



[I-21/264/2023-W&M Section]

GOVERNMENT OF INDIA/भारत सरकार

MINISTRY OF CONSUMER AFFAIRS, FOOD AND PUBLIC DISTRIBUTION

उपभोक्ता मामले, खाद्य एवं सार्वजनिक वितरण मंत्रालय

DEPARTMENT OF CONSUMER AFFAIRS/ उपभोक्ता मामले विभाग

LEGAL METROLOGY DIVISION/ विधिक मापविज्ञान प्रभाग

Krishi Bhawan/कृषि भवन, नई दिल्ली

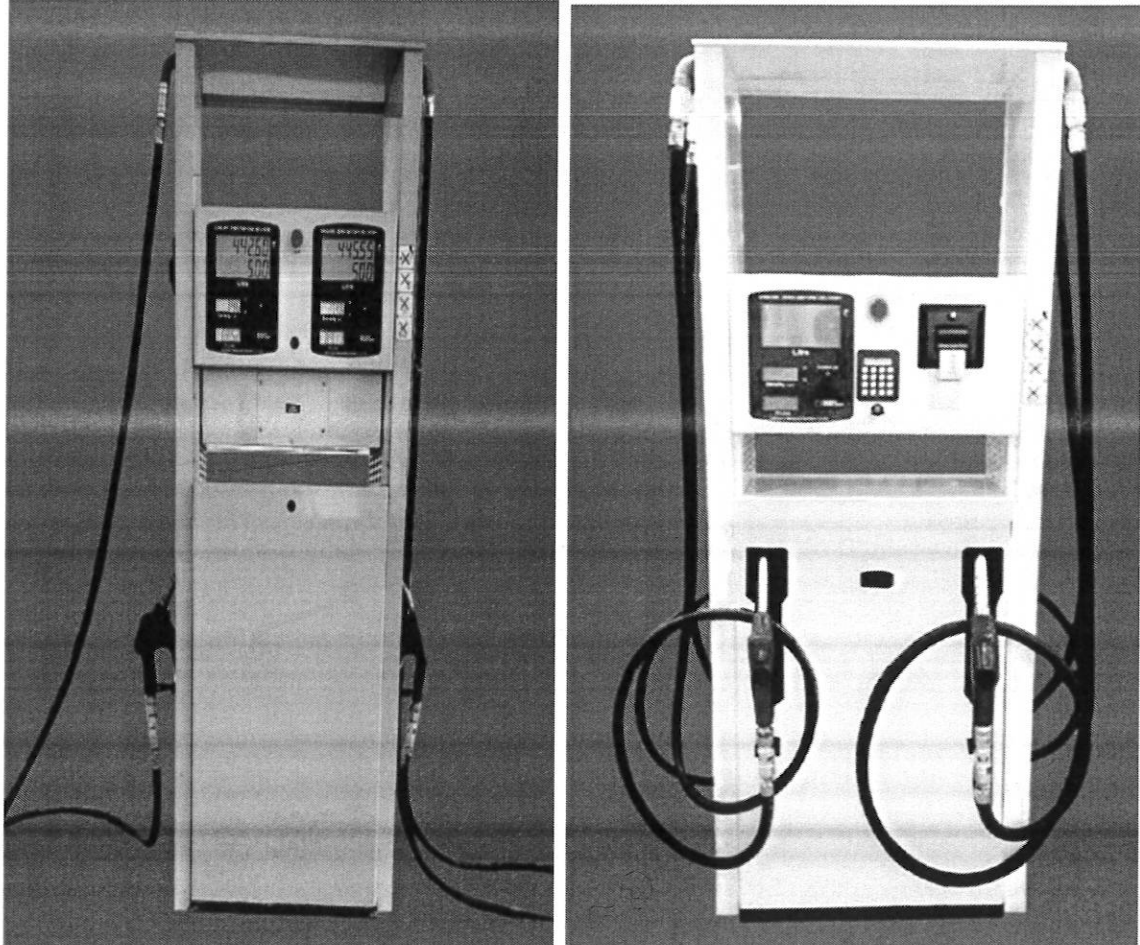
Dated/दिनांक:- 03.04.2024

Certificate of Approval of Model/ मॉडल का अनुमोदन प्रमाणपत्र

Whereas the Central Government, after considering the report submitted to it by the prescribed authority along with the OIML Certificate No. R117/2019-A-NL1-21.02 revision 2 issued by NMI Certain B.V., Netherlands is satisfied that the model described in the said report (see the figure given below), is in conformity with the provisions of the Legal Metrology Act 2009(1 of 2010) and the Legal Metrology (Approval of Models) Rules, 2011 and the said model is likely to maintain its accuracy over periods of sustained use and to render accurate service under varied conditions;

