LOW PRESSURE GAS METERING

Diaphragm meters for residential, commercial and industrial applications

The recent merger of Elster and Instromet once again gives us the opportunity to provide you with an overview of our diaphragm meter range. If you should require any more detailed information than you will find in the following two pages, please check out our internet site www.elster.com.

The only effect the integration of Elster and Instromet will have on our diaphragm meters will be in the form of a new Elster-Instromet logo. This logo will first appear on the index plates of all of our diaphragm meters in June, 2005. If, however, anyone might think, "So what? It's still the same old product", they will soon think again! The introduction of the new Z6 index will offer our customers new opportunities when it comes to optimising their readout and billing processes.

In figure 1, you can see the industrial diaphragm gas meter BK-G65 and the BK series of residential and commercial diaphragm gas meters from BK-G2.5 up to BK-G25 produced by Kromschroeder in Osnabrueck. The BK meters are well known for their high metering accuracy and long-term stability as well as their low-noise operation. What's more, they are popular because they are not susceptible to any impurities in the gas. The meters are available in one or two-pipe versions and those meters up to and including size BK-G10 can, on request, be supplied with a mechanical temperature compensation system.

Fig. 1: Residential and commercial diaphragm meters from BK-G1.6 up to BK-G65

Fig. 2: BK-G2.5 V1.2

In the case of electronic temperature compensation (starting from BK-G10), the pulses from the magnets integrated into the standard index are counted and then converted to calculate the actual volume with the registered temperature values.

An optional function for all Elster-Instromet meters is a reverse flow valve. This system is a simple and cost-saving measure which not only prevents the internal mechanism from being turned around to operate in the wrong direction but also stops the gas from flowing back through the meter and thus prevents anyone from stealing gas.

Figure 2 shows the BK-G2.5 with the well-known V1.2-liter measuring unit, which is an extremely successful residential meter in use all over the world. Figure 3 shows the BK-G4 with its 2-liter measuring unit.

Fig. 3: BK-G4 V2

Fig. 4: BK-G40 and BK-G65 diaphragm meters

The BK series is rounded off with the BK-G40 and BK-G65 industrial diaphragm meters (Fig. 4). These meters also make full use of the positive features of the other BK meters but take things much further in that they are capable of switching on three or four 6-liter measuring units in parallel. Another major advantage is that these meters have become much more compact and lighter than in previous years. They are manufactured in Mainz-Kastel and can be supplied as one-pipe versions or either horizontal or vertical two-pipe versions.

Fig. 5: Metering units for the BK series

A new index has been designed specially for the BK series and this can be optionally fitted with the CHEKKER® system. The CHEKKER® is a patented roller counter which, with the help of two additional rolls in the index, offers the possibility to check the readout of the consumption or the data registration.

Fig. 6: Z6 including CHEKKER®

As well as the introduction of the new Z6 index, it is now also possible to use the ENCODER-Technology with diaphragm meters. The Z6 Absolute-ENCODER acts as the main index and provides the original meter reading from the seven highest rolls in digital form. The function and the benefits of the ENCODER index were explained in detail in the last issue of Profiles in 2004.

Fig. 7: BK meter with Z6 Absolute-ENCODER

Do you have any questions concerning our meters? Are you interested in our CHEKKER® system or the Absolute-ENCODER for diaphragm meters? Why not give us a call:

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