

Technical data	
Nominal diameters and max. measuring ranges	DN 25/1 inch: 17 m <sup>3</sup> /h DN 50/2 inch: 70 m <sup>3</sup> /h DN 80/3 inch: 180 m <sup>3</sup> /h DN 100/4 inch: 300 m <sup>3</sup> /h
Nominal pressure	
DIN	PN 40 (DN 25 to DN 100) PN 16 (DN 100)
ANSI	Class 300 (DN 1 inch to DN 3 inch) Class 150 (DN 3 inch and DN 4 inch)
Process connection	Flange to DIN 2501 with plane sealing face or groove (DIN 2512) or ANSI B16.5
Materials of parts in contact with medium	
Metering tube, converter assembly	Stainless steel, mat. No. 1.4571 (SS 316 Ti)
Flange	Stainless steel, mat. No. 1.4571 (SS 316 Ti)
Gasket	Graphite, Kalrez or Teflon
Reflector	Ceramic
Temperature range of medium	-20 to +180 °C (-40 to +180 °C on request)
Amount of gases/solids	≤ 1 % v/v
Housing material	Die-cast aluminium
Degree of protection	IP 65
Cable inlet	2 × Pg 13.5 or M20 or 1/2-14 NPT
Power supply	AC 115 to 230 V ± 15 % (50/60 Hz) or AC/DC 19 to 30 V
Voltage failure	No effect for at least 1 period (> 20 ms)
Power consumption	Approx. 8 VA/8 W
Analog output	
Signal range	4 to 20 mA
Upper limit	20 to 22.5 mA, adjustable
Failure signal	3.6 mA, 22 mA or 24 mA
Load	Max. 600 Ω; min. 230 Ω for communication
Digital output 1	Active or passive signal, selectable Active: DC 24 V, ≤ 24 mA, R <sub>i</sub> = 300 Ω Passive: open collector, ≤ DC 30 V, ≤ 200 mA Can be configured as pulse, frequency or device status output Pulse output: pulse significance and pulse width adjustable Frequency output: f <sub>End</sub> selectable up to 10 kHz
Digital output 2	Relay, selectable as NC or NO contact, max. DC 50 V, max. 200 mA, switching capacity max. 5 W, self-resetting fuse, R <sub>i</sub> = 9 Ω, configurable for device status, flow direction or limit (flow, temperature, speed of sound or ultrasonic amplitude)
Electrical isolation	Outputs electrically isolated from power supply and from one another
Display	LCD, two lines with 16 characters each, can be configured for the following: flow, quantity, flow velocity, temperature, speed of sound, ultrasonic amplitude, current or frequency Multi-display: 2 freely-selectable values are displayed simultaneously
Operation	4 optical input elements, menu-controlled
Electromagnetic compatibility	
Emitted interference	To EN 50 081
Noise immunity	To EN 50 082 and NAMUR

Ambient temperature range	-20 to +65 °C with temperature of medium ≤ 60 °C -20 to +55 °C with temperature of medium > 60 °C LCD: 0 to +50 °C Observe temperature classes in potentially explosive atmospheres!
Storage temperature range	-25 to +80 °C
Explosion protection	II 2G EEx dem [ib] IIC T6 II 2G EEx dem IIC T6 II 2G EEx d IIC T6
Communication	PC/laptop or HART communicator with SITRANS F flowmeter
Load with connection of:	
Coupling module	230 to 500 Ω
HART communicator	230 to 600 Ω
Cable	Two-core, screened: ≤ 3 km Multi-core, screened: ≤ 1.5 km
Protocol	HART, version 5.1
PC/laptop requirements	IBM-compatible, main memory ≥ 4 Mbyte, hard disk, RS-232-C interface, VGA graphics
Software for PC/laptop	Windows version 3.11 and SIPROM F
Weight (with DIN flange)	DN 25: approx. 9 kg DN 50: approx. 18 kg DN 80: approx. 19 kg DN 100: approx. 25 kg
Deviation in measured value (at reference conditions)	
Pulse output	
7ME3001	≤ ± 0.5 % of measured value up to dynamic response 1:25 or
7ME3002	≤ ± 1 % of measured value with dynamic response 1:100
Analog output	As pulse output, plus ± 0.1 % of measured value ± 20 μA
Repeatability	≤ 0.2 % measured value
Reference conditions	
Temperature of medium	25 ± 5 °C
Ambient temperature	25 ± 5 °C
Warming-up time	30 min
Mounting conditions	Inlet section > 10 D Outlet section > 5 D Mounted centrally with respect to pipe