



Present production and verification of industrial gas meters follows the long tradition of gas meters production in Czech Republic. Calibration and repairing of industrial gas meters in Chrudim city, which have been carried out since 1966, were expanded in the '90s by production of turbine gas meters in cooperation with well established Swiss company GWF MessSysteme AG, Luzern. High quality workmanship, accurate and reliable technology along with wide experience were the reasons, why ELGAS, s.r.o. decided to incorporate the Chrudim workshop into its structure. This know-how enables the company ELGAS, s.r.o. to achieve faster the long-term goal to become a major global manufacturer of smart rotary and turbine gas meters.



Manufacturer: ELGAS, s. r. o., Ohrazenice 211, 533 53 Pardubice, Czech republic
 tel.: +420/ 466 414 500, 466 414 511 fax: +420/ 466 411 190
 E-mail: sales@elgas.cz, http://www.elgas.cz

ELGAS family products for SMART metering

TURBINE GAS METERS

for high precision gas volume measurement



- High accuracy
- Long term stability
- MID approved
- ATEX approved ZONE 2
- Self lubricated longlife bearings
- Designed for easy replacement
- Special variant for biogas applications
- LF/MF/HF pulse outputs
- Integrated thermowell
- Over-run brake

Radial-Blade Turbine Gas Meter - concept with advantages -

Radial-blade turbine gas meter



Over-run brake



Monopipe adapter EAS



ELGAS radial-blade turbine meter is a velocity meter designed for industrial and commercial use.

Radial-Blade Turbine Gas Meter

- The gas meter need not to be built-in until measurement is required
- Meter sizes G/Q 16 up to 400
- Measuring range of 3 up to 650 m³/h
- There is a solution for each demand

Over-run brake (option)

- Suppression of after-run error at intermittent operation without restriction of the measuring range
- For TRZ DN 50–100 and EQZ DN 40–100

Monopipe adapter EAS

- Component of the pipeline
- Flange connection DN 50 – DN 100
- Thread connection G 1 1/2 " and G 2"
- In preparation of the measuring point the EAS can be installed in advance with an over flow cap or lid cap into the pipeline

Installation and maintenance

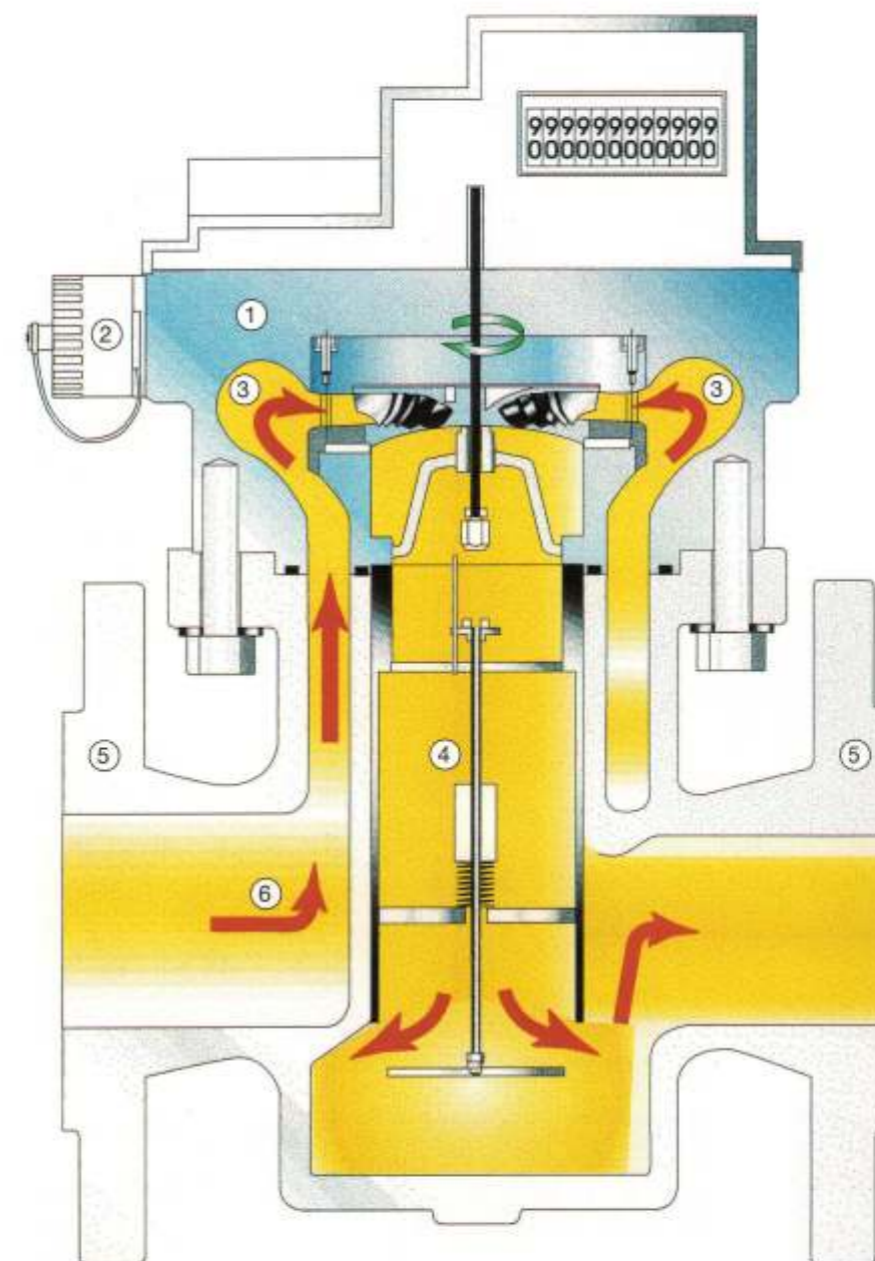
- Can be installed in any position from horizontal to vertical
- Simple exchange of the meters on site. The heavyweight monopipe adaptor remains in the pipeline
- The disconnection of the meter and monopipe adaptor allows a strain-free meter installation

Why an over-run brake

Axial-blade turbine or radial-blade turbine gas meters are most often used for measuring consumption of heating gas supply systems. All turbine meters of this construction are based on the principle of velocity measurement. The advantages of the radial blade turbine gas meter are mainly to be found in its simple installation, small size,

light weight, in any installation arrangement and low cost. However gas meters with the velocity measuring principle are not ideal for intermittent operation. When an energy consuming installation is suddenly switched off, the meter does not react immediately. The freely moving turbine wheel continues to rotate at a slowly decreasing speed and will produce an error. In such case this error can be eliminated by installation of over-run brake.

Schematic sectional view of the Radial-Blade Turbine Gas Meter



① Radial-Blade Turbine Gas Meter

② Impuls tap

③ Radial flow towards the turbine wheel

④ Over-run brake (option)

⑤ Monopipe fitting

⑥ Diversion of the gas flow in the monopipe adaptor