



**National
Measurement &
Regulation Office**

Member State of OIML
United Kingdom of Great Britain
and Northern Ireland

OIML Certificate No
R117 1995-GB1-10.01
Revision 1

OIML CERTIFICATE OF CONFORMITY

Issuing authority: **National Measurement and Regulation Office**

Person responsible: **Paul Dixon – Director, Certification Services**

Applicant: **Gilbarco Veeder-Root
Crompton Close
Basildon
Essex
UK**

Manufacturer: **Gilbarco Veeder-Root India Pvt. Ltd.
PDP, Coimbatore Campus,
Coimbatore Ind. Estate
Coimbatore,
641 021, Tamil Nadu,
India**

Identification of the certified pattern: **Liquids other than water dispenser, designation Frontier**

This certificate attests the conformity of the above-mentioned pattern (represented by the samples identified in the associated test report) with the requirements of the following Recommendation of the International Organisation of Legal Metrology (OIML):

OIML R 117- Edition 1995(E) for accuracy class: 0.5

This certificate relates only to the metrological and technical characteristics of the pattern of the instrument concerned, as covered by the relevant OIML International Recommendation.

This certificate does not bestow any form of legal international approval.

Important note: Apart from the mention of the certificates reference number and the name of the OIML Member State in which the certificate was issued, partial quotation of the certificate or of the associated test report is not permitted, though they may be reproduced in full.

This revision replaces previous versions of the certificate.

Issue Date: 07 May 2015

Reference No: T1117/0048

G Stones
Technical Manager - Certification Services
For and on behalf of the Chief Executive



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The conformity was established by testing and examinations described in the associated Frontier OIML Evaluation Report P01614

Characteristics:

Each hydraulic circuit consists of:

1. one or two meters, types V, V+ (mechanical or electronic calibration options), or C, C+, or Ecometer,
2. GPU90 or GPU140 pump and gas separator, except for use in pressurized (STP) systems

Two hydraulic circuits may be combined for the dispensing at a highest flowrate,

Maximum Flowrate l/min	Minimum flowrate l/min	Minimum measured quantity l	Maximum volume indication l	Maximum unit price	Maximum price to pay	Meter	Liquids
40	1.6	1*, 2 or 5	9999999 (Floating decimal)	999999 (Floating decimal)	9999999 (Floating decimal)	V/V+ or C+ global	Gasoline, Gasoline with up to 15% ethanol or MTBE, Gasoline with up to 5% methanol, Diesel, Biodiesel (up to 100%)
40	4	2 or 5	9999999 (Floating decimal)	999999 (Floating decimal)	9999999 (Floating decimal)	Ecometer or C global	Gasoline, Gasoline with up to 15% ethanol or MTBE, Gasoline with up to 5% methanol, Diesel, Biodiesel (up to 100%)
80	1.6	2, 5 or 10	9999999 (Floating decimal)	999999 (Floating decimal)	9999999 (Floating decimal)	V/V+ or C+ global	Gasoline, Gasoline with up to 15% ethanol or MTBE, Gasoline with up to 5% methanol, Diesel, Biodiesel (up to 100%)
80	4	2, 5 or 10	9999999 (Floating decimal)	999999 (Floating decimal)	9999999 (Floating decimal)	Ecometer or C global	Gasoline, Gasoline with up to 15% ethanol or MTBE, Gasoline with up to 5% methanol, Diesel, Biodiesel (up to 100%)
130	3.2	2, 5 or 10	9999999 (Floating decimal)	999999 (Floating decimal)	9999999 (Floating decimal)	V/V+ or C+ global	Diesel, Biodiesel (up to 100%)
130	8	2, 5 or 10	9999999 (Floating decimal)	999999 (Floating decimal)	9999999 (Floating decimal)	Ecometer or C global	Diesel, Biodiesel (up to 100%)

*Note: this is outside of the scope of the recommendation. Utilising the C+ meter only, the meter has been shown to measure within the accuracy limits defined by OIML R117-1 2007(E) at a minimum delivery of 1 litre. Any dispenser quoting a minimum delivery of 1 litre shall limit Qmax and hose length, and provide appropriate pulser and display resolution, in order to ensure compliance with limits for hose expansion masking at delivery start, preset handling, pulser check periods, and maximum increments of quantity registration.

Extended temperature range -40°C to +55°C with low temperature version of C+ meter.

Up to four hydraulic circuits are housed in a single enclosure with

1. one common Tulip calculator, or Sandpiper
2. measuring transducers of type Tulip pulser or Sandpiper
3. optional features and functions:
 - communications (remote automation)
 - electronics for payment at the dispenser, printer,
 - delivery speed selection either by pushbutton or nozzle selection
 - electronic or electromechanical totalizers,
 - speakers, preset, keypad, pushbutton options
 - slave displays, and/or master-satellite operation
 - additional displays, number of display digits and display size (minimum 6 digits money and volume, 4 digits unit price, and minimum height 25mm)

Certificate History

ISSUE NO.	DATE	DESCRIPTION
R117/1995-GB1-10.01	07 May 2010	Certificate first issued.
R117/1995-GB1-10.02 Revision 1	07 May 2015	Revision 1 issued. Frontier OIML Evaluation Report P01614 replaces list of evaluation certificates and test reports. Reference to 1 litre MMQ added Reference to Sandpiper Calculator added