FLOWSIC100 Process

Reliable and precise volume flow measurement in processes

SICK
Sensor Intelligence.

FLOWSIC100 Process

Technical data overview

Measured values	Gas velocity, Mass flow rate, volumetric flow a. c., volumetric flow s. c., sound velocity, gas temperature
Measurement principle	Ultrasonic transit time difference measurement
Hazardous area	3G
Gas temperature	–40 °C ... +260 °C
Operating pressure	–0.5 bar ... 16 bar Depending on device version
Nominal pipe size	0.15 m ... 1.7 m Depending on device version
Enclosure rating	IP65
USB	✓
Function	Connection to SOPAS ET software
Serial **Serial**	✓, ✓
Type of fieldbus integration	RS-232
Function	Connection to SOPAS ET software
Ethernet	✓
Type of fieldbus integration	Via optional interface module
Modbus **Modbus** **Modbus**	✓, ✓, ✓
Type of fieldbus integration	ASCII RS-485 (via optional interface module)
HART	✓
Type of fieldbus integration	Via optional interface module
PROFIBUS DP	✓
Type of fieldbus integration	Via optional interface module
Foundation Fieldbus	✓
Type of fieldbus integration	Via optional interface module
Diagnostics functions	Automatic check cycle for zero and span point Extended device diagnosis via SOPAS ET software

Product description

With the FLOWSIC100 Process gas flow measurement devices, measurements can be taken at pressures up to 16 bar – even in zone 2 explosive environments. The sender/receiver units are available as hermetically sealed designs made of stainless steel or titanium. The standard system contains an MCU control unit and 2 sender/receiver units or a single measuring probe. The MCU is used for signal input and output and to calculate reference values (standardization) or mass flow. It also serves as a user-friendly LCD interface.

At a glance

• Corrosion-resistant transducer made of stainless steel or titanium
• Up to 16 bar process pressure
• Explosion-protected design for applications in zone 2 (ATEX) available
• Hermetically sealed ultrasonic transducer
• Measurements practically free of pressure loss and without influencing the process
• Automated operational check with zero and reference point test

Your benefits

- Reliable and accurate measurement even at low gas velocities
- Low-maintenance, as no moving parts
- Measurement is independent of pressure, temperature, and gas composition
- Does not affect gas flow, as non-contact measurement
- Approved for use in zone 2 explosive environments(ATEX)
- User-friendly operation and device diagnosis via MCU control unit and SOPAS ET operating software

Fields of application

- Natural gas industry
- Chemical and plastics-processing industry
- Glass Industry
- Pharmaceutical industry
- Petrochemical plants and refineries
- Cement production
- Steel and iron production
- Food industry

Ordering information

Other models and accessories ➜ www.sick.com/FLOWSIC100_Process

- **Product segment:** Flow measurement instruments
- **Product family:** FLOWSIC100 Process
- **Measurement principle:** Ultrasonic transit time difference measurement
- **Measured values:** gas velocity, Mass flow rate, volumetric flow a. c., volumetric flow s. c., sound velocity, gas temperature
- **Nominal pipe size min.:** ≥ 0.15 m
- **Nominal pipe size max.:** ≤ 1.7 m
- **Ex area category:** 3G, Gc
- **Communication interface:** USB, Serial, Serial, Ethernet, Modbus, Modbus, Modbus, HART, PROFIBUS DP, Foundation Fieldbus
- **Communication Interface detail:** RS-232, RS-485, ASCII RS-485, RTU RS-485, TCP
- **Process temperature min.:** ≥ –40 °C

Process tem-perature max.	Operating pressure min.	Operating pressure max.	Enclosure rating	Type	Part no.
≤ +260 °C	≥ –0.5 bar	≤ 16 bar	IP65	FLOWSIC100 Process	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**

SICK AG | Waldkirch | Germany | www.sick.com

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