

Instruction Manual



RECEIVING, INSTALLATION & MAINTENANCE

The series PT & PTM flow meters are supplied ready for operation. Before installation, remove the internal pieces that fix the float for shipment. Check that when the float is in a vertical position the float moves freely. This operation will have to be done manually.

MOUNTING

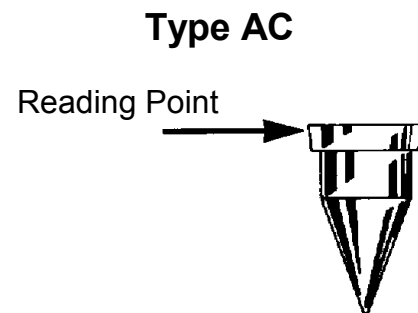
The installation must be in a vertical position with the liquid flowing from the bottom to the top of the flowmeter. For accurate measurement, it is very important to set the flowmeter in the vertical position. Variations of 5-10° in the vertical plane could produce a measurement error of approximately 10%.

Rubber gaskets, of adequate material, must be fitted when installing the flowmeter in a pipe with flange connections.

OPERATION

Always open the regulating valve slowly so that the float does not rise from the bottom to the top too quickly.

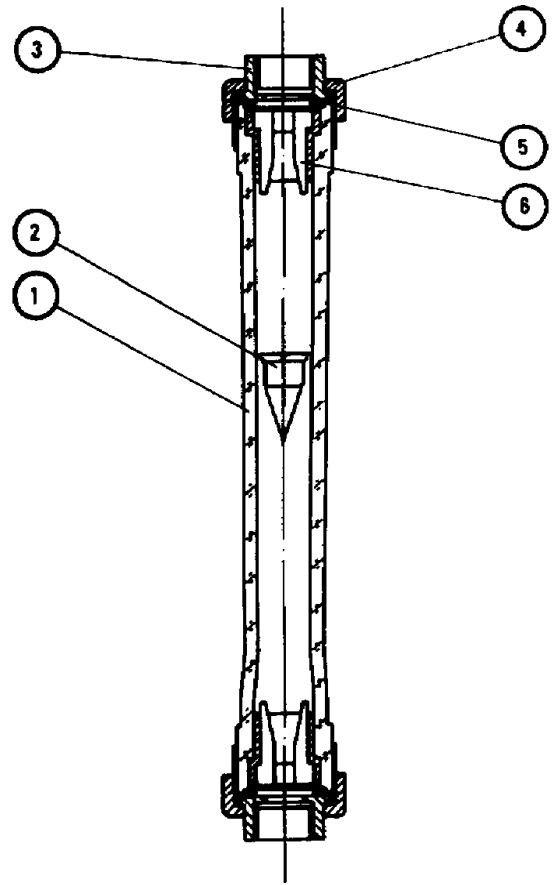
The reading point for the float is on the edge of its largest diameter.



CLEANING AND MAINTENANCE

Usually it is enough to clean the pipe line with water or detergent. If this is not sufficient, you must disassemble the flowmeter as follows:

1. Loosen the nut (4) and remove Items 3,4,5 and 6 at the top end. The float can then be removed from the top. Then remove Items 3,4,5 and 6 from the lower end.
2. Clean the tube with water or detergent and with a bottle brush. Also clean the float.
3. Replace Items 3,4,5 and 6 on the lower end. Insert the float from the top end and replace Items 3,4,5, and 6 on the top end.
4. Check the float (2) moves freely in the flow tube.



No.	Item	PT-11/PT-12	Specials
1	Flow Tube	Trogamid T	Polysulfone
2	Float	AISI-316,PVC,Al	PTFE,PTFE+Lead, Hastaloy,Titanium
3	Connector	PVC/-	PP,Steel,AISI 316, PTFE,Threaded
4	Nut	PVC	PP,Titanium,Hastaloy
5	O-Ring	Nitrile,Viton	PTFE
6	Stops	PVC/AISI-316	PTFE

PT-AMR LIMIT SWITCH

APPLICATION

Magnetically operated bi-stable limit switch driven by the float's magnetic field, for mounting in the PTM-11, PTM-12, PT-11 and PT-12 series flowmeters.

TECHNICAL CHARACTERISTICS

- Application range: from 4 - 40 l/h water
(minimum scale) from 170 - 1700 NI/h air
- Connector DIN 43650.
- Protection class IP-65.
- Maximum switching current: 0.5 A.
- Maximum working voltage: 250 Vac.
(For inductive loads, use an auxiliary relay).
- Maximum power: 12 VA.
- Switching time: 1.1 ms.
- Working temperature: -20, +80°C.
- Complies with the 73/23/EEC Standard EN61010-1

OPERATION

The reed contacts are normally open.

Maximum limit switch:

The contacts close when the float falls below the limit switch and remains closed whilst the float is in any position above the switch. The contacts open when the float falls below the limit switch.

Minimum limit switch:

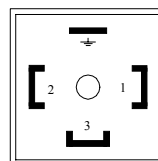
The contacts close when the float falls below the limit switch and remains closed whilst the float is in any position below the switch. The contacts open when the float rises above the limit switch.

To reverse the operation of the switch, disassemble the switch and rotate Item C by 180°.

CONNECTION

In the female connector (A):

Terminal 1:	Reed
Terminal 2:	Reed
Terminal 3:	No connection
Earth terminal:	No connection



MOUNTING

Once the electrical connection have been made, tighten the cable gland, place the rubber gland (B) on the male connector (C) and screw the female connector (A) in its position.

To fasten the limit switch in its position on the flowmeter, loosen the screw (E), clip the limit switch onto the guide on the metering tube and tighten the screw (E) to lock in the correct position.

