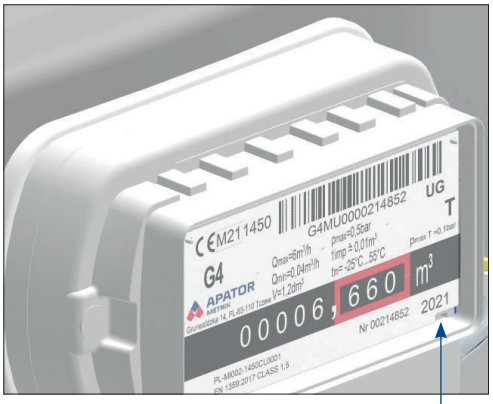

# Residential, commercial and industrial gas meters

| Type | | UG G1.6 | UG G2.5 | UG G4 | UG G4 | 2UG G6 | UG G10 | UG G16 | UG G25 | UG G40 | UG G65 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Maximum flow rate | $m^3/h$ | 2.5 | 4 | 6 | 6 | 10 | 16 | 25 | 40 | 65 | 100 |
| Minimum flow rate | $m^3/h$ | 0.016 | 0.016 / 0.025 | 0.016 / 0.025 / 0.04 | 0.04 | 0.06 | 0.1 | 0.16 | 0.25 | 0.4 | 0.65 |
| Nominal flow rate | $m^3/h$ | 1.6 | 2.5 | 4 | 4 | 6 | 10 | 16 | 25 | 40 | 65 |
| Cyclic volume | $dm^3$ | 1.2 | 1.2 | 1.2 | 2.2 | 2.2 | 5.6 | 5.6 | 11.2 | 16.8 | 22.4 |
| Max working pressure | bar | 0.5 / 2* | 0.5 / 2* | 0.5 / 2* | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| Index max indication | $m^3/h$ | 99999.999 | | | | | 999999.99 | | | | |
| Starting flow rate | $dm^3/h$ | 3 | 5 | 5 | 5 | 8 | 13 | 13 | 20 | 32 | 32 |
| Fireproof up to 650 ºC according to EN 1359 | bar | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Thread | | Threaded connections may be manufactured acc. to any international norm (ISO; ANSI; British Standard etc.....) | | | | | | | | | |

*) Aluminium case

# Robust index

## with proven protection against fraud




NEW GENERATION SEAL

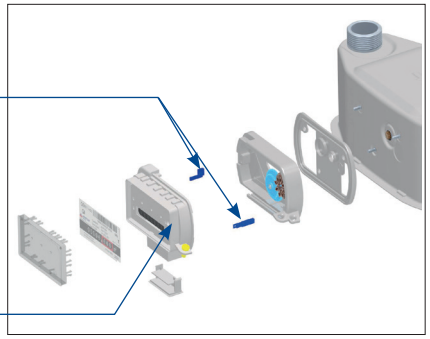
Stamp on index window from inside


PLACE FOR TRADITIONAL SEAL (OPTIONAL)

