



FTMg

Energy consumption flow meter with leakage detection

FLOW SENSORS

SICK
Sensor Intelligence.



Technical data overview

Measurement principle	Calorimetric (flow, temperature), piezoresistive (pressure)
Medium	Compressed air (air quality ISO 8573-1:2010 [3:4:4]), helium, argon, nitrogen, carbon dioxide
Output signal	1 analog output 4 mA ... 20 mA +1 digital/analog output (PNP, NPN, push-pull, 4 mA ... 20 mA / switchable) +1 digital output (PNP, NPN, push-pull, switchable), IO-Link V1.1 (COM3 / 230K4 baud) Ethernet TCP/IP, OPC UA, MQTT, integrated web server
Nominal width measuring tube	DN 15 DN 20 DN 25 (depending on type)

Product description

The FTMg energy consumption flow meter measures gas flow and temperature as well as the process pressure, making it a cost-saving multi-talent. With high measurement dynamics and low pressure loss, it measures non-corrosive gases with extreme efficiency. The contrast-rich color display enables easy operation of the FTMg and allows for representation of several measured values as a process diagram. Internal data logging over seven days and integrated static evaluation help detect even the smallest leaks in a pneumatic system. PoE also enables simple web-based connection to a PC or a cloud to make energy consumption more transparent. All measurement data can be transmitted via IO-Link or with switching and analog signals.

At a glance

- Measures compressed air and non-corrosive gases such as argon, helium, carbon dioxide and nitrogen
- Calorimetric measurement principle with a measurement accuracy of $\pm 3\%$ M.V. and $\pm 0.3\%$ M.E.V.
- Measurement of gas flow and temperature as well as process pressure and energy consumption with only one sensor
- Low pressure loss
- High measurement dynamics for cylinder and leakage monitoring

Your benefits

- Transparent compressed air consumption measurement according to DIN EN 50001
- Complete overview of the flow, pressure and temperature of gases increases system reliability
- IO-Link or Ethernet interfaces (communication with OPC UA) for simple system integration and data availability
- Cost savings thanks to reduced energy consumption and increase in production efficiency
- Intuitive configuration with large, contrast-rich OLED display saves time and money during commissioning
- Only one installation and commissioning process for the collection of flow, pressure and temperature data

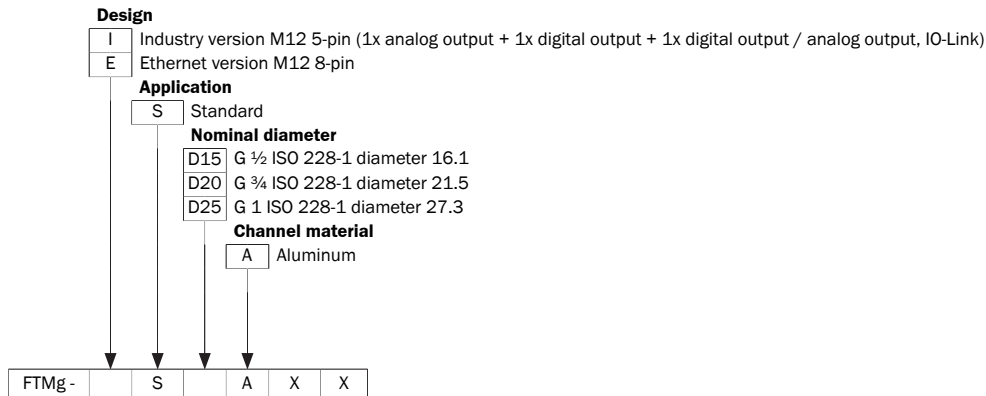
Fields of application

- Consumption and leakage monitoring in compressed air systems
- Monitoring of the energy consumption of compressed air in the supply network
- Measurement of inert gases in packaging with modified atmospheres in the food and beverage industry
- Flow measurement of non-corrosive gases such as Ar, He, CO₂, N₂

Type code

Other models and accessories → www.sick.com/FTMg

Type code



Not all variants of the type code can be combined!

Ordering information

Other models and accessories → www.sick.com/FTMg

- **Nominal width measuring tube:** DN 15
- **Maximum flow velocity:** ≤ 150 m/s
- **Wetted parts:** Stainless steel 1.4305, PA6, Viton®, aluminum
- **Process connection:** G ½ (according to DIN ISO 228-1)
- **Process temperature:** -20 °C ... +60 °C
- **Process pressure:** 0 bar ... 16 bar
- **Accuracy of sensor element:** ± 3 % (From measured value), + 0.3 % (of the measuring range end value (standard measuring range)), ± 8 % (From measured value), + 1 % (of the measuring range end value (extended measuring range))

Output signal	Type	Part no.
1 analog output 4 mA ... 20 mA +1 digital/analog output (PNP, NPN, push-pull, 4 mA ... 20 mA / switchable) +1 digital output (PNP, NPN, push-pull, switchable), IO-Link V1.1 (COM3 / 230K4 baud)	FTMG-ISD15AX0	1100211
Ethernet TCP/IP, OPC UA, MQTT, integrated web server	FTMG-ESD15AX0	1100214

- **Nominal width measuring tube:** DN 20
- **Maximum flow velocity:** ≤ 150 m/s
- **Wetted parts:** Stainless steel 1.4305, PA6, Viton®, aluminum
- **Process connection:** G ¾ (according to DIN ISO 228-1)
- **Process temperature:** -20 °C ... +60 °C
- **Process pressure:** 0 bar ... 16 bar
- **Accuracy of sensor element:** ± 3 % (From measured value), + 0.3 % (of the measuring range end value (standard measuring range)), ± 8 % (From measured value), + 1 % (of the measuring range end value (extended measuring range))

Output signal	Type	Part no.
1 analog output 4 mA ... 20 mA +1 digital/analog output (PNP, NPN, push-pull, 4 mA ... 20 mA / switchable) +1 digital output (PNP, NPN, push-pull, switchable), IO-Link V1.1 (COM3 / 230K4 baud)	FTMG-ISD20AX0	1100212
Ethernet TCP/IP, OPC UA, MQTT, integrated web server	FTMG-ESD20AX0	1100215

- **Nominal width measuring tube:** DN 25
- **Maximum flow velocity:** ≤ 150 m/s
- **Wetted parts:** Stainless steel 1.4305, PA6, Viton[®], aluminum
- **Process connection:** G 1 (according to DIN ISO 228-1)
- **Process temperature:** -20 °C ... +60 °C
- **Process pressure:** 0 bar ... 16 bar
- **Accuracy of sensor element:** ± 3 % (From measured value), + 0.3 % (of the measuring range end value (standard measuring range)), ± 8 % (From measured value), + 1 % (of the measuring range end value (extended measuring range))

Output signal	Type	Part no.
1 analog output 4 mA ... 20 mA +1 digital/analog output (PNP, NPN, push-pull, 4 mA ... 20 mA / switchable) +1 digital output (PNP, NPN, push-pull, switchable), IO-Link V1.1 (COM3 / 230K4 baud)	FTMG-ISD25AXO	1100213
Ethernet TCP/IP, OPC UA, MQTT, integrated web server	FTMG-ESD25AXO	1100216

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