EN

IQ+FLOW

IQFD-100C

Microfluidic Mass Flow Meter for Gases, Downported

Technical specifications

Measurement & control

Type of media	Dry, clean and non-corrosive gases
Flow range	min. 0.2...10 ml_n/min max. 0.1...5 l_n/min
Accuracy	< ±1.5% Rd + ±0.5% FS
Repeatability	for flows < 20 mln/min: < ±0.2% FS; for flows > 20 mln/min: < ±0.5% Rd
Turndown ratio	1:50 (2…100%)
Multi fluid capability	storage of max. 8 calibration curves
Operating temperature	5…+50°C
Temperature sensitivity	span: < 0.2% Rd/°C; zero: < 0.01 mln/min/°C
Leak integrity, outboard	1 x 10^{-8} mbar·l/sec He
Pressure drop	20 mbar(d) based on 1 ln/min Air at 0 bar(g)
Mounting	max. error at 90° off horizontal 0.5 mln/min at 1 bar, typical N2
Storage/transport conditions	0...+50°C, max. 95% RH (non-condensing)

Approvals

Marking	CE

Mechanical specs

Pressure rating (PN)	10
Ingress protection	IP40
Material wetted parts	body: aluminum or stainless steel SS316L; chip sensor (flow or pressure): Si, SiOx, epoxy, aluminum
Sealing material	standard: Viton®; other on request
Process connections	downported construction
Weight	0.3 kg

Electrical properties

Power supply	+ 15 … 24 Vdc
Power consumption	0.75 W typical at 24 V
Analog output	0…5 (10) Vdc or 0 (4)…20 mA (sourcing)
