

ANNEX IV

PART I

SPECIFIC REQUIREMENTS

GAS METERS

3. Permissible effect of disturbances

3.1. *Electromagnetic immunity*

3.1.1. The effect of an electromagnetic disturbance on a gas meter or volume conversion device shall be such that:

- the change in the measurement result is no greater than the critical change value as defined in point 3.1.3, or
- the indication of the measurement result is such that it cannot be interpreted as a valid result, such as a momentary variation that cannot be interpreted, memorised or transmitted as a measuring result.

3.1.2. After undergoing a disturbance, the gas meter shall:

- recover to operate within MPE, and
- have all measurement functions safeguarded, and
- allow recovery of all measurement data present just before the disturbance.

3.1.3. The critical change value is the smaller of the two following values:

- the quantity corresponding to half of the magnitude of the MPE in the upper zone on the measured volume;
- the quantity corresponding to the MPE on the quantity corresponding to one minute at maximum flowrate.

3.2. *Effect of upstream-downstream flow disturbances*

Under installation conditions specified by the manufacturer, the effect of the flow disturbances shall not exceed one third of the MPE.