Now, therefore, in exercise of the powers conferred by section 22 of the Legal Metrology Act, 2009 (1 of 2010) read with sub-rule (6) of rule 8 and sub-rule (4) of rule 11 of the Legal Metrology (Approval of Models) Rules, 2011 and as per OIML R 117 : 2019, the Central Government hereby issues the certificate of approval of the model of a fuel dispenser and /or Adblue dispenser of type "Sprint" of accuracy class-0.5 (hereinafter referred to as the said model), manufactured by M/s Gilbarco Veeder Root India Pvt Ltd, PDP Manufacturing Facility, SF No. 628/2 & 627/2, W-4, Coimbatore Campus, Eachanari Chettipalayam Road Malumichampatti, Coimbatore-641021, Tamil Nadu and which is assigned the approval mark IND/09/24/170 (the picture of the model is given below as Figure 1);

Figure 1





General Characteristics:

	Fuel dispenser	Adblue / DEF dispenser
Minimum – maximum flow rate	1,6 – 40 L/min Viscosity range 0,4 – 1,0 mPa·s. 2,0 – 80 L/min Viscosity range 1,1 – 8,0 mPa·s.	2 – 40 L/min
Minimum measured quantity	2, 5 and 10 L	2 L
Maximum pressure	3,5 bar(g)	10 bar(g)
Accuracy class	0,5	0,5
Environmental classes	M1 / E1	M1 / E1
Ambient temperature range	-25 – +55 °C	-10 – +55 °C
Product temperature range	-25 – +50 °C	-10 – +40 °C
Intended for the measurement of	Hydrocarbon oils (Gasoline, Gasoline up to 86% ethanol or MTBE, Gasoline up to 5% methanol, Diesel or Biodiesel up to 100%)	Adblue (Diesel Exhaust Fluid)

Table 2 Flow characteristics of the configurations

Configuration fuel dispenser	Flow rate range	Remarks
1 x gas separator* 1 x meter sensor, type C+, V or V+	1,6 – 40 L/min	Intended for the measurement of hydrocarbon oils with viscosity range 0,4 – 1,0 mPa·s.
1 x gas separator* 1 x meter sensor, type C+, V or V+	2,0 – 80 L/min	Intended for the measurement of hydrocarbon oils with viscosity range 1,1 – 8,0 mPa·s. Optionally a feature to allow Qmax to be limited to 40 L/min.
1 x gas separator* 2 x meter sensors, type C+, V or V+, one per dispenser side	1,6 – 40 L/min	Intended for the measurement of hydrocarbon oils with viscosity range 0,4 – 1,0 mPa·s. The gas separator of this measuring system is suitable for use with two meter sensors. Each meter sensor is considered as part of an individual measuring system. Flowrate reduces to 40 L/min with both meter sensors operating. Optionally a feature to allow Qmax to be limited to 40 L/min with a single meter sensor operating.
1 x gas separator* 2 x meter sensors, type C+, V or V+, one per dispenser side	2,0 – 80 L/min	Intended for the measurement of hydrocarbon oils with viscosity range 1,1 – 8,0 mPa·s. The gas separator of this measuring system is suitable for use with two meter sensors. Each meter sensor is considered as part of an individual measuring system. Flowrate reduces to 40 L/min with both meter sensors operating.

Configuration fuel dispenser	Flow rate range	Remarks
2 x gas separators* 2 x meter sensors, type C+, V or V+	2,0 – 130 L/min	Intended for the measurement of hydrocarbon oils with viscosity range 1,1 – 8,0 mPa·s. A Qmax of 130 L/min is reached by connecting two gas separators and two meter sensors in parallel with delivery through a single transfer point. Optionally a feature to allow Qmax to be limited to 80 L/min. Optionally a feature to allow one of the gas separators and one of the meter sensors to operate as the configuration described above.

Configuration Adblue dispenser	Flow rate range	Remarks
1 x measurement sensor type KROHNE BATCHFLUX 3200 C	2 – 40 L/min	Intended for the measurement of Adblue (Diesel Exhaust Fluid).

