

Flowmeters with float for liquids and gas – type AF, BF, CF, DF

Flowmeters are used to measure the volume or weight flow. The upper flow edge is the reading edge and it is composed of the upper float front. Flowmeters are connected to the piping in a vertical direction $\pm 1^\circ$. The flowmeter must not be stressed with the connecting piping – e.g. with **bending**. Clean and rinse the piping out before the flowmeter installation.

Service and maintenance have only to check the tightness, cleanness of the screen at the inlet of the flowmeter and cleanness of the measuring tube. During the operation it is necessary to avoid to pressure impacts and flow breaks, when the float would strike the float backstops. Close and open adjusting valve (not closing valve of stopcock) **slowly**, it is necessary for required flow adjusting. The quick opening or closing of adjusting valve can (especially when gas medium is used, or in the aeration pipe) evoke flash flow impact and following breakage of measuring tube. Locate the adjusting valve into the piping between the flowmeter and pressure source (pump, fan etc.)

The flow values stated on the flowmeter scale relate to conditions (medium, pressure, temperature), that are stated on the device scale and that should be kept in the piping system.

For the gas measuring at the DN 50 and DN 80 inside diameters it is necessary to insert straight easeful piping in length five times longer than the pipe diameter is, in front of the device inlet (from under). If it is not possible, use the flowmeter with direct flow.

Make the measuring tube removal by unscrewing of tightening nuts (flanges) and careful dismantling of fillers with seals. At the fillers fitting-on into the pipe spread the seal with e.g. soap water, silicone oil etc. and then insert by mild press and by turning the filler into the measuring tube carefully.

During the operation use the shield by reason of higher safety and security.

Closely before the insertion of flowmeters type AF, BF into the piping take out the flowmeter from packing, remove steel bands from flanges and at all types of flowmeters remove float catch, that fasted down the float during transport.

The lower pressed filler (type AF, BF), that creates connecting packing surface (circular ring), is necessary to support (by hand) from under during the assembly and this way secure it against possible filler protrusion from the device.

In case of usage of sensors SP1 and SP2 it is necessary to locate these sensors as close as possible to measuring tube and orientate them by half-round head of rivet in direction up.

Note, that adjusting valves installed in flowmeters are intended for adjusting not for closing. In standard type they have not the closing function.

- Operating temperature 0 – 100°C
- Operating pressure 1 MPa (without pressure impacts)