

### VADODARA GAS LIMITED CORRIGENDUM – 1 DATED 10/10/2022

## <u>TENDER NO.</u>: VGL/CO/C&P-PNG/BD202208P008 & <u>TENDER ID</u>: 552687 <u>TENDER SUBJECT</u>: PURCHASE OF DOMESTIC DIAPHRAGM METER ON ARC BASIS FOR A PERIOD OF ONE YEAR

## **DATA SHEET**

| DATASHEET OF DOMESTIC DIAPHRAGM GAS METER |                              |  |  |
|---|------------------------------|--|--|
|   | Subject                      | Description  |  |
| General                                   | Service                      | Natural Gas  |  |
|   | Standard                     | Approved to MID Approval/ Compliance as per EN 1359:2017 or latest, 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 m3/hr (Max) 0.016 m3/hr (Min.)   |  |
|   | Accuracy                     | +- 3% (Qmin. to 0.1 Qmax.)<br>+- 1.5% (0.1 Qmax. To Qmax.)   |  |
|   | Range ability                | 1:150 or better  |  |
| uo,                                       | Cyclic Volume                | Minimum  |  |
| ) ss                                      | Operating Pressure           | 15 - 38 mbar-g   |  |
| )Ce                                       | Design Pressure              | 500 mbar-g (As per EN 1359)  |  |
| Pro                                       | Max. Allowable Pressure Drop | 2 mbar   |  |
|   | Specific Gravity             | 0.6  |  |
|   | Operating Temperature        | 0° to 45°C, Design 60° C   |  |
|   | Casework/body                | Suitable for outdoor/Indoor Installation, tamper proof and corrosion resistant powder coated / waterproof.   |  |
|   | Coating & painting           | Powder coating & epoxy painting  |  |
| Body                                      | Corrosion Protection         | The suitable coating on the inside and outside of the casing.  |  |
|   | End Connections              | 3/4" BSPP (M) confirming to ANSI B 1.20.1 End Connection (In case the end connections are differing bidder to provide suitable adopters of Brass material and approved quality to meet the specified end connections). |  |
|   | Fire Resistance              | As per BS EN 1359 (or latest) / BS 4161 or equivalent  |  |
| <b>×</b>                                  | Reading                      | 99999.999 Index with auto reset facility and protection as per IP 65.  |  |
| Index                                     | Unit                         | CM (Cubic Meter)   |  |
| 1   | Marking on index dial        | VGL along with the logo  |  |
|   | Ingress Protection           | IP65 and above   |  |
| Internals                                 | Diaphragm                    | Diaphragm meter then material shall be Polyester fabric coated for an endurance life cycle as per 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                 | Meter pressurized with air at 1.5 MAOP of the meter, immersed in water for observance of leakage.  |  |
|   | Cyclic Volume                | Minimum  |  |
|   | Sealing Arrangement          | Provision has to be made by the vendor   |  |
|   | Anti-Tampering               | Meter is internal to be non-metallic to prevent tampering like a magnet.   |  |



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|  | 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 EN 1359 2017 or the latest edition in force shall be provided. (The certificate as EN 1359-2017 valid as on bid due date then only it will be accepted)
- 2. The Vendor shall provide a calibration certificate and accuracy at MAOP of the meter for flow rates of Qmax, Qmin, and 0.1 Qmax. The model approval should be from FCRI or DVGW or equivalent authorities.
- 3. End connections shall be protected by Plastic Caps.
- 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. 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 VGL 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 VGL along with Bid.
- f) Availability of importing license for domestic meters to be imported.