

# Flow Meters with Float constructive series AF, BF, CF DF for liquids and gases

Flow meters are meant for measuring of volume or weight of flow. Reading edge of a float is the top edge, which consists of front edge of float. Flow meters to the pipes are joint in vertical position  $\pm 1^\circ$ . Flow meter must not be stressed by pipes eg. **bend**. Before installation of flow meter the pipes have to be rinsed out.

Service and maintenance is limited to checking of tightness, cleaning of entering screens and cleaning of measuring pipe. During operation it is necessary to omit any hydraulic shocks and sudden changes of flow, when the float would interfere with the float stop. Regulating valve (not the stop valve or tap) necessary for setting of required should be opened or closed **slowly**. Sudden opening or closing of regulation organ could, especially for gas media or aired pipes, cause intense crash of float and the damage of measuring pipe. Regulating valve is located into the pipe between flow meter and the source of pressure (pump, ventilator etc.).

Values of flow noted on scale of flow meter refer to conditions (medium, pressure, temperature), which are noted on scale of device and which should be in kept in pipe system.

In case of measuring gas it is necessary especially for inside diameters DN 50 and DN 80 to provide direct calming pipe length greater than five times the pipe diameter. If it is not possible to provide that than the flow meter with led float has to be used.

**Removal of measuring tube is done by unbolting tightening nuts (flanges) and by careful removing of liners with gasket. During setting of liners into the pipe the gasket needs to be smeared by eg. soap water, silicon oil, etc. and then by moderate pressure and with rotatory movement the liners are carefully inserted into measuring pipe.**

Due to increased safety and certitude it is necessary to use protecting shield.

Right before inserting the flow meter type AF, BF into the pipes, take off the flow meter from cover, remove steel bands from flanges and for all types of flow meters take out catch of the float, which kept the float safe during the transport.

Lower pressed-on liner (for types AF, BF), which makes connective, sealing surface (annular area), is necessary to be bottomed on (by hand) during the installation to insure against possible extrusion of the liner from the device.

In case of using the sensors SP1 and SP2 it is necessary to locate them as close as possible to the measuring pipe and to orientate them by the half-rounded head of rivet upward.

Warning, the regulating valves installed in flow meters are intended to regulation, not to closing. In standard version they do not have the closing disposition.

- **Operating temperature**                    **-30 – 100°C**
- **Operating pressure**                      **1 MPa (without pressure shocks)**