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Operating Instructions

DS12

Float - Type Flow Meter with Glass Tube

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1 Introduction

Series DS12 float-type meters with glass tube are noted for their reliable function and easy operation. To obtain the greatest benefit from this device, please observe the following cautionary statement:

Persons who are responsible for setting up or operating this device must be sure to read the and understand the operating instructions and the safety information pertaining to it.

2 Safety Information

2.1 General Instructions

To ensure safe operation, the device must only be operated according to the information in the operating instructions. When the device is in use, the regulations and safety standards applicable to the specific application must also be observed. This statement also applies to the use of accessories.

2.2 Proper Usage

Series DS12 are designed to measure the flow of liquids or gases.

Any application extending beyond this specific intended use does not constitute proper usage. Series DS12 must not be employed as the sole means of avoiding hazardous conditions in machinery and installations.

The machinery and installations must be designed in such a manner that faulty conditions and malfunctions will not present hazardous situations for operating personnel.

2.3 Qualified Personnel

Series DS12 float-type meters must only be used by qualified, knowledgeable personnel trained in correct use of these devices. Qualified personnel are those persons familiar with setting up and assembling these devices, placing them in service and operating them. In addition, such personnel must also be qualified to perform the work associated with the application for which the device is being used.

3 Hints for Assembly

Assemble tension-free! The connection tubes must be aligned. With flanges make sure the screw holes are in line. Avoid vibration. If necessary, support the tubes in front of and behind the DS12 with braces. Avoid large volumes of gas downstream and upstream of the float (vibration due to compression).

4 Commissioning

When functioning properly, the float (1) rotates freely in the flow. With major floats made of plastic or metal, this can easily be seen in their rotation. If the float does not rotate, either the device is soiled or the vertical assembly requirement has been disregarded. This only applies to floats with notches. The scale mark to which the float adjusts its top edge is decisive for reading.

5 Maintenance

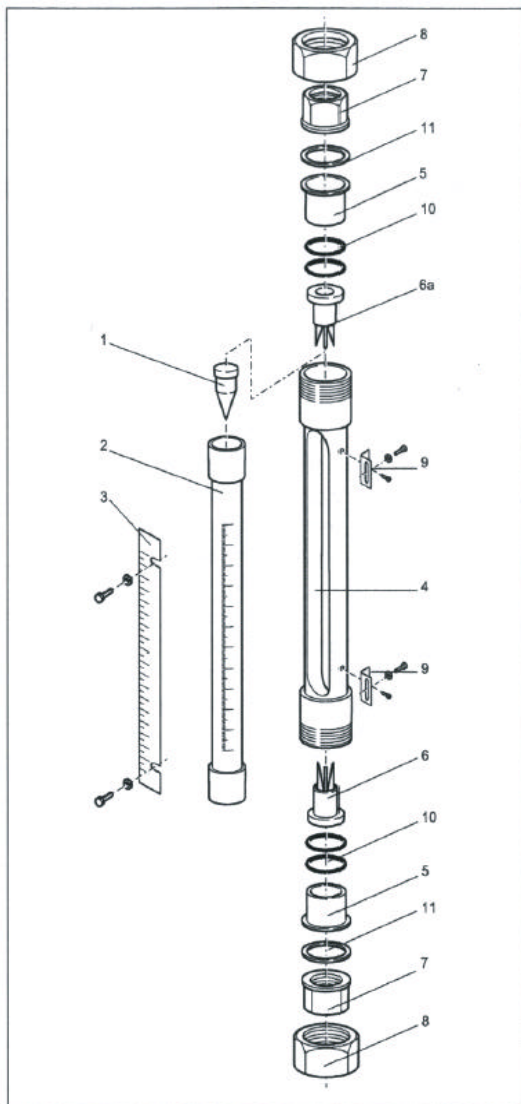
To clean the DS12, remove it from the tube. After the removal of the two stops (6, 6a) and the float (1), the measuring tube (2) can be cleaned without removing it from the fitting. For cleaning we recommend using a bottle brush and soap and water solution. Make sure the measuring tube does not get scratched. If the float or the measuring tube show signs of wear and tear, we recommend replacing them. To remove the tube, take off the stops (6, 6a) and the float and then press the tube out of its O-ring support (5) using a cylindrical plastic tube. The diameter of the cylindrical plastic tube corresponds to the external diameter of the measuring tube. Reassemble the parts in reverse order.

6 Additional Safety hints

The measuring tube is made of glass and therefore fragile. Avoid any damage coming from the outside. The specified maximum pressures must not be exceeded. Pressure peaks must not exceed the specified maximum pressure either. Pressure shock may hit the float against the top stop (6a) with high speed. This may result in the destruction of the stop and the measuring tube

Tension in the glass over 6N/mm^2 have to be avoided. Therefore the temperature difference in the glass may not exceed 40°C . Please avoid temperature shocks. PKP gives no warranty for the improper use of flow meters having glass floats. Due to the uncontrollability of the material PKP cannot guarantee that the material is fracture-proof. Further hints can be found in VDI/VDE 3513.

Caution: The metering tube, the float and the scale must always be kept together.



Position	Quantity	Description
1	1	Float
2	1	Metering Tube
3	1	Exchangable scale
4	1	Jacket fitting
5	2	O-ring holder
6	1	Bottom stop
6a	1	Top Stop
7	2	Insertion parts
8	2	Sleeve nuts
9	2	Scale holder
10	4	O-rings
11	2	Gasket

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