

We're ready to take on more responsibility: Elster volume correctors now with MID approval

As one of the world's leading manufacturers of gas meters, Elster is one of the first to have satisfied all the requirements for the production of volume correctors EK210, EK230 and EK260 in accordance with the European Measuring Instruments Directive (MID). Together with the German National Metrological Institute (PTB), the first EC type-examination for volume correctors in Germany was carried out pursuant to the European Directive 2004/22/EC. Production by Elster is now conducted in accordance with this Directive. Essentially what that means for us is that we will be taking on more responsibility – and we are prepared to do so. For our customers little will change – you can be sure of that.

Conforming to the Directive

Under the previous national regulations, the operation of volume correctors (known as "volume conversion devices" in the relevant Standards) was subject to national statutory specifications and metrological approvals. Calibration, testing and official verification of the devices, their placing on the market and commissioning were governed by national regulations.

With the new European concept for the field of technical harmonisation and standardisation, individual national directives will be replaced. With the application of the MID, the manufacturer declares his products as complying with the requirements of the MID, from the type sample to the units placed on the market. For the EC type-examination of volume correctors, the reference criterion is primarily the harmonised standard EN 12405-1:2005 + A1:2006. The company's certified quality system, with an extension for metrology, applies for the production of measuring instruments.

Conformity of a measuring instrument with the corresponding essential requirements is assessed according to a conformity assessment procedure chosen by the manufacturer. Approval of the chosen procedure and monitoring of the assessment will be conducted by an independent institution appointed by the relevant EU Member State, known as a "notified body".

In Germany, the PTB (Physikalisch-Technische Bundesanstalt – German National Metrological Institute) in Brunswick is one of these notified bodies, which Elster consciously chose. In the past, the stringent demands and the quality of a German PTB approval served as the basis for approvals granted by many other national metro-

logical authorities worldwide, often without the need for further testing.

It is possible to choose between the following modules for the declaration of conformity for gas meters and volume correctors:

- **B + D:** type-examination by a notified body and quality assurance/production
- **B + F:** type-examination and verification of products, in each case by the notified body
- **H1:** full quality assurance for development, production, final acceptance and testing

The following flowchart shows the possible conformity assessment procedures.

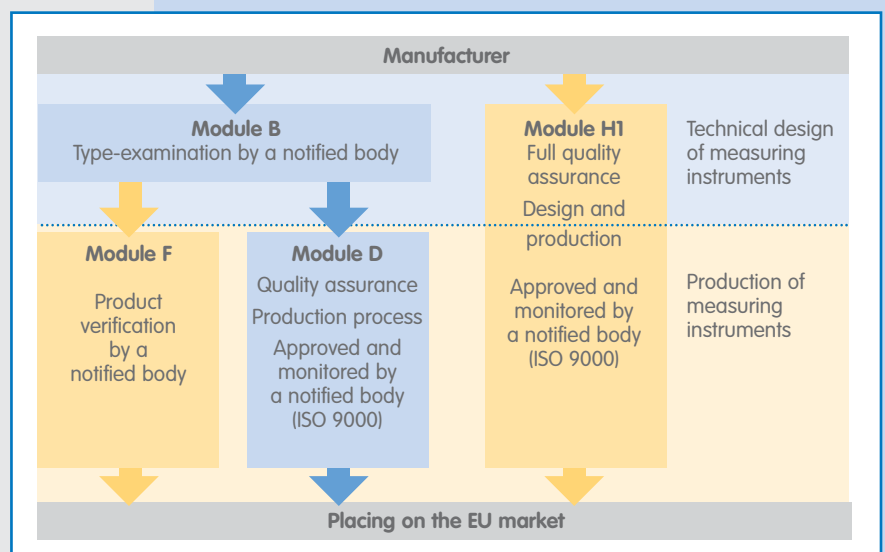


Fig. 1: Possible conformity assessment procedures for gas meters

Elster has chosen the conformity assessment procedure according to Modules B + D (blue).

This means: in addition to the actual production, calibration, testing and sealing the volume correctors are now integral parts of the production process. This procedure was certified to Module D by the notified body, in our case the PTB.

Technical modifications

As Elster's volume correctors EK210, EK230 and EK260 have already satisfied the European Standard specifications for volume correctors before undergoing the EC type-examination, there are no essential technical modifications.

The MID offers a choice of ranges for the permitted ambient temperature. In this case, the former specified range of -20°C to +60°C has been adjusted to -25°C to +55°C. The necessary compliance of the measurement accuracy at -25°C has of course been tested and confirmed by an independent body. Furthermore, further pressure ranges between 0.7 and 80 bar (absolute pressure) are also possible.

Front film in new design

In addition, with the MID approval we have taken the opportunity to transfer the colour and design of our new company logo onto the front film as well. The control keys, as well as the retainer ring of the optical interface, are no longer yellow, but instead in the new company colour, blue. The CE marking pursuant to the MID can now be found on the type label, and no longer on the front film.

Type label and sealing

All the general information required about the unit is now indicated on the type label in English. Besides the year of production and the serial number, the maximum permissible error at reference conditions, the IP protection class and the note on the applicable harmonised standard are also shown.

With the CE and the Metrology markings, as well as indicating the reference number of the notified body, Elster finally confirms conformity with the Directive (see Fig. 2).

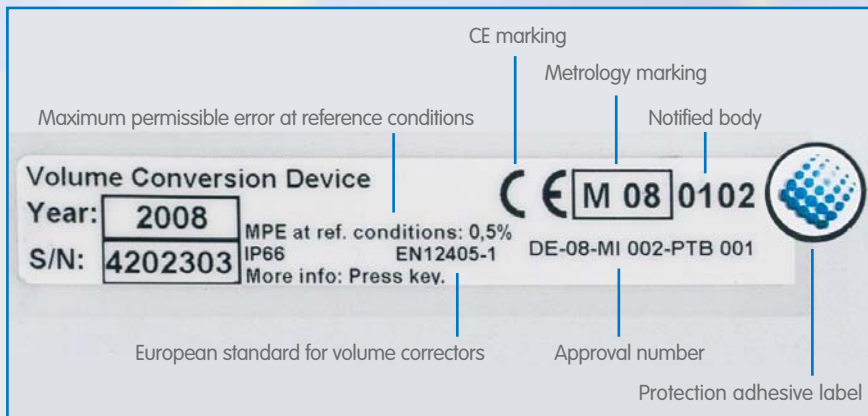


Fig. 2: New type label and new protection adhesive label



Fig. 3: Volume correctors EK210, EK230 and EK260 with new front film

We have chosen to use our company logo for the protection adhesive label. In the future you will find it on all the units delivered, in the place where national official adhesive seals had previously been used.

No change to the market surveillance measures!

Market surveillance, in other words, compliance with national regulations within the framework of ongoing measurements, is required by the MID, but is not governed by the MID. Checking measurement accuracy, recalibration, as-found tests, etc., is the responsibility of national metrological authorities or testing agencies.

We are ready

Elster GmbH satisfies all the requirements for producing volume correctors and placing them on the market in accordance with the European Measuring Instruments Directive (MID). As our units had for years already met similarly stringent technical demands, conformity with the MID-harmonised standards could quickly be implemented.

The main difference, in comparison with before, is that the former initial calibration process for the units – based on national regulations and laws – will now be replaced in all the European Union Member States by the conformity declaration made by Elster GmbH. At the end of the day, this procedure means more responsibility. Taking on more responsibility will not be difficult for us, as we already know how important our customers are to us.