. PRODUCT DESCRIPTION

The disc check valves are made of EN-GJL-250 cast iron. They are offered in a flange version. The valve body is fully covered with epoxy paint with a thickness of min. 250µm. The compression spring made of stainless steel allows the valve to be installed in any position. A flat gasket made of EPDM ensures valve tightness. The valves of this type are characterized by quiet operation. The shape of the body reduces adverse flow-related phenomena such as turbulence and cavitation. Recommended for installations with variable flow parameters.



	Body material	A
	Type	52
1	Body	EN – GJL250 5.1301 ex (JL1040)
2	Guide	EN- GJS- 400-15 5.3106 (ex.JS 1030)
3	Closing assembly	EN- GJS- 400-15 5.3106 (ex.JS 1030)
4	Gasket	EPDM
5	Spring	AISI 302
	Max. operating temperature	80°C

The valves have a permanent marking in accordance with the requirements of the standard PN-EN19. Marking facilitates technical identification and includes:

- nominal diameter DN (mm),
- nominal pressure PN (bar),
- identification of the body material,
- arrow indicating the direction of flow,
- symbol of the manufacturer,
- cast number,
- CE mark for valves subject to Directive 2014/68/UE.

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° to 65°C , and valves should be protected against external forces influence and destruction of epoxy painting layer as well.

Do not move the valve through a sling attached to the flange mounting holes. The valves can be moved using a flexible sling attached to the valve body. The 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.

4. FUNCTION

Check valves are used to protect the installation against backflow of the working medium. The scope of application is given in the catalogue card. The kind of working medium makes some materials to be used or to be prohibited for use. Valves were designed for normal working conditions.

5. APPLICATION

- industry
- heating
- cooling and air conditioning
- cold and hot industrial water installations
- drinking water installations
- media neutral to the materials used - these could be both gases and liquids of groups 1 and 2 according to EC Regulation No. 1272/2008, resulting from the practice of use.

The kind of working medium makes some materials to be used or to be prohibited for use. Valves were designed for normal working conditions.

6. ASSEMBLY

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

- evaluate before an assembly if the valves were not damaged during the transport or storage,
- make sure that applied valves are suitable for working conditions and medium used in the plant,
- for welding the valves must be protected from splashes and the used plastics from excessive heat,



The pipeline to which the valves are fitted should be arranged and mounted in a way that the valve body is not subjected to bending moment and stretching.

Screw connections on the pipeline must not introduce additional strength stresses resulting from excessive tightening, and the type of materials of fasteners must be adapted to the operating parameters of the installation,

- the valves can be mounted in any position,



pay attention to the medium flow direction marked with an arrow on the valve body,

- empty the installation and check that the pipeline is clean before installation,
- flush the pipe system with the check valve removed before starting the installation, and in particular after repairs, to remove solids or welding chips that are harmful to sealing surfaces,
- installing a strainer before the valve increases the certainty of its proper functioning.
- to ensure proper operation of the valve, keep sufficient distance from system components that disturb flow. Therefore, a straight section of at least 3 x DN upstream and 5 x DN downstream of the valve should be provided.

The installation designer, building contractor and user are responsible for the correct selection of the valve for the working medium and operating conditions, placement and assembly.

7. OPERATION

The following rules must be observed during operation:

- the valves does not require maintenance
- **switch on and shutdowns should be carried out in such a way as to eliminate sudden changes in temperature and pressure,**
- if the disc is blocked, start the pump several times. If this does not work, remove the valve from the pipeline and check the cause of disc blockage.

10. DECOMMISSIONING

All decommissioned 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 operated 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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