**Table 3 General characteristics of the measurement sensor type C+**

Flow rate range [L/min]	1,6 – 40 L/min	2,0 – 80 L/min
Intended for the measurement of	Hydrocarbon oils with a viscosity of 0,4 mPa·s – 1,0 mPa·s	Hydrocarbon oils with a viscosity of 1,1 mPa·s – 8,0 mPa·s
MMQ	1 L	1 L
Maximum pressure	3,5 bar	3,5 bar
Environmental classes	M1 / E1	M1 / E1
Ambient temperature range	-40 °C / +55 °C	-40 °C / +55 °C
Product temperature range	-40 °C / +50 °C	-40 °C / +50 °C

Table 4 General characteristics of the measurement sensor type V and V+

Flow rate range [L/min]	1,6 – 40 L/min	2,0 – 80 L/min
Intended for the measurement of	Hydrocarbon oils with a viscosity of 0,4 mPa·s – 1,0 mPa·s	Hydrocarbon oils with a viscosity of 1,1 mPa·s – 8,0 mPa·s
MMQ	2 L	2 L
Maximum pressure	3,5 bar	3,5 bar
Environmental classes	M1 / E1	M1 / E1
Ambient temperature range	-25 °C / +55 °C	-25 °C / +55 °C
Product temperature range	-25 °C / +50 °C	-25 °C / +50 °C

Table 5 General characteristics of the measurement sensor type BATCHFLUX 3200 C

Meter size	DN15
Flow rate range [L/min]	2 - 40 L/min
Intended for the measurement of	Adblue (Diesel Exhaust Fluid)
MMQ	2 L
Maximum pressure	10 bar
Environmental classes	M1 / E1
Ambient temperature range	-40 °C / +55 °C
Product temperature range	-40 °C / +55 °C
Software version	ER1.0.0_ / ER1.0.1_
Checksum	6C3F9F91 / C019A476
Power supply	20,4 - 27,6 VDC (grounding mandatory)

Table 6 General characteristics of the calculating/indicating device type Tulip

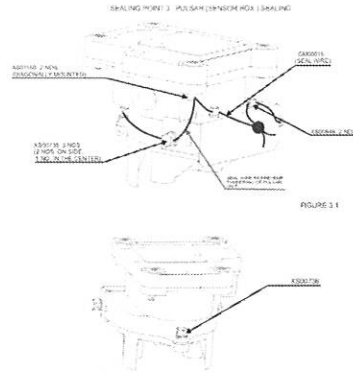
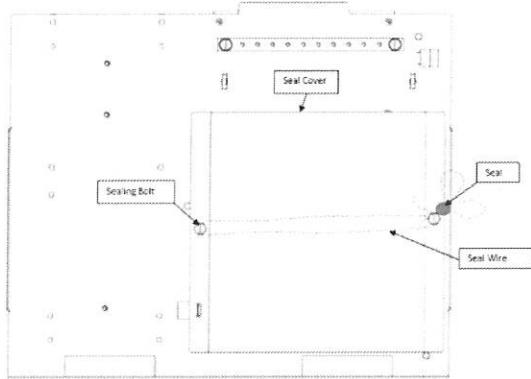
Maximum volume indication	7 digits (9999999; floating decimal)
Maximum unit price	6 digits (999999; floating decimal)
Maximum price to pay	7 digits (9999999; floating decimal)
Environmental classes	M1 / E1
Ambient temperature range	-25 °C / +55 °C
Impulse encoder or pulser	ST73662 and Evolve 2.1

