

## <u>IS 14439 (Part 2):1998 Legal Metrology – Gas Volume Meters</u> (Part 2 Diaphragm Gas Meters)

The gas meters are used for measuring the bas consumption at the consumer's end, when the gas is supplied through pipelines. These meters are commonly used in residential and small commercial settings due to their durability, accuracy, and relatively simple design. Their mechanical design ensures ease of use and durability, though they are less suited for high-flow industrial applications.

IS 14439 (Part 2) covers the direct reading type diaphragm gas meters, to be used for gaseous fuels, for registering the volume of gas passed. It covers the different working ranges with maximum flowrates suit the applicability. The maximum permissible errors at initial verification of the gas meters, as well as in service are also specified.

The standard provides the guidelines for test procedure, for pattern approval and subsequent verifications to check conformity against the pattern approved. The accuracy tests are also prescribed, to check the accuracy at the defined maximum permissible errors at the specified flowrates.

By adhering to these standards, manufacturers can provide consumers with trustworthy, consistent, and safe devices, while utility companies can offer transparent and fair billing. The overall effect is a safer, more reliable energy system for households, helping both consumers and providers maintain a high level of trust and operational efficiency.