

STOPPING REVERSE FLOW:

Shut-off ?

For many years now, devices to prevent reverse operation have been standard in diaphragm gas meters up to size G 25. They prevent gas from being measured if the direction of the gas flow should be reversed, i.e. from the outlet side to the inlet side of the meter. With the help of this it is possible to determine, when setting up a new installation, if there are any faults in the piping system or, in the case of one-pipe gas meters, if a regulator connection piece has been used.

Many people also assume that the use of such a device prevents the consumer from turning a two-pipe meter around in order to allow the gas to flow in the opposite direction and, by doing so, to steal gas. This is, however, not the case.

This type of device prevents the measuring unit and, therefore, the totalizer from running backwards. However, in contrast to normal operation, the pressure conditions on the slides are reversed and they are lifted even when the differential pressure is very small. The gas flow is released in full. Any attempt to steal gas is then successful and the device only prevents the 'double' effect. This theft can only be stopped by using a reverse flow valve. This works like a shut-off valve. In normal operating conditions, it is opened by the gas flow.



If, as a result of any manipulation, the gas flow comes from the opposite direction, the reverse flow valve closes and stops the meter from operating. The exact requirements which apply to these devices can be found in the European Standard EN 1359 for diaphragm gas meters.

In the last few years, Kromschöder has developed reverse flow valves like these for all sizes of measuring units. They are now available as an option at a very reasonable price for all two-pipe meters from BK-G1.6 up to the new BK-G65. Naturally enough, all of the requirements mentioned in EN 1359 are fulfilled.

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