

Installation Guide

Domestic / Contact Water Meters / Mechanical Flow Sensor

1. General information on the installation guide

This installation guide is intended for trained personnel.
For this reason no basic working steps are included.



The seal on the meter must not be damaged!
A damaged seal will result in immediate invalidation of the factory warranty and verification / conformity.



Respect the right choice of the model, the nominal load, the temperature and the pressure area.

2. Transport and Storage



Store meters in a frost-free place.
Water meters are precision devices and must be protected against impact and vibration!

3. Assembly

- Prior to installing the meter, all pipework must be flushed thoroughly.
- If the water is soiled, fit the strainer in the pipe before the meter.
- Install the meter in a frostproof position at the lowest possible point of the installation to avoid air accumulation.
- Install the water meter in the approved installation position.
- Position the meter with the arrow mark in the correct direction of water flow.
- Protect meter against impacts or vibrations which could arise at the installation location.
- Protect meter against stress or forces which could be caused by pipes or fittings (e.g. offset, alignment) and use mounting clamps if necessary.
- On completion of installation fill the pipe slowly to prevent pressure shocks damaging the measuring insert.



The meter must always be completely filled with water.
If a risk of frost exists, empty the system and, if necessary, remove the meter.

4. Calming Sections

The water meter coupling is sufficient for multi-jet impeller meters and rotary piston meters.

5. Contact Water Meters

Method of operation

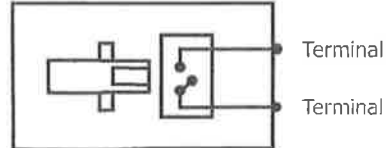
A solenoid opens and closes the contact of an encapsulated, moisture-proof reed switch (reed switch = floating contact).

As a permanent contact can exist in the idle state of the meter (no water flow), the devices to be connected must be designed for continuous operation.

If necessary, switching amplifiers such as HY BR 521 should be inserted.

6. Technical Data

- Version with cable connection or terminal
- Strain relief with Pg 7 conduit thread coupling



Recommended cable cross-section: 2 x 0.25 mm²
Max. contact rating 100 mA at 24 V
Cable assignment floating, as desired (make)

7. Fault clearance

If no flow rate is indicated

- Check direction of meter and correct if necessary.
- Remove meter and check whether the impeller rotates or the counter registers by blowing into the meter. In the event of fault replace the meter.

8. Declaration of conformity for MID meters

Diehl Metering hereby declares that these products conform to the essential requirements of the following directives:

- EMC Directive (2004/108/EC)
- MID Directive (2004/22/EC)
- DE-07-MI004-PTB023 EC Type Examination Certificate for RAY FS BR 414

If required, the complete declaration of conformity can be found under: www.diehl.com/metering

