DOSIC
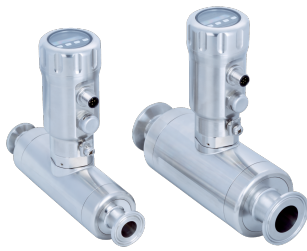
The compact stainless-steel sensor for flexible flow measurement

SICK
Sensor Intelligence.

Technical data overview

Measurement principle	Ultrasonic sensor
Medium	Conductive and non-conductive liquids
Output signal	1 x analog output: 4 mA ... 20 mA, 2 x digital input or output (configurable) [1] [2] 2 x analog output: 4 mA ... 20 mA, 2 x digital input or output (configurable) [1] [2]
Nominal width measuring tube	DN 15 / DN 25 (depending on type)
Maximum adjustable measuring range	80 l/min, 250 l/min (depending on type)

[1] Digital output configuration: PNP/NPN/push-pull/open collector.

[2] Selectable analog output: flow/temperature.

Product description

The non-contact DOSIC® flowmeter detects the flow volume of conductive and non-conductive liquids based on ultrasonic technology. With its measurement channel and stainless-steel housing, the ultrasonic flowmeter is suitable for measuring tasks in hygienic environments. The compact and rugged design offers a wide variety of application possibilities, including in those where space restrictions or aggressive media play a role. Installation is quick and easy, and does not require medium calibration. The seal-free, self-draining measuring tube enhances process reliability. Up to two configurable digital and analog outputs as well as the IO-Link interface ensure the right initial situation. The DOSIC® is EHEDG-certified and FDA-compliant.

At a glance

- Flow measurement for water and oil-based liquids
- Seal-free stainless-steel 316L sensor with Ra ≤ 0.8 µm
- Straight, self-draining measuring tube
- Compact design with short installation lengths
- Configurable digital outputs
- Temperature measurement
- IP 67/69 enclosure rating, CIP/SIP-compatible, IO-Link version 1.1
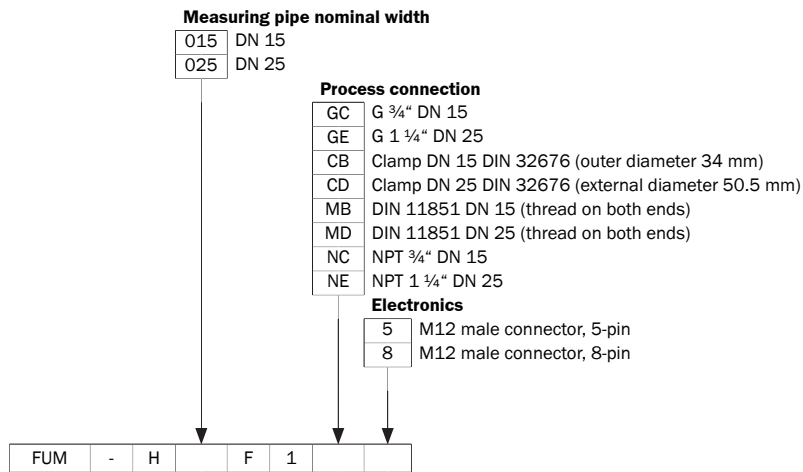
Your benefits

- Flexible measurement system for all industries and liquids
- Versatile use for conductive and non-conductive liquids and temperature measurement
- Short installation lengths and a compact design enable installation in applications with limited space
- Food-safe thanks to rust-free stainless steel and hygienic design
- Quick installation without medium calibration
- User-friendly application thanks to rotatable housing and display
- Straight measuring tube reduces pressure loss, thus reducing energy costs

Fields of application

- Flow measurement in the food and beverage industry
- Use in CIP systems
- Flow monitoring in rinsing circuits with demineralized water
- Flow measurement in cooling circuits
- Monitoring the flow rate in dairies and measuring systems

Type code

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

Measuring pipe nominal width

015	DN 15
025	DN 25

Process connection

GC	G ¾" DN 15
GE	G 1 ¼" DN 25
CB	Clamp DN 15 DIN 32676 (outer diameter 34 mm)
CD	Clamp DN 25 DIN 32676 (external diameter 50.5 mm)
MB	DIN 11851 DN 15 (thread on both ends)
MD	DIN 11851 DN 25 (thread on both ends)
NC	NPT ¾" DN 15
NE	NPT 1 ¼" DN 25

Electronics

5	M12 male connector, 5-pin
8	M12 male connector, 8-pin

FUM	-	H		F	1		

Not all variants of the type code can be combined!

Ordering information

Other models and accessories ➔ www.sick.com/DOSIC

- **Wetted parts:** stainless steel 1.4404 (Ra ≤ 0,8 µm)
- **Process temperature:** –20 °C ... +95 °C, up to 143°C for 60 minutes for SIP process (temperature measurement only)
- **Process pressure:** –0.5 bar ... 16 bar

Nominal width measuring tube	Process connection	Output signal	Type	Part no.
DN 15	DIN 11851 DN 15	1 x analog output: 4 mA ... 20 mA, 2 x digital input or output (configurable)	FUM-H015F1M-B50000	1082020
		2 x analog output: 4 mA ... 20 mA, 2 x digital input or output (configurable)	FUM-H015F1M-B80000	1082025
	G ¾	1 x analog output: 4 mA ... 20 mA, 2 x digital input or output (configurable)	FUM-H015F1GC50000	1082021
		2 x analog output: 4 mA ... 20 mA, 2 x digital input or output (configurable)	FUM-H015F1GC80000	1082024
	Clamp (DIN 32676) DN 15	1 x analog output: 4 mA ... 20 mA, 2 x digital input or output (configurable)	FUM-H015F1CB50000	1072035
		2 x analog output: 4 mA ... 20 mA, 2 x digital input or output (configurable)	FUM-H015F1CB80000	1082023
	¾" NPT	1 x analog output: 4 mA ... 20 mA, 2 x digital input or output (configurable)	FUM-H015F1NC50000	1082022
		2 x analog output: 4 mA ... 20 mA, 2 x digital input or output (configurable)	FUM-H015F1NC80000	1082026
DN 25	1 ¼" NPT	1 x analog output: 4 mA ... 20 mA, 2 x digital input or output (configurable)	FUM-H025F1NE50000	1082030
		2 x analog output: 4 mA ... 20 mA, 2 x digital input or output (configurable)	FUM-H025F1NE80000	1082035
	DIN 11851 DN 25	1 x analog output: 4 mA ... 20 mA, 2 x digital input or output (configurable)	FUM-H025F1MD50000	1082029
		2 x analog output: 4 mA ... 20 mA, 2 x digital input or output (configurable)	FUM-H025F1MD80000	1082034
	G 1 ¼	1 x analog output: 4 mA ... 20 mA, 2 x digital input or output (configurable)	FUM-H025F1GE50000	1082028
		2 x analog output: 4 mA ... 20 mA, 2 x digital input or output (configurable)	FUM-H025F1GE80000	1082033
	Clamp (DIN 32676) DN 25	1 x analog output: 4 mA ... 20 mA, 2 x digital input or output (configurable)	FUM-H025F1CD50000	1082027
		2 x analog output: 4 mA ... 20 mA, 2 x digital input or output (configurable)	FUM-H025F1CD80000	1082031

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:

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