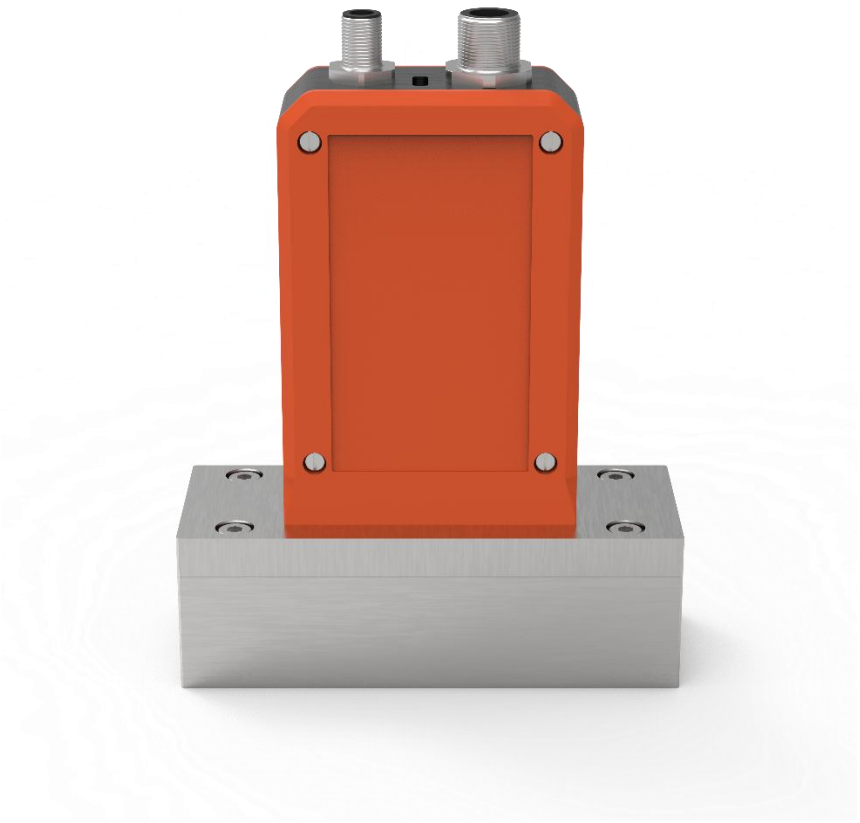
Trigas DM

Durchflussmesser-Manufaktur



AETOS MFM STANDARD

Mass Flow Meter for GASES

With Multigas Function

Datasheet

2026-11-12 EN

TrigasDM GmbH • Erdinger Str. 2b • D-85375 Neufahrn • www.trigasdm.com

Technical specifications for the AETOS MFM STANDARD Mass Flow Meter
Flow ranges from 200 SCCM to 500 SLPM
Standard version. We will be happy to advise you on available options.

Sensor Performance

Mass flow accuracy:	Standard accuracy: ±0.6% of reading or ±0.1% of full scale (whichever is greater)
Mass flow repeatability:	± (0.1% v.MW + 0.02% v. EW)
Pressure accuracy:	Above 1 atm: ±0.5% of reading Below 1 atm: ±0.07 PSIA
Steady-state control range:	0.05 - 100% v. EW (2000:1 turndown)
Operating pressure range:	10 bar (145 PSIA)
Pressure sensitivity:	Mass flow zero shift: ± 0.01% of full scale per atm from tare pressure Mass flow span shift: ± 0.1% of reading per atm from calibration conditions
Temperature sensitivity:	Mass flow zero shift: ± 0.01% of full scale per °C from tare temperature Mass flow span shift: ± 0.01% of reading per °C from 25°C
Temperature accuracy:	±0.9°C
Operating temperature range:	-25 to +85°C (ambient and gas)
Totalizer volume uncertainty:	± 0.1% of reading in additional uncertainty
Sensor response time:	<8 ms
Typical warm-up time:	<1 s

Mechanical Specifications

Wetted materials:	316L, Silicon, RTV, Gold, Ceramic, Epoxy, Nylon Plastik, Aluminum, LCP, Pyrex, EPDM/NBR/FKM
Maximum pressure:	Possible damage above 16 bar (232 PSIA) common-mode pressure Possible damage due to pressure spikes above 1 bar (14 PSIA) differential pressure
Relative humidity range:	0 - 95%, non-condensing
Ingress protection:	IP40 (contact us for higher protection ratings)
Mounting orientation:	Any / bidirectional
Mounting holes:	G1/8 | G1/4 | G3/4
Process connection:	200 SCCM- 20 SLPM: G1/8 female thread 50 - 100 SLPM: G1/4 female thread 250 – 500 SLPM: G3/4 female thread

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Gas Functions

STP reference conditions:	25°C, 1.01325 bar(a)
NTP reference conditions:	0°C, 1.01325 bar(a)
Gas selection:	Large selection of stored gases; selection based on gas curves from NIST REFPROP 10 for temperature and pressure compensation to achieve maximum accuracy when switching gases - without real-gas calibration
GASMIX:	upon request

