

FLAWSIC900

ultrasonic flowmeter

Custody transfer ultrasonic LNG meter



More information and current pricing:

www.ca.endress.com/IFL900

Benefits:

- Low measurement uncertainty directly at custody transfer point reducing financial risks during LNG-transaction
- Increased transparency during LNG transaction by dynamic & real-time measurement & diagnostics
- Operational expenditure savings by reduced boil-off gas losses and efficient LNG transfer due to minimized pressure drop
- Capital expenditure savings by simplified meter integration and installation due to compact design and factory pre-insulation
- Easy and fast access during commissioning and regular checks with remote SPU

Specs at a glance

- **Measured variables** Volume a. c., volumetric flow a. c., Fluid velocity, Speed of sound
- **Measuring Medium** LNG (Liquefied Natural Gas)
- **Nominal pipe size** 8 " ... 36 " DN200 ... DN900, Schedule 40S/STD acc. ASME B36.19 / B36.10, others on request

Field of application: FLOWSIC900 is the result of our many years of experience in natural gas measurement: a flowmeter specially tailored to the requirements of the LNG industry. It offers the required custody transfer accuracy for volume flow measurement and meets highest metrological standards. With FLOWSIC900 and the proven products FLOWSIC600-XT and FLOWSIC100 Flare-XT, we offer high-end measurement solutions from a single source to bring measurement performance and reliability in LNG plants to a new level.

Features and specifications

Liquified Natural Gas (LNG)**Measuring principle**

Ultrasonic transit time difference measurement

Measured variables

Volume a. c., volumetric flow a. c., Fluid velocity, Speed of sound

Measuring Medium

LNG (Liquefied Natural Gas)

Repeatability

$\leq \pm 0.05$ % of the measured value

Accuracy

Typical error limits Q_{min} ... Q_{max}

$\leq \pm 0.2$ % of reading

After flow calibration and adjustment

Operating pressure range

0 bar (g) ... 19 bar (g) / 0 psi(g) ... 275 psi(g)

Nominal pipe size

8 " ... 36 "

DN200 ... DN900, Schedule 40S/STD acc. ASME B36.19 / B36.10,
others on request

Liquified Natural Gas (LNG)

Metrological approvals and certificates

Metrological:

OIML R117 Class 0.3

Explosion protection:

IECEX: IEC 60079

cCSA: CAN/CSA C22.2 No. 60079

CSAus: UL 60079, UL 61010, UL 1203, FM3600

Pressure rating:

ASME: B16.5/B16.47, B36.19/B36.10

Other: API MPMS Ch. 5.8

For details see operating instructions

Hazardous area approvals

IECEX

Ex db ia [ia Ga] IIA T4 Gb

NEC/CEC (US/CA)

Class I, Division 2, Group D T4

Ex db ia [ia Ga] IIA T4 Gb

Class I, Zone 1, AEx db ia [ia Ga] IIA T4 Gb

Class I, Division 1, Group D T4

Digital Outputs

2 Digital output/Frequency output:

Others on request

Digital communication

Modbus RS-485 (2x)

Modbus RTU/ASCII

Bluetooth

USB

More information www.ca.endress.com/IFL900