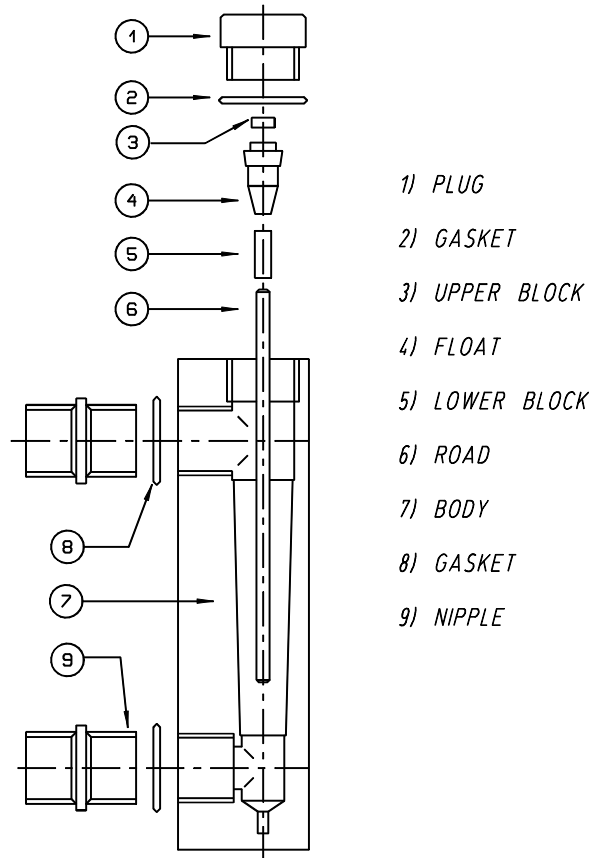


INSTRUCTIONS MANUAL FOR USE AND MAINTENANCE FLOWMETERS SERIES 110



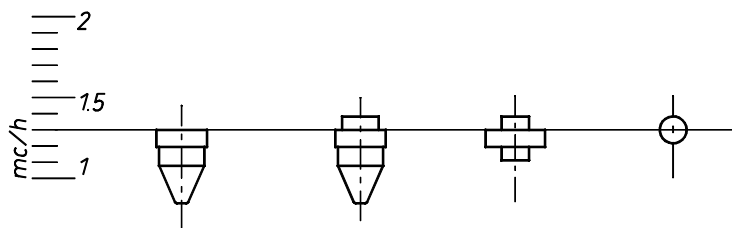
1. WORKING INSTRUCTIONS AND MAINTENANCE

The instrument must be assembled in a vertical position with flowing sense from down to up. Connecting the pipes do not stress excessively the structure in order to avoid body damages at the attachment points.

Bringing it to working phase the instruments must not be subject to water hammers.

It is important not to measure fluids with temperatures of more than 50°C. The plastic parts could be deformed.

In working conditions the float (4) settles in a precise position of the cone-shaped body (7) and the flow reading has to be carried out in correspondence of the maximum float diameter as showed below, where all floats show a flow of 1,3 mc/h.



2. DISASSEMBLYING

For the cleaning:

- Disassemble the tap (1), remove the float (4) and rod guide (6)
- Clean precisely, using cleaning-rods or soft cloths in order not to damage or to score the surface of the measuring body, abrasive materials could make the body opaque.
- Reassemble inverting the above mentioned operations.

For an always correct flow measurement it is necessary to keep the instrument clean, eliminating deposits or incrustations from the inner part of the body (7) from the float (4), and in case of guided float from the rod (6); controll that at the end of an operation the float is completely free to slide without any friction.

3. DISPOSAL

Once the flowmeters have reached the end of their working life, they should be sent for disposal in accordance with prevailing regulations.

During their disposal, pay special attention to the polymers, resins and rubber used in their construction (PLEXIGLASS, PVC, PTFE, PP, PVDF, neoprene, viton etc.).

Metal components may be recycled after removing the gaskets, special coverings as requested by the customer or other plastic materials.

4. WARRANTY

All flowmeter series 110 are guaranteed against manufacturer defects for a period of 12 months from the date of shipment. In the event of a malfunction, if the defective part is returned within the above-mentioned warranty period, Officine Orobiche undertakes to replace any damaged parts under warranty (**excluding transport costs**), provided that the defect is not the result of the improper use of the instrument.

Officine Orobiche may not be held liable for any improper use of its products where these are used for ends other than those indicated in the specifications forming part of the order.

No claims for damages will be accepted in the case of improper use.

Damages and/or expenses, whether direct or indirect, arising from improper installation or use of the instrument shall not be attributable or debited to Officine Orobiche under any circumstance.

The instrument may be used for a maximum period of 10 years from the date of delivery.

After said period, the customer has two alternatives:

- 1) Replace the instrument with a new one.
- 2) Have the instrument overhauled by Officine Orobiche.

5. HOW TO RETURN INSTRUMENTS

Any returned instruments must be accompanied by a sheet indicating:

- 1) The name of the customer
- 2) A description of the material
- 3) Details of the fault
- 4) Process data
- 5) Liquids with which the instrument has come into contact

The returned instrument must be perfectly clean, free of dust and deposits; otherwise, Officine Orobiche may reserve the right to refuse to carry out the required maintenance and return the item "as found" to the customer.

6. FINAL NOTES

Every instrument is supplied fully assembled with all the accessories requested by the customer.

Only in exceptional cases will the various components be supplied separately.

We therefore recommend that the customer inspects the delivery on arrival and immediately notifies Officine Orobiche of any discrepancies.

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.**