

DATA SHEET

DATASHEET OF DOMESTIC DIAPHRAGM GAS METER		
General	Subject	Description
	Service	Natural Gas
	Standard	Approved to MID Approval/ Compliance as per EN 1359: 2006 / EN 1359:2017 / latest edition OIML R 137-1 & 2 for Gas Meters; PNGRB requirement (refer T4S) specification
	Connections Orientation	Left Side Inlet & Right-Side Outlet
	Installation	Suitable for outdoor/Indoor Installation, Hot and Humid ambient conditions, tamper proof and corrosion resistant for a life period of 20 years
Process Condition	Flow / Service	2.5 m ³ /hr (Max) 0.016 m ³ /hr (Min.)
	Accuracy	+ - 3% (Qmin. to 0.1 Qmax.) or + - 1.5% (0.1 Qmax. To Qmax.)
	Range ability	1:150 or better
	Cyclic Volume	Minimum
	Operating Pressure	15 - 38 bar-g
	Design Pressure	500 mbar-g (As per EN 1359)
	Max. Allowable Pressure Drop	2 mbar
	Specific Gravity	0.6
	Operating Temperature	0° to 45°C, Design 60° C
Body	Casework/body	Suitable for outdoor/Indoor Installation, tamper proof and corrosion-resistant powder coated / waterproof.
	Coating & painting	Powder coating & epoxy painting
	Corrosion Protection	The suitable coating on the inside and outside of the casing.
	End Connections	¾" NPT (M) conforming to ANSI B 1.20.1 End Connection (In case the end connections are differing bidders to provide suitable adopters of Brass material and approved quality to meet the specified end connections).
	Cyclic Volume	0.8 dm ³ and above
	Fire Resistance	As per BS EN 1359: 2006 (or latest) / BS 4161 or equivalent
	Index	Reading
Unit		CM (Cubic Meter)
Marking on index dial		Gasonet, along with the logo
Ingress Protection		IP65 and above
Internals	Diaphragm	The diaphragm meter then material shall be Polyester fabric coated for an endurance life cycle as per EN 1359: 2006 / EN 1359:2017 / or the latest edition in force
	Other Internals	All meter internals shall be Tamper proof & non-metallic to prevent from tampering with any magnet of any capacity
Others	Leak testing	The meter was pressurized with air at 1.5 MAOP of the meter immersed in water to observe leakage.
	Sealing Arrangement	Provision has to be made by the vendor.
	Anti-Tampering	The meter is internal to be non-metallic to prevent tampering like a magnet.
	Centre to Centre distance between inlet & outlet connection	to be given by the vendor
	Noise	Very low, vendor to specify
	Automatic Meter Reading System	The gas meters should be compatible with implanting the automatic meter reading system at a later stage by retrofitting an appropriate signal-transmitting device.
	Reverse Flow Deterrents	Reverse count restrictor to be provided. Reverse rotation of the index is not allowed.

Note:

1. For Domestic Diaphragm Gas Meter Compliance to BS EN: 1359:1999+A1 Amendment 2006 or EN 1359 2017 or the latest edition in force shall be provided. (The certificate as per 1359:1999+A1 Amendment 2006 valid as on bid due date then only it will be accepted; otherwise, certificate in compliance to EN 1359-2017 has to be provided)
 2. The Vendor shall provide a calibration certificate and accuracy at MAOP of the meter for flow rates of Q_{max}, Q_{min}, and 0.1 Q_{max}. The model approval should be from FCRI or DVGW or equivalent authorities.
 3. Plastic Caps shall protect end connections.
 4. The meters shall be indelibly marked with details of Max. Flow, the direction of flow, Max. operating pressure, model serial number, date of manufacturing etc.
 5. Flow capacity in SCMh shall be calculated considering Maximum Operating Pressure & Temperature
 6. Safety Sticker is required,
6. Complete details with product catalogue, mounting instructions, Weights & Measure certificate, import certificate (in case of the foreign manufacturer) and location of meter manufacturing, calibration certification of each meter and test bench valid at the time of testing and calibrations, valid certification as per PNGRB regulatory requirement shall be submitted along with the bid. Any non-compliance found at the time of inspection, strict action shall be taken against the manufacturer as per the terms and conditions of the contract. Warranty as per the terms and conditions of the contract shall be provided.

REFERENCE STANDARDS

The latest editions of the standards mentioned herein in this specification, including all addenda and revisions, shall apply. The vendor shall furnish (along with the technical bid) a copy of the approval documents, and certificates (in English language only) for each of the offered models, for compliance with the requirements of the following standards:

- a) Meters shall comply with EN 1359: 2017 (or latest)
- b) Meters shall have EU Directive 2004/22/EC (MID) certificate.
- c) Conformance certificate shall be submitted. The meter shall be tested in line with its compliance with the test requirements of EU Directive 2004/22/EC (MID) as per EN1359 (Latest) standard (or latest standard). The certificate shall be submitted to GAOSNET along with the Bid conforming to the fact that the meters are tested with respect to the test procedures indicated in MID and found OK.
- d) Type approval certificates
- e) Approval shall be obtained from the Weights and measurement department for the diaphragm meters and the certificate shall be produced to GAOSNET along with Bid.
- f) Availability of importing license for domestic meters to be imported.