

OIML Member State
The Netherlands

Number R117/2007-A-NL1-22.01
Project number 2504257
Page 1 of 5

Issuing authority
Person responsible: NMi Certin B.V.
M.Ph.D. Schmidt

Applicant and
Manufacturer: Jiangyin Furen High-tech Co., Ltd.
ADD: No. 8-6,8-7, Xinyuan Road Jiangyin
Jiangsu
China

Identification of the
certified type: A **fuel dispenser** (for liquids other than water)
Type: HAOSHENG A-****

Characteristics: See page 2 and further

This OIML Certificate is issued under scheme A.

This Certificate attests the conformity of the above identified type (represented by the sample(s) identified in the OIML Type Evaluation Report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

R 117-1 (2007) "Dynamic measuring systems for liquids other than water"

Accuracy class: 0,5

This Certificate relates only to the metrological and technical characteristics of the type of measuring instrument covered by the relevant OIML International Recommendation identified above. This Certificate does not bestow any form of legal international approval.

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Issuing Authority: **NMi Certin B.V., OIML Issuing Authority NL1**
20 January 2022

Certification Board

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OIML Member State
The Netherlands

Number R117/2007-A-NL1-22.01
Project number 2504257
Page 2 of 5

The conformity was established by the results of tests and examinations provided in the associated report:

- No. NMI-2504257-01 dated 20 January 2022 that includes 114 pages.

Characteristics of the measuring instrument

In Table 1 the general characteristics of the measuring instrument are presented. The construction of the measuring instrument is recorded in the Documentation folder no. 2504257-1.

Table 1 General characteristics

Minimum – maximum flow rate	5 – 90 L/min
Minimum measured quantity	5 L
Maximum pressure	2,4 bar
Accuracy class	0.5
Environmental classes	M2 / E1
Ambient temperature range	-25 – +55 °C; non-condensing humidity
Product temperature range	-5 °C – +35 °C
Intended for the measurement of	Petrol; Diesel, Kerosine
Power supply voltage	220 VAC; 50/60 Hz
Software identification	Version number – Mainboard: V5.00.01.09 Version number – Keyboard: PSB-1-20110401pe

Each HOASHENG Tax-controlled fuel dispenser consists at least of:

- One combined pump and gas eliminator device (ZCB-90);
A gas separator is not essential if a submersible pump is used, in this case measures should be taken on the supply tank to make sure that air or gas is not introduced in the system.
- One measurement transducer (Piston meter (TMC-FM-1)) with magnetic encoder (pulser (B-TY9)).
- One electronic calculating/ indicating device (FRJ-2003 calculator).
- Optionally, a printer can be connected to the dispenser as follows:
 - o Printer mounted on the dispenser door;
 - o Printer mounted on the side of the dispenser;
 - o Remote printer connects via the POS communication cable.

The characteristics of the mentioned parts of the fuel dispenser are presented at table 3 and higher.

The same housing of the dispenser can comprise of one or more measuring systems. When more than one measuring systems are in one housing, one calculating/indicating device may be a common part of the measuring systems.

The HAOSHENG series can have a maximum of 8 main displays and a maximum of 8 delivery nozzles connected to it.

OIML Member State
The Netherlands

Number R117/2007-A-NL1-22.01
Project number 2504257
Page 3 of 5

A maximum of eight nozzles can be connected to each calculating/indicating device's main display, only one nozzle out of the eight connected to a single display can be simultaneously operated.

Approved input – Pulsar communication cable via DC5V
Approved output – POS communication cable via RS-485
 POS communication cable via RS-422

All communication cables (POS and Pulsar) should be shielded cables.

A single meter is used to deliver fuel through the hydraulic path for each nozzle.

Parts of the measuring instrument

The conformity of the following parts was established by the results of tests and examinations provided in the associated report:

Part:	<u>Measurement transducer</u>
Producer:	Jiangyin Furen High-tech Co., Ltd
Type:	TMC-FM-1
Documentation folder:	2504257-1
Reports:	No. NMI-2504257-01 dated 20 January 2022 that includes 114 pages.

Table 2 General characteristics of the measurement transducer type TMC-FM-1

Flow rate range [L/min]	5 – 90 L/min
MMQ	5 L
Maximum pressure	2,4 bar(g)
In- and outlet size	29 mm
Product temperature range	-5 °C / +35 °C
Intended for the measurement of	Gasoline; Diesel; Kerosine.
Impulse encoder or pulsar	B-TY9

OIML Member State
The Netherlands

Number R117/2007-A-NL1-22.01
Project number 2504257
Page 4 of 5

Part: Calculating/indicating device
 Producer: Jiangyin Furen High-tech Co., Ltd.
 Type: HAOSHENG series
 Documentation folder: 2504257-1
 Reports: No. NMI-2504257-01 dated 20 January 2022 that includes 114 pages.

Table 3 General characteristics of the calculating/indicating device type FRJ-2003

Maximum volume indication	6 Digits (4 integers and 2 decimals)
Maximum unit price	5 Digits (3 integers and 2 decimals)
Maximum price to pay	7 Digits (5 integers and 2 decimals)
Environmental classes	M2 / E1
Ambient temperature range	-25 °C / +55 °C
Software identification	Version number – Mainboard: V5.00.01.09 Version number – Keyboard: PSB-1-20110401pe
Impulse encoder or pulser	Magnetic encoder B-TY9

Part: Gas elimination device
 Producer: Jiangyin Furen High-tech Co., Ltd
 Type: ZCB-90
 Documentation folder: 2504257-1
 Reports: No. NMI-2504257-01 dated 20 January 2022 that includes 114 pages.

Table 4 General characteristics of the gas elimination device type ZCB-90

Maximum flow rate	90 L/min
Minimum pressure	1,0 bar
Maximum pressure	3,0 bar
Product temperature range	-5 °C / +35 °C
Intended for the measurement of	Gasoline; Diesel; Kerosine.

The gas separator is in combination with the pumping unit.
 The pump type ZCB-90 is a gear suction pump.
 The attached gas separator to the pumping unit is a float type mechanical device.



OIML Member State
The Netherlands

OIML Certificate

Number R117/2007-A-NL1-22.01
Project number 2504257
Page 5 of 5

Production location

The fuel dispenser is produced at one of the following production locations:

- Jiangyin Furen High-tech Co., Ltd ADD: 8-6,8-7, Xinyuan Road Jiangyin, Jiangsu, China