FLOWSIC300

Non-custody transfer measurement and process monitoring

SICK
Sensor Intelligence.

FLOWSIC300
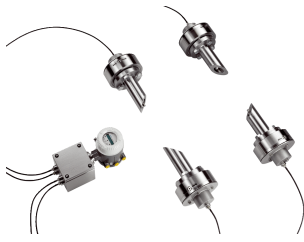
Technical data overview

Measured values	Volumetric flow a. c., volume a. c., gas velocity, sound velocity
Measurement principle	Ultrasonic transit time difference measurement
Number of measuring paths	1, 2
Hazardous area	1G 2G
Measuring ranges	Depending on the nominal size of the pipe
Measuring span	Max. 1:130
Gas temperature	–40 °C ... +180 °C
Operating pressure	10 bar (g) ... 100 bar (g)
Nominal pipe size	4 ″ ... 56 ″
Enclosure rating	Sender/receiver units: IP68 SPU control unit: IP65 / IP67
Modbus **Modbus**	✓ , ✓
Type of fieldbus integration	ASCII RS-485 RTU RS-485
HART	✓

Product description

The FLOWSIC300 ultrasonic flowmeter features a unique combination of high quality components, large measuring range, simple installation, and low installation costs. It can be used anywhere where custody approval is not required: For internal measurements in the natural gas grid and with process measurements in the petrochemical industry. The FLOWSIC300 incorporates proven technology and components of the rugged custody transfer quality gas flow meters from SICK for custody transfer and combines these to produce a cost-effective flowmeter for a variety of applications. The measuring transducer at a distance of up to 15 m away from the measuring point facilitates a high level of flexibility in installation and includes continuous self-diagnostics. The ultrasonic measurement principle does not generate any pressure loss, has no moving parts, is resistant to pulsations and pressure regulator noise and is ideal for reliable and practically drift-free operation.

At a glance

- Quality components
- Modular flexible installation
- Non-contact ultrasonic technology without pressure loss
- Measuring range span greater than 100 : 1
- Sensors can be replaced under pressure
- Low sensitivity to pulsation and pressure regulator noise
- Remote electronics (max. 15 m)
- Bi-directional measurement with automated diagnostics

Your benefits

- Reliable flow measurement for checking purposes
- Simple installation into existing pipelines
- Efficient solution, especially for pipe diameters over 12 inches, thanks to installation onto existing pipelines and without need for a meter body
- Reduced acquisition costs – the sensor extraction tool can be used for multiple devices
- Low maintenance, wear and no deterioration
- Low operating costs thanks to automated diagnostics and condition-based maintenance
- Suitable for installation in underground compartments via remote electronics and sensors with enclosure rating IP 68

Fields of application

- Gas flow measurement in non custody transfer applications
- Control measurements in the field of natural gas transfer and storage
- Internal measurements for balancing purposes
- Associated gas measurement
- Efficiency monitoring in gas compressor stations
- Flare gas and process measurements for design pressure of over 16 bar
- Pipeline leakage detection

Ordering information

Other models and accessories ➜ www.sick.com/FLOWSIC300

- **Product segment:** Flow measurement instruments
- **Product group:** Flow measurement instruments
- **Product family:** FLOWSIC300
- **Measurement principle:** Ultrasonic transit time difference measurement
- **Measured values:** volumetric flow a. c., volume a. c., gas velocity, sound velocity
- **Number of measuring paths:** 1, 2
- **Measuring medium:** natural gas, process gases, high pressure flare gases, air
- **Nominal pipe size min.:** ≥ 4 ″
- **Nominal pipe size max.:** ≤ 56 ″
- **Ex area category:** 1G, 2G, Ga, Gb
- **Communication interface:** Modbus, Modbus, HART
- **Communication Interface detail:** ASCII RS-485, RTU RS-485
- **Process temperature min.:** ≥ –40 °C

Process temperature max.	Operating pressure min.	Operating pressure max.	Enclosure rating	Type	Part no.
≤ +180 °C	≥ 10 bar (g)	≤ 100 bar (g)	IP68, IP65 / IP67	FLOWSIC300	On request

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is "Sensor Intelligence."

WORLDWIDE PRESENCE:

Contacts and other locations –**www.sick.com**