Table 7 General characteristics of the gas elimination device type GPU90

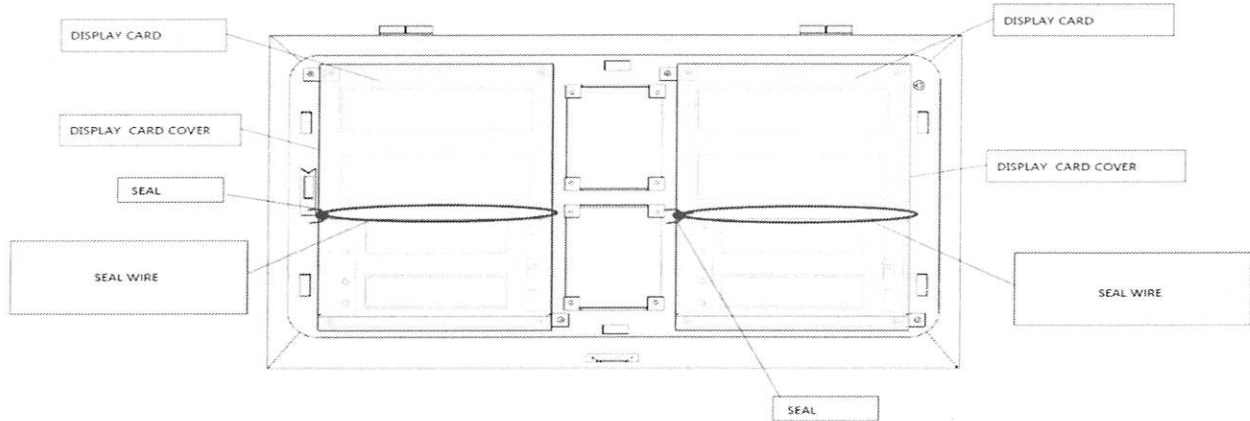
Maximum flow rate	90 L/min
Minimum pressure	1,4 bar
Maximum pressure	3,0 bar
Environmental classes	M1
Ambient temperature range	-40 °C / +55 °C
Product temperature range	-40 °C / +50 °C
Intended for the measurement of	low-viscosity mineral oils with a viscosity of 0,4 mPa·s – 8,0 mPa·s



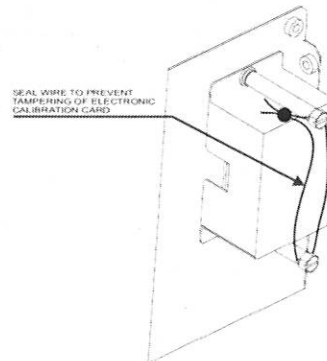
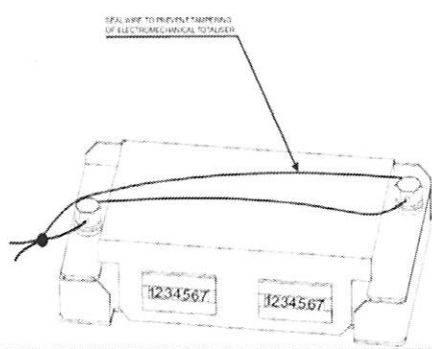
Tulip Sealing Summary (essential mechanical seals)



Typical Sealing of the Meter and Pulsar assembly (Optical type)