Power Supply and Communication

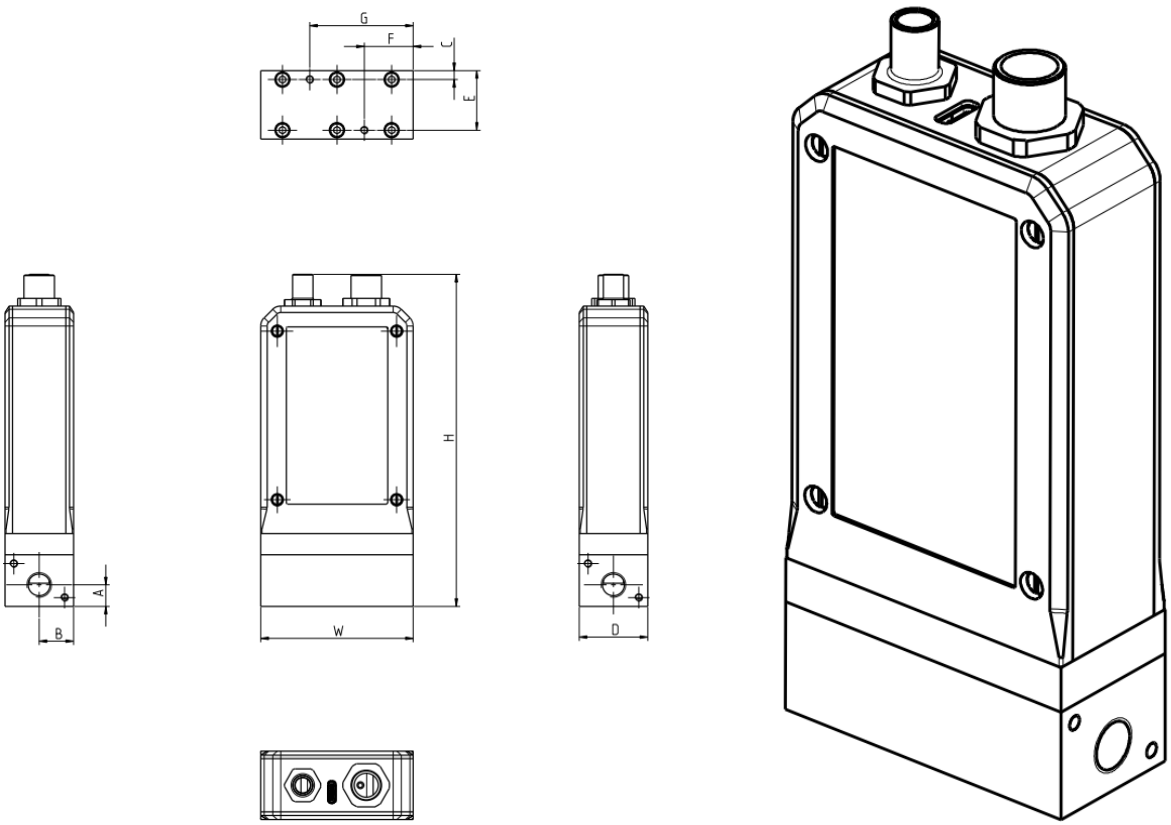
Digital input and output options:	RS-485 serial and Modbus RTU (standard)
Interface (service):	USB-C (for PC-software / configuration)
Digital data update rate:	40 Hz at 19,200 baud
Analog input and output optional:	4–20 mA, 0–5 V, 0–10 V, 1–5 V
Analog data update rate:	80 kHz
Analog signal accuracy:	±0.1% of full-scale additional uncertainty
Electrical connection:	4-pin M8
Power connection:	12 - 24 VDC, USB-C-cable, 4-pin M12

Range Specific Technical Data

Full scale flow	Pressure drop at full scale when venting air to atmosphere
200 – 500 SCCM	70 mbar (1.0 PSID)
1 SLPM	105 mbar (1.5 PSID)
2 SLPM	200 mbar (3.0 PSID)
5 SLPM	140 mbar (2.0 PSID)
10 SLPM	380 mbar (5.5 PSID)
20 SLPM	830 mbar (12.0 PSID)
50 SLPM	175 mbar (2.54 PSID)
100 SLPM	205 mbar (2.97 PSID)
250 SLPM	175 mbar (2.54 PSID)
500 SLPM	310 mbar (4.50 PSID)

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Dimension and Weight



Dimension

Full-scale flow	Width	Depth	Height	A	B	C	E	F	G	Weight
200 SCCM - 20 SLPM	2.36“	1.06“	5.16“	0.35“	0.53“	0.14“	0.93“	0.76“	1.60“	≈ 1.1 lb
	60 mm	27 mm	131.1 mm	8.5 mm	13.5 mm	3.5 mm	23.5 mm	19.25 mm	40.75 mm	≈ 0.5 kg
50 SLPM - 100 SLPM	4.06“	1.65“	5.34“	0.50“	0.83“	0.24“	1.42“	0.71“	3.35“	2.65 lb
	103 mm	42 mm	135.7 mm	12.7 mm	21 mm	6 mm	36 mm	18 mm	85 mm	≈ 1.2 kg
250 SLPM - 500 SLPM	4.06“	1.65“	5.93“	0.79“	0.83“	0.24“	1.42“	0.71“	3.35“	≈ 3.09 lb
	103 mm	42 mm	150.7 mm	20 mm	21 mm	6 mm	36 mm	18 mm	85 mm	≈ 1.4 kg