

## CALIBRATION LABORATORY CO., LTD.

2/10-11,14,55 Soi Prasert Manukit 29 Yaek 4, Prasert Manukit Rd., Ladphrao, Bangkok 10230 Tel. 02-578-0353-4 Fax: 02-578-2672 www.cal-laboratory.com E-mail:sale@cal-laboratory.com





## **CERTIFICATE OF CALIBRATION**

### **FOR**

NOMENCLATURE

ULTRASONIC FLOW METER

MANUFACTURER

FLOKO

MODEL / TYPE

FM-200H

SERIAL NO.

81976169H/7158195

CLID. NO.

212200911

JOB CONTROL NO.

220614059768

CUSTOMER

JTEC ENGINEERING (THAILAND) CO., LTD.

9/111 SOI RANGSIT-NAKORNNAYOK 34/1,

PRACHATIPAT, TANYABURI, PATHUMTHANI, THAILAND

DATE OF RECEIVED: 14 June 2022

DATE OF ISSUED: 17 June 2022

Report of calibration screening must not be taken in part. Except complete. Without the approval of the Calibration Laboratory Co., Ltd.

Calibrated By:

Supphakit Sakuntaharn

Calibration Engineer

Approved By:

Mongkol Yotsoontorn

**Authorized Signatory** 

17 June 2022



This Calibration Certificate documents the traceability to national standards, which realize the units of measurement according to the International System of Units (SI)

Certificate No. Q22059768

F3-011-04/01-12

page 1 of 3





## CALIBRATION LABORATORY CO., LTD.

2/10-11,14,55 Soi Prasert Manukit 29 Yaek 4, Prasert Manukit Rd., Ladphrao, Bangkok 10230 Tel. 02-578-0353-4 Fax: 02-578-2672 www.cal-laboratory.com E-mail:sale@cal-laboratory.com





## REPORT OF CALIBRATION

### **FOR**

**NOMENCLATURE** 

ULTRASONIC FLOW METER

**MANUFACTURER** 

FLOKO

MODEL / TYPE

FM-200H

SERIAL NO.

81976169H/7158195

**CALIBRATION SITE** 

MOBILE FLOW

DATE OF CALIBRATION

16 June 2022

#### **ENVIRONMENT CONDITIONS:**

Temperature: 30 °C to 31 °C

Relative Humidity: 60% to 62%

#### PROCEDURE USED:

This instrument was calibrated under procedure No. CLC-CPPF-02. The calibration was performed by comparison with Mass Flowmeter which maintained by the Calibration Laboratory Co., Ltd.

#### REFERENCE STANDARD USED:

Mass Flowmeter, Nagman Model NAGMASS 100 S/N. V1882003.

#### TRACEABILITY:

The measurements are traceable to International System of Units (SI), through Flowlab & Service Co., Ltd. Certificate No. FLS-LAB3-20-0872, Due Date 27 October 2022.

#### **UNCERTAINTY:**

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor complies with the table which for a normal distribution corresponds to a coverage probability of approximately 95 %.

It has been evaluated according to the "Evaluation of the Uncertainty of Measurement in Calibration (EA-4/02 M:2021)"

Certificate No. Q22059768

F3-011-04/01-12

page 2 of 3





# CALIBRATION LABORATORY CO., LTD.

2/10-11,14,55 Soi Prasert Manukit 29 Yaek 4, Prasert Manukit Rd., Ladphrao, Bangkok 10230 Tel. 02-578-0353-4 Fax: 02-578-2672 www.cal-laboratory.com E-mail:sale@cal-laboratory.com





**CONDITION OF CALIBRATION ITEM: GOOD** 

MEASUREMENT RESULTS: (X) without adjustment () adjustment

The table in the following gives the calibration results and associated measurement uncertainties of the measuring ultrasonic flow meter.

#### **CALIBRATION DATA**

#### ULTRASONIC FLOW METER RESULT

Test point	DUC Reading	STD Reading	Correction	Uncertainty	Coverage
$(m^3/h)$	$(m^3/h)$	(m <sup>3</sup> /h)	(m <sup>3</sup> /h)	$\pm (m^3/h)$	factor k
33	32.893	32.967	+0.074	0.040	2,00
66	65.600	66.017	+0.417	0.079	2,00
99	98.399	99.020	+0.621	0.119	2,00

Technical Note. Type of calibration: Mass Flow

Display in used: DUC Display

Unit Display: m<sup>3</sup> / hr

Standard pipe No.: 4"

Wall Thickness: 2.75 mm

Pipe Material: Stainless Steel

Transducer Mounting: V Method

Transducer Type: Clamp-On TM-1

Scale Factor: 1

Note. The Scope of Accredited ANAB Certificate No. ACDM-2814 Version 008 Page 40 of 54

This report is valid for the above stated instrument/s only.

### End of Certificate ###

Certificate No. Q22059768

F3-011-04/01-12