INDEX BLOCKAGES

Optional anti-tamper blockage parts prevent opening index

BLOCKAGE OF REVERSE FLOW COUNTING

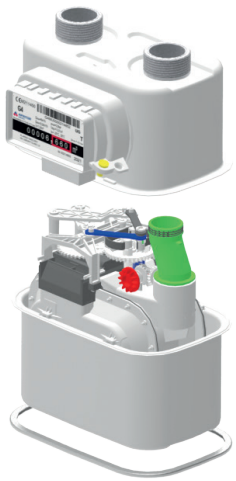


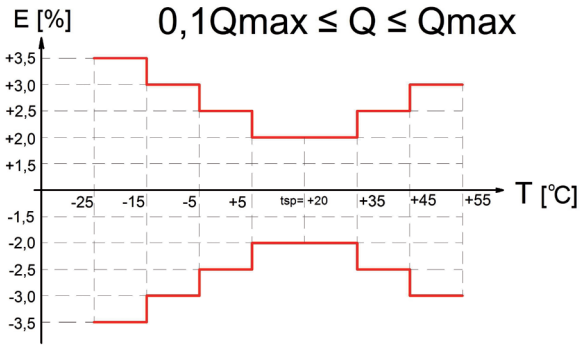


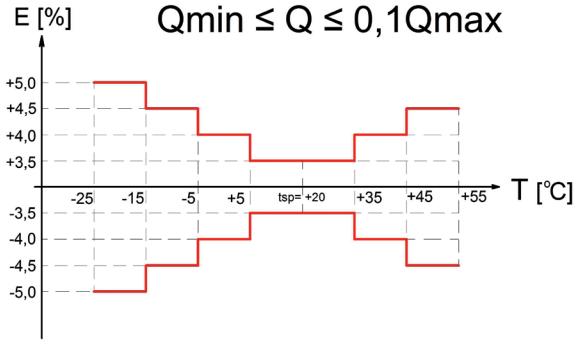
gas

## MECHANICAL TEMPERATURE COMPENSATION

Gas meters UG G1.6 up to UG G4 can be equipped with mechanical temperature compensation (bimetal).






Gas is a substance subject to thermal expansion, which means that depending on temperature, it increases or decreases its volume. Consequently, what changes is the measuring accuracy of a gas meter with relation to its energy content. In other words when gas with some energy content, volume and temperature is already in pipes and is heated, then the index unit is to show a bigger consumption after flow, whereas when gas is cooled, the gas meter will indicate a lower consumption.

It is a very important issue as a temperature change of 3°C corresponds to a volume change of approximately 1%. Such considerable temperature changes are likely to occur especially to meters placed on the outside of a building. Consequently the meter works at various temperatures depending on the season. A gas meter with temperature compensation provides a solution to this problem as it uses and undergoes thermal expansion as well.

A temperature compensation mechanism installed in the measuring unit is adjusted in such a way so that it changes the cyclic volume of the measuring unit exactly like gas undergoing expansion due to temperature changes. Elements responsible for compensation installed in the meter allow a radial shift of the diaphragm, which results in moving the curve of typical error up or down in relation to the zero line.

Thus the gas meter converts the measured value of gas volume into its value at fiducial temperature – irrespective of measuring temperature.

## UG SERIES V=1.2 dm³

UG 1.2 dm³ series gas meters are designed for measurement of gas supplied to apartments where consumption of gas does not exceed 6 m³/h of air density of 1.2 kg/m³.

### THE GAS METERS CAN BE USED FOR MEASUREMENT OF:

- Natural gas
- City gas
- Propane-butane gas

Gas meter is equipped with pulse magnet as standard.
Pulse transmitter can be added at any time (1 imp = 0.01 m³).

### TECHNICAL DATA

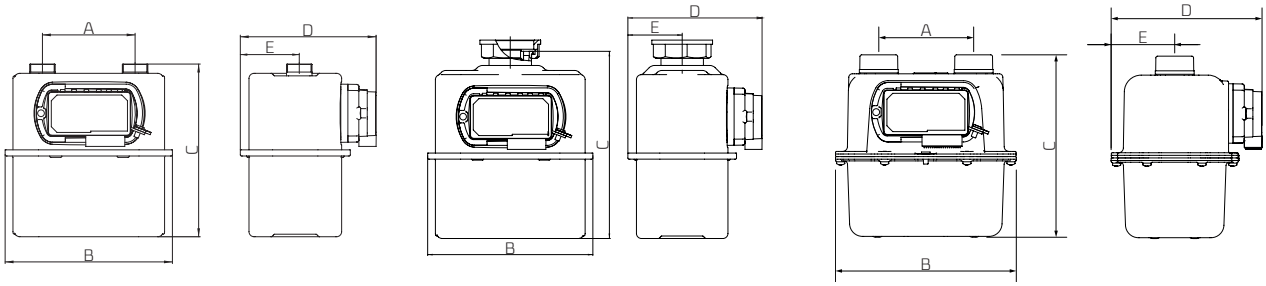
| | | UG G1.6 | UG G2.5 | UG G4 |
|---|---|---|---|---|
| Maximum flow rate | m³/h | 2.5 | 4 | 6 |
| Minimum flow rate | m³/h | 0.016 | 0.016 / 0.025 | 0.016 / 0.025 / 0.040 |
| Nominal flow rate | m³/h | 1.6 | 2.5 | 4 |
| Cyclic volume | dm³ | 1.2 | 1.2 | 1.2 |
| Max working pressure | bar | 0.5 / 2* | 0.5 / 2* | 0.5 / 2* |
| Index max indication | m³/h | 99999.999 | 99999.999 | 99999.999 |
| Starting flow rate | dm³/h | 3 | 5 | 5 |
| Fireproof up to 650 ºC according to EN 1359 | bar | 0.1 | 0.1 | 0.1 |

