

G1.6 / G2.5 / G4

Diaphragm gas meter with mechanical counter



VuGas G1.6 / G2.5 / G4 diaphragm gas meters suitable for a variety of applications including secondary metering of natural gas, town gas, propane/butane - available in sizes 3/4" to 1 1/4".

Key Features

- Diaphragm meter type
- Universal design for most domestic applications
- Accuracy up to $\pm 1.5\%$
- Mechanical sealed counter
- Meter body material is Epoxy coated steel with anti-corrosion properties
- BSP fittings supplied
- Maximum pressure of 500 mbar
- Maximum temperature of $+55^{\circ}\text{C}$
- Qmax up to $6 \text{ m}^3/\text{h}$
- Tamper proof body and counter protected from running backwards

Operating Principle

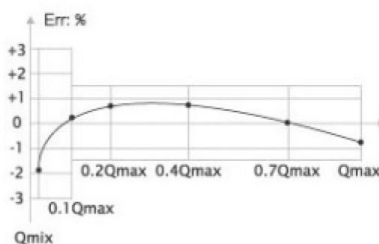
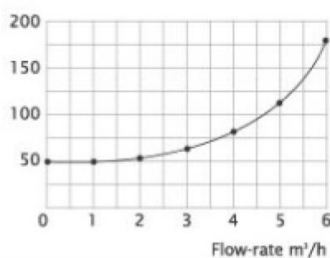
The **VuGas** gas meters have measurement chambers linked together to form a unit that is separated by a diaphragm or a deformable wall. These diaphragms are connected to each other via a rotating piston. The quantity of gas passing through the diaphragm meter can be directly measured as the volume of each chamber is already known and checked at manufacture. Diaphragm meters can also be employed with LF pulse generators for providing a meter reading remotely or for data logging. Diaphragm meters are mainly installed in domestic applications because they have especially large rangeability which is suited to such diverse and unpredictable applications.

Technical Data

Item	Unit	Model		
		G1.6S	G2.5S	G4S
Nominal flow rate (QN)	m ³ /h	1.6	2.5	4
Maximum flow rate (Qmax)	m ³ /h	2.5	4	6
Minimum flow rate (Qmin)	m ³ /h	0.016	0.025	0.04
Total pressure absorption (Loss)	Pa	<200 = (<2 mbar)		
Operating pressure range	mbar	5 to 500 max		
Cyclic volume	dm ³	1.2		
Permissible error	Qmin ≤ Q < 0.1 Qmax	±3		
	0.1 Qmax ≤ Q ≤ Qmax	±1.5		
Min. index readings	dm ³	0.2		
Max. Index readings	m ³ /h	99999.999		
Operation: ambient temperature	°C	-10 to +40		
Storage temperature	°C	-20 to +50		
Service life	Years	10		
Pulse Output	Reed Sw	RJ45 1m cable (1 Imp = 0.001 m ³)		
Dimensions	mm	166 x 222 x 163.5 (width x height x depth)		

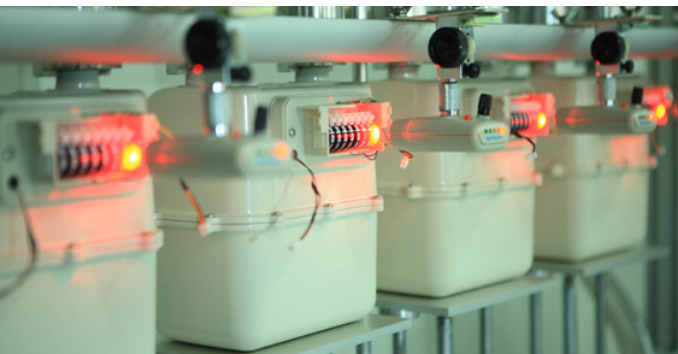
Curve Graph

Pressure Absorption (Pa)



Main Product Parameters

Description	
Type	G1.6 / G2.5 / G4
Design and dimensions	According to EN1359 / O.I.M.L diaphragm type gas meter
Fluid in line	Natural Gas / Town Gas / Propane, Butane, air
Back run stop	Meter counter is protected from reverse flow
Anti magnetic	The meter internals including the meter counter are made of non magnetic materials
Reading indication	Direct reading front counter with suitable flow proving provisions
	Min. index reading: 0.2dm ³
	Max. index reading: 99999.999m ³
Diaphragm	Nitrile rubber, long life, temperature resistant
Temperature & corrosion resistant	All internal components, diaphragm and housing are designed to withstand operational / ambient temperature of -25 °C to +55 °C and are corrosion resistant
Housing	Steel (Epoxy Coated)
Capacity	G1.6 with Qmax= 2.5 m ³ /h and Qmin = 0.016 m ³ /h
	G2.5 with Qmax= 4 m ³ /h and Qmin = 0.025 m ³ /h
	G4 with Qmax= 6 m ³ /h and Qmin = 0.04 m ³ /h
Total pressure absorption (loss)	≤200 Pa (< 2 mbar)
Max operating pressure	500 mbar
Cyclic volume	1.2 dm ³
Flow measurement accuracy	Between Qmin and 0.1 Qmax = ± 3%
	Between 0.1Qmax and Qmax = ± 1.5%
Operating temperature range	-25°C to +55°C
Service life	≤10 years
The distance between centres	110mm (100mm or 130mm by request)
Connection threads	Standard 1" BS 746 / or 3/4" BSP or NPT / M30 x2 (or customised on request)
Colour	RAL9002
Weight	2kg
Installation	Top mounted connections with flow direction left to right (or right to left on request)
Tamper proofing/ Sealing	i) Tamper evident cup seals at both sides of the index assembly
	ii) Tamper evident bolt seals are provided to hold the upper and lower part of the body of the meter.
Meter serial no.	Meter serial no. and type are printed on the index assembly (counter)



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