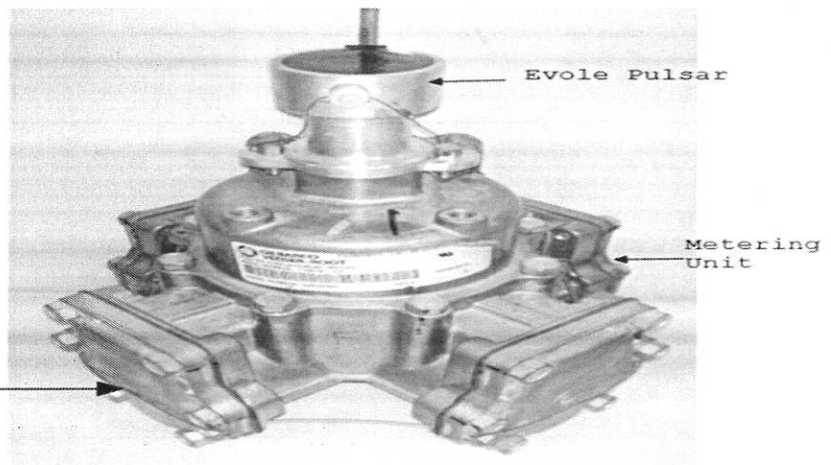


Typical Sealing on the Display board

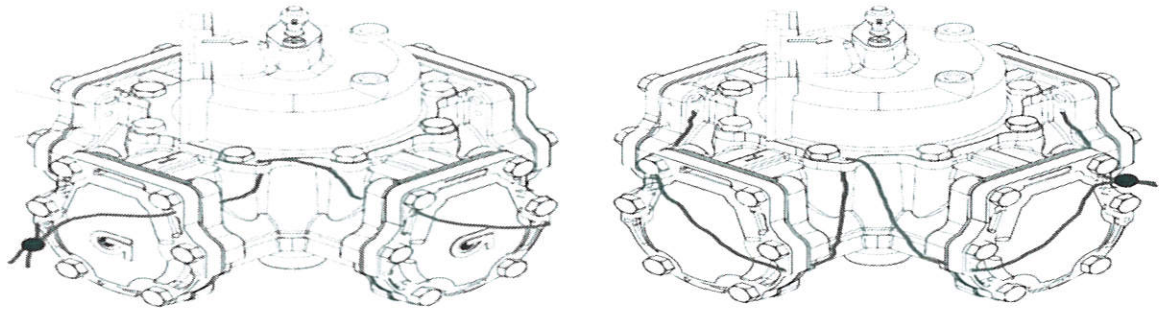


Typical Sealing on the Electromechanical Totalizer

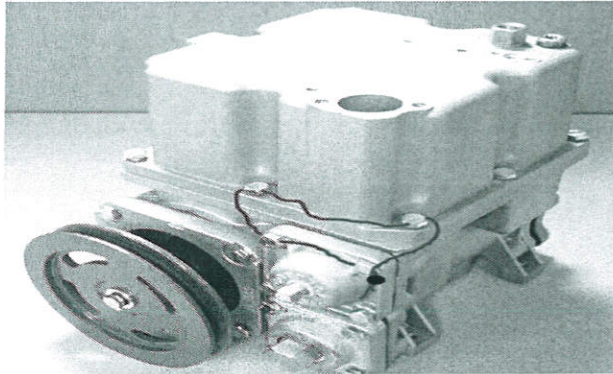
Typical Sealing on the Electronic Calibration board



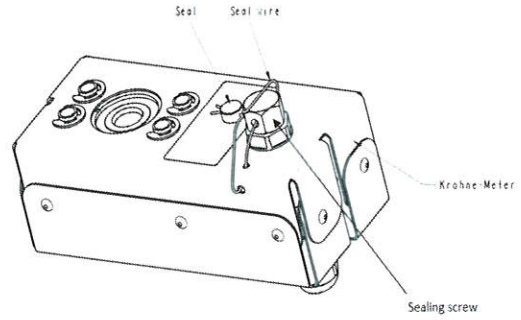
Typical Evole (Magnetic) Pulsar sealing



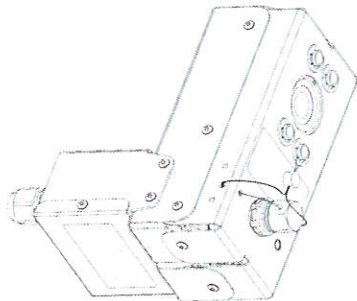
Typical sealing options for C+, V or V+ meter



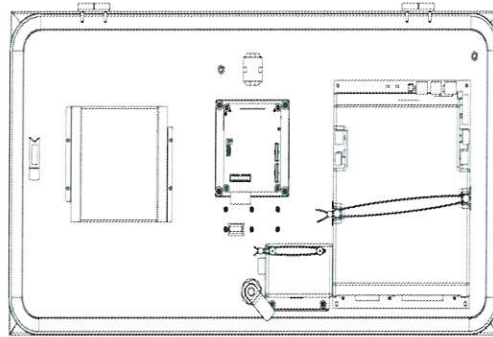
Typical sealing for GPU90



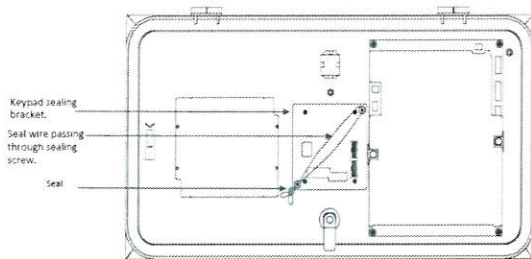
Typical Krohne Batchflux Electromagnetic flowmeter sealing



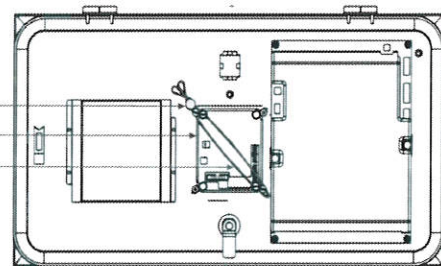
Typical Krohne Batchflux Electromagnetic flowmeter sealing integrated with Protocol Converter Device



Alternative Display Board Sealing Diagram



Sealing for Metallic Keypad



Sealing for Membrane Keypad

Figure- 2

Sealing Provision

A typical schematic diagram of sealing provision to prevent the fraudulent practices of the model is given above as Figure 2.

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