

Installation of Woltman meters

The best measuring results can be achieved with all Woltman meters if some simple but important installation rules are followed. The instructions and engineering rules according to the calibration regulations serve as a basis, in particular the documents PTB-A6.1, PTB-A6.2 and the DIN 1988.

Woltman meters are by construction sensitive to the incident flow profile. Tee pieces or gate valves that are not completely opened within close proximity to the meter, effectively influence the measuring result.

Exemplary the most important installation rules:

- Woltman meters must be operated in the correct flow direction.
- There must be a minimum of 3 x DN of straight pipe section for WPH type upstream of the meter.
- There must be a minimum of 5 x DN of straight pipe section for WS type upstream of the meter.
- If a sufficient straight pipe section is not possible, then a honeycomb flow straightener should be installed.
- Ideally a straight pipe section of at least 2 x DN is present downstream of the meter.
- To avoid air pockets in the meter, it should not be installed on the highest point of the piping.
- Gate valves or other shut-off valves in front of the meter should be completely opened during operation.

Installation positions

WPH type Woltman meters can be installed horizontally or vertically, that is in horizontal or in perpendicular pipelines; the counter either is facing upwards or is tilted 90° to the side.

Type WS and WPV Woltman meters can only be mounted horizontally, that means only in horizontal pipelines with the counter facing upwards.

The overhead installation is not permitted for any meter type.

Complete installation instructions can be found on www.zenner.com.