*) Aluminium case

### ADDITIONAL INFORMATION ON GAS METERS WITH MECHANICAL TEMPERATURE COMPENSATION

| | UG T |
|---|---|
| Cyclic volume | 1.15 (1.2) dm³ |
| Allowable indication errors limits during initial verification: | |
| - Qmin to 0.1 Qmax | ± 3.5% |
| - 0.1max to Qmax | ± 2.0% |
| Temperature range | -25 ÷ 55°C |
| UG T - TC correction range: | |
| - standard | -10 ÷ 40°C |
| - optional | -25 ÷ 40°C |

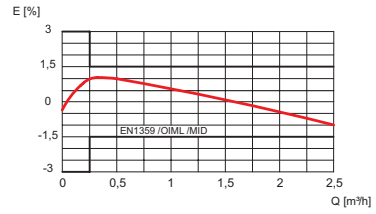
## DIMENSIONS

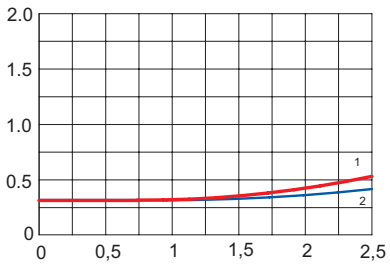



| A [mm] | B [mm] | | C [mm] | | D [mm] | | E [mm] | | Weight [kg] |
|---|---|---|---|---|---|---|---|---|---|
| | Steel | Alu | Steel | Alu | Steel | Alu | Steel | Alu | |
| 000 | 200 | – | 226 | – | 163 | – | 66 | – | ~ 1.7 |
| 100 | 200 | 210 | 212 to 224 | 210 | 163 | 175 | 66 | 74 | ~ 1.7 |
| 110 | 200 | 210 | 208 to 228 | 210 | 163 | 175 | 66 or 70 | 74 | ~ 1.7 |
| 130 | 200 | – | 212 to 228 | – | 163 | – | 66 | – | ~ 1.7 |
| 152.4 | 235 | – | 262 | – | 177 | – | 72 | – | ~ 3 |
| 160 | 235 | – | 241 | – | 177 | – | 77 | – | ~ 3 |
| 220 | 283 | – | 223 | – | 177 | – | 72 | – | ~ 2.9 |
| 250 | 326 | – | 223 | – | 177 | – | 72 | – | ~ 3.2 |

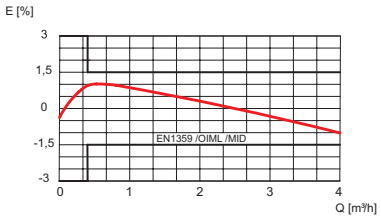
## CURVES OF TYPICAL ERROR AND PRESSURE LOSS

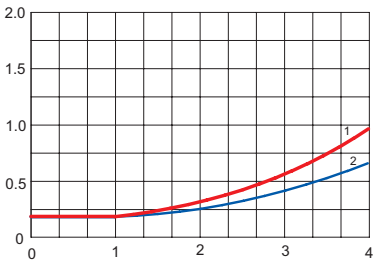
### UG G1.6




### UG G2.5




### UG G4