

## INSTRUCTIONS FOR METAL FLOW METERS series TMS-100

### DESCRIPTION

Flow meters made entirely from metal with magnetic transmission of the reading.

### MODEL IDENTIFICATION

Each model is identified by a code on every document.

### WORKING PRINCIPLE

This instrument consists of a metal non-magnetic tube - generally tapered - containing a float that moves up and down with a magnet inside this. On the outside of the tube there is a mobile device that is magnetically-coupled with the float and indicates the flow rate

### INSTALLATION

The flow meter should be installed on a perfectly vertical tube with ascending fluid. The unions must be perfectly aligned and at an equal distance from the instrument to avoid creating any irregular tensions in the instrument. The case must not be used as a grip to tighten or loosen the instrument.

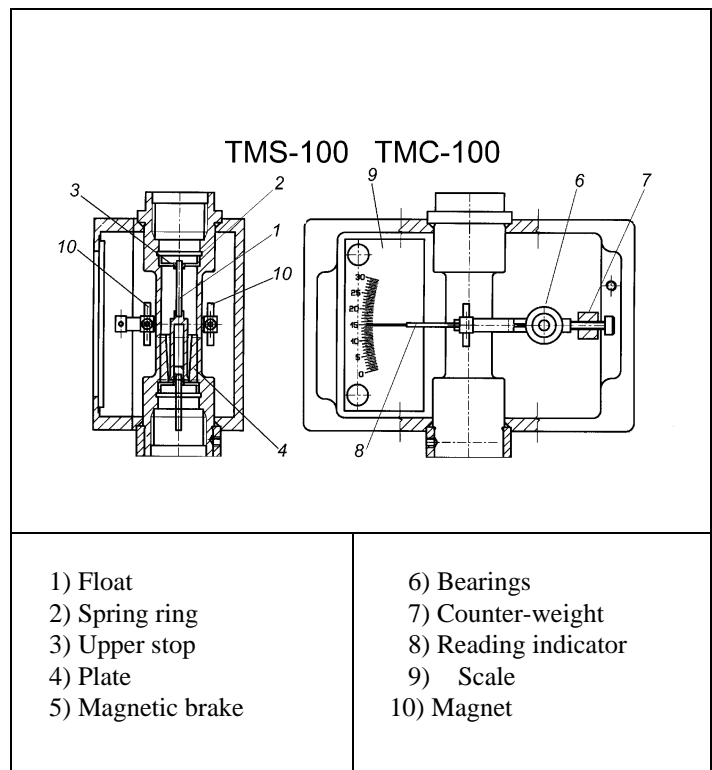
### COMMISSIONING

Remove any blocks on the mobile device inside the case before starting the plant.

Any impurities or magnetic particles in the pipes must be eliminated with suitable filters.

### CALIBRATION

The instruments are individually calibrated before leaving the factory. The calibration is lost if the float or scale are removed and replaced, even on identical instruments.



### MAINTENANCE

Regularly remove the instrument from the plant whenever there is reason to believe that the instrument has become clogged or dirty and remove the upper stop (3), carefully extract the float (1) and then clean the instrument thoroughly. Take especial care not to bend the float guides as this will compromise the efficiency of the instrument.

It may sometimes be necessary to clean the mobile device mechanism and the bearings (6). Never lubricate these.

### TROUBLE-SHOOTING

Given the simplicity of this instrument, any problems are easily identified and eliminated. The main causes are the result of an incorrect use of the instrument:

- installation on pipes with dangerous vibration levels;
- use of the instrument without its case.

### SCRAPPING

There are no particular requirements.

**N.B. IN CASES WHEN THE INSTRUMENTS ARE MEANT TO BE USED IN AREAS FEATURING POTENTIALLY EXPLOSIVE ATMOSPHERES, THE USER SHALL COMPLY WITH THE ADDITIONAL SAFETY INSTRUCTIONS ATTACHED TO THE STANDARD ONES.**