

Flexible and smart-ready!

A gas meter for every occasion

The chameleon has the particular skill of being able to change its outward appearance. However, this "colour change" is not designed primarily as a means of camouflage, but above all to help it to communicate with its fellows. The new Absolute ENCODER AE2 from Elster is also adaptable and communicative.



The new Absolute ENCODER can at any time be equipped with different communication modules and can thus be retrofitted for automated data transfer. We therefore designate a diaphragm meter with an Absolute ENCODER as "smart-ready".

Communication can take place, for example, according to the Open Metering System specification (see p. 13). For this solution, the communication module ACM M-BUS WIRE is provided.



Diaphragm meter BK-G4 with Absolute ENCODER

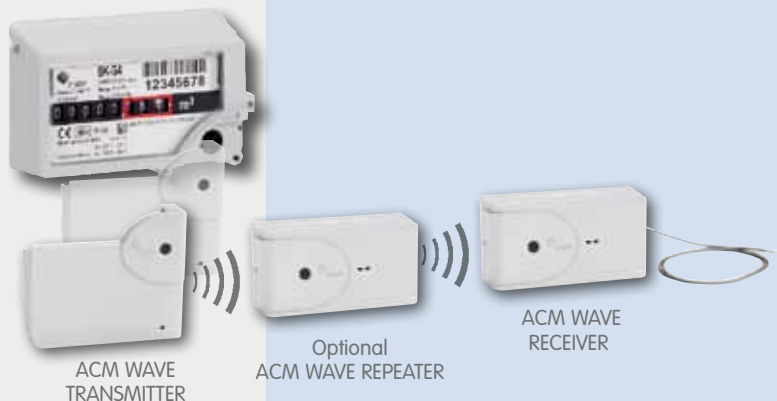
The communication modules described below are designed for easy and safe installation and reliable operation, and support the long service life of diaphragm gas meters of at least 20 years.

The first choice communication solution is cable-based integration in an M-BUS system. A cable still provides the most reliable basis for data transfer and batteryfree operation ensures minimum operating costs.



ACM M-BUS WIRE

However, cable-based installation at the consumer's premises is not always possible or economical. So, in order to enable a uniform M-BUS structure, the ACM WAVE SYSTEM can also alternatively be used. This system comprising a transmitter and a receiver creates a "wireless bridge" between the gas meter and the higher-level M-BUS unit (e.g. electricity meter or MUC). If the range is insufficient, due to local influences, the wireless link can be extended with so-called repeaters.



ACM WAVE TRANSMITTER

Optional ACM WAVE REPEATER

ACM WAVE RECEIVER



If a wireless solution is preferred for data transfer, Elster offers the communication module ACM M-BUS RF. Wireless transmission takes place, for example, via wireless M-BUS according to the Open Metering System specification.



ACM M-BUS RF

For connecting units with SCR interfaces such as data loggers or external radio modules, the communication module ACM SCR+ WIRE will be able to be used in the future.



+ ACM SCR+ WIRE

Flexible and ready for communication

With his demonstrable colour-changing, the chameleon also expresses its readiness for courtship, using its adaptability to signal its readiness to communicate or to mate.

When a communication standard is changed, the Absolute ENCODER AE2 also needs a new "partner". The AE2 interface can also be used for "foreign" communication modules. In this way, it is possible to fit or retrofit a gas meter with Absolute ENCODER with a new communication module even after installation, without impairing the calibration validity.

If the Absolute ENCODER is integrated in a data management system, and the consumption data is made available to the end customer in an Internet portal, the consumer is placed in a position where they can understand and control their gas consumption themselves. This concept satisfies the requirements of the EU Directive on energy end-use efficiency and energy services, as well as §21b of the German Energy Industry Act.

Open Metering System

The Open Metering System (OMS) is an inter-divisional, inter-manufacturer, inter-operable open system specification that is valid across Europe. The OMS specification has been submitted to the European Committee for Standardization (CEN) as draft European standard TC294. The OMS specification is available on the internet at www.openmetering.org.

In this way, the Absolute ENCODER AE2 is brilliantly suited to fully-fledged smart metering and presents a comparatively efficient and ecological solution for recording and transferring consumption data.

Further information about the highly-interesting, communicative chameleon can be found for example at www.en.wikipedia.org. Everything about Absolute ENCODERS and associated communication modules can be found at www.elster-instromet.com.

We would also be happy to talk to you personally. I am looking forward to our communication.

Hans Arp

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The **Absolute ENCODER** is an index for diaphragm gas meters, which records and displays gas consumption in exactly the same way as a mechanical roller index. The position of the digit rollers is scanned opto-electronically and the absolute meter reading is transmitted via an interface and standardized communication protocols.

The operating energy for the diaphragm meter is derived from the gas pressure. Electrical power is required only for reading the Absolute ENCODER, which is made available by the M-BUS master in the case of cable-based data transfer. The M-BUS master is integrated in an electricity meter or in a data concentrator (e.g. MUC). For this application, no batteries are required.

