



gAVC 1000

Gas Temperature Conversion Device



Features

- Competitive price
- Quick and easy assembly
- Compliant with MID- en ATEX-Approval
- Long battery lifetime
- Can used as data logger

gAvilar

gAvilar is a leading manufacturer of electronic volume correctors and communication devices, gaspressure regulators, safety auxiliary parts, to complete gas pressure regulating and metering stations. We also provide comprehensive services such as performing maintenance on (natural) gas equipment and systems and Scios approvals 7a, 7b and 11. For more detailed information please visit our website www.gavilar.nl.

Temperature conversion

If gas with a constant gas pressure flows through a diaphragm-, rotor- or turbine- gas meter, With a gas consumption may be less than, for example, 170,000 Nm³ / year suffices to only adjust the gas temperature to a traced volume. By using the gAVC 1000, temperature changes of the gas flowing through the gas meter are corrected to normal conditions. The recalculation takes place on the basis of a fixed value for pressure and the gas composition. Through the gas meter GAVC 1000 gives you an accurate gas measurement. The gAVC 1000 is certified according to the MID- and ATEX Directive.

Datalogger

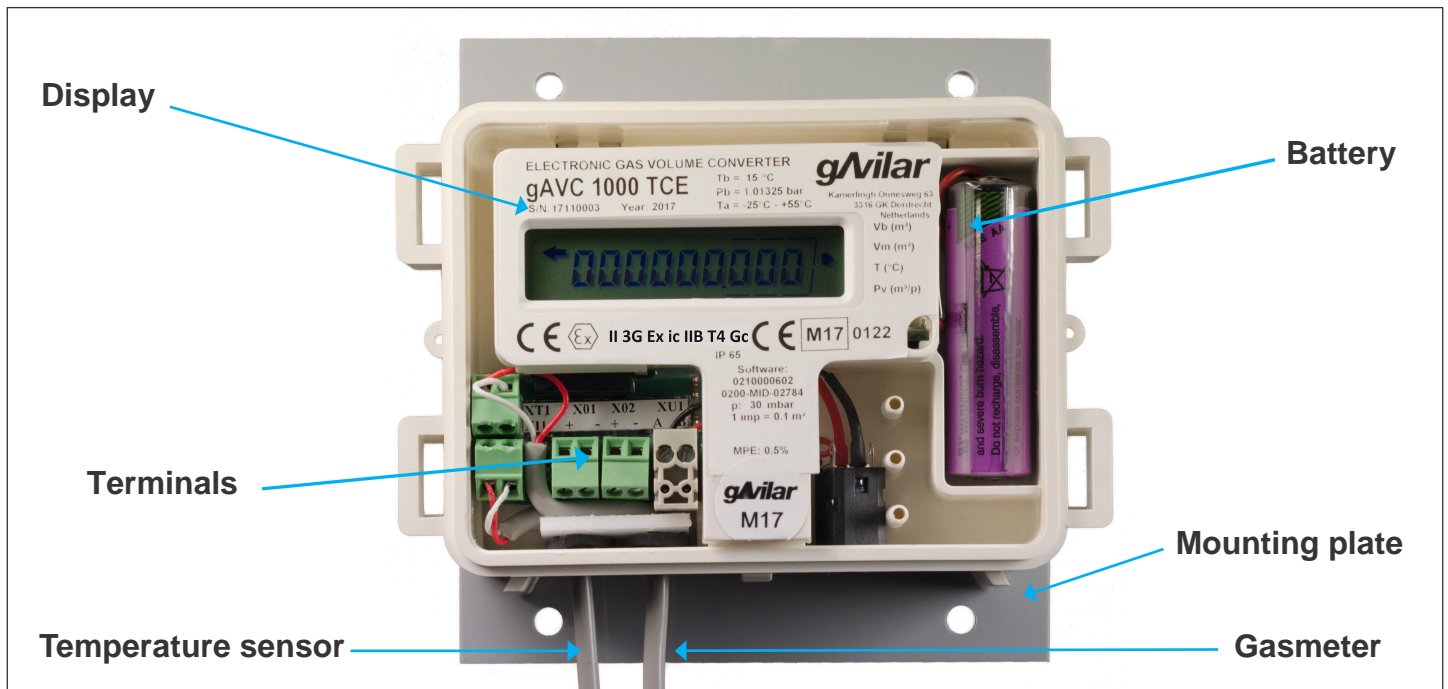
The gAVC 1000 can also be used as a data logger in which the gas consumption is logged. The data logger can adjust the corrected volume and save time, the last 5 peak value of consumption are recorded. In addition, 5 different alarms can be recorded from the total corrected volume with a time stamp. Optionally, the logger can be read locally using user-friendly PC software.

Mounting

The gAVC 1000 can be mounted directly on the gas meter or on the wall by means of a bracket. The gAVC 1000 is equipped with a temperature sensor, the sensors must be fitted with a thermowell. The temperature sensors and thermowell are available in different sizes. The supplied cable must be connected to the LF output of the gas meter. The gAVC 1000 is suitable for placement in zone 2. The housing is IP65 protection class. The Battery power has a capacity of about 15 years.

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Technical specifications



Gas temperature:

-25°C tot +55°C (For gas and ambient temperature).

Pressure range:

0 - 500 mbar G (1-1,5 bar A). Fixed value for pressure.

Temperature sensor:

Type NTC-resistor. T-sensor with electronic device
Certificate included with the device.

Dimensions temperature sensor:

Ø4x50mm

Ø5x50mm

Ø5x50mm with connection for data communication

Other on request.

Pulse input:

One digital LF-input $f < 1,5\text{Hz}$. Wiegand pulses also possible.

0,001 - 10m³/per pulse

Pulse output:

2 pulse outputs. Can be selected to Vb, Vm en Alarm.

Pulslengthe: 125 msec

0,001 - 1m³/pulse

Serial-output:

UniWire with connector for gAVC1000

TCE. Described protocol can be

delivered on request.

Power:

The gAVC 1000 is powered by a single Lithium AA battery life of up to 15 years. The battery can be changed without breaking the calibration seal.

Data logging:

20 monthly loggings of converted volume incl. time stamp.

Alarm log:

5 different alarms including time stamp and total converted volume.

Maximum flow log:

The 5-last registered max flow values incl. time stamp.

Compressibility calculation:

SGERG-88 or fixed factor.

Mechanical:

Housing class: IP 65

Size: length: 115mm width: 80mm height: 35mm

Metrological approval:

MID Approved 0200-MID-02784

Approved In accordance with EN 12405-1

ATEX:

Classificatie: Ex II 3G Ex ic IIB T4 Gc

Ta: -25. +55°C

Accuracy:

Temperature measurement: +/- 0,25°C Conversion factor: +/- 0,25% of the measured value.

Setup software – “UniMeter”:

The available user-friendly PC software (All Microsoft™ Windows® operating systems are supported), can be used for both reading and parameterization * of the gAVC 1000.

*. Parametering is not possible with all versions of the gAVC 1000.