



The game changer

Hygienic flow meter with IO-Link

- Magnetic-inductive flow meter completes the portfolio for the food industry
- Reduces the need for measuring points by providing flow rate, total volume, temperature and conductivity
- Easy to set up thanks to app-based menu and guided installation



ifm – close to you!

Nominal width	Measuring range [m³/h]	Order no.		
		Units of measurement: SI, EU With TFT display	Units of measurement: SI, EU, Imperial With TFT display	Units of measurement: SI, EU, Imperial Without TFT display
DN40 (1 ½")	0.3...45	SMF320	SMF321	SMF350
DN50 (2")	0.6...72	SMF420	SMF421	SMF450
DN65 (2 ½")	1.2...120	SMF520	SMF521	SMF550
DN80 (3")	1.8...180	SMF620	SMF621	SMF650
DN100 (4")	3.0...300	SMF720	SMF721	SMF750
DN125 (5")	4.5...450	SMF820	SMF821	SMF850
DN150 (6")	6.0...600	SMF920	SMF921	SMF950

No more blind spots in the digital process

The SM Foodmag magnetic-inductive flow meter takes the flow measurement of liquid and creamy foods to a new level. Equipped with IO-Link, the sensor is the first of its kind to enable digital data transmission from the process, eliminating the last blind spot in the digitalised, transparent production process. On site, the display itself and the all-round visible status LED provide information on the current status. The sensor version without display can be used for installation situations in which no visualisation of the process values is required.

Measures what matters

The sensor detects the current flow rate, total volume and flow direction, as well as the presence of the medium (often referred to as empty pipe detection). It also transmits conductivity and temperature to the control system and IT level. This can reduce the need for additional measuring points in the system.

Convenience, clarity, safety

The integration of the SM Foodmag almost takes care of itself. Combined with our patented cables, the standard M12 connection ensures a fast, waterproof and error-free connection to the data infrastructure. Standard installation dimensions and a flexible choice of seals and process adapters make it easy to integrate into existing systems.

The app-based menu structure and guided installation make parameter setting a breeze. Locally and digitally, the SM Foodmag ensures maximum visibility inside the pipe - for greater process reliability.

Technical data		
Accuracy, flow rate under reference conditions, optional (subject to a charge)	[%]	± 0.5 MW + 1.5 mm/s ± 0.2 MW + 2 mm/s
Response time	[s]	0.3
Repeatability	[%]	± 0.1 MW
Medium temperature	[°C]	-20...150 (continuously)
Accuracy, temperature	[K]	± 1
Measuring range, conductivity	[µS/cm]	100...100,000
Accuracy, conductivity 100... 20,000 µS/cm 20,000... 100,000 µS/cm	[%]	± 10 MW ± 20 MW
Materials (wetted parts)		PFA; High-grade stainless steel (316L/1.4435)
Protection rating		IP67 IP69K

MW: measured value

BEST FRIENDS



IO-Link masters

Field-compatible masters for use in hygienic areas



Conductivity sensor

Precise distinction of liquid media based on their conductivity



Pressure sensor

Hygienic, with robust and flush-mounted ceramic measuring cell



For further technical details, please visit: ifm.com/fs/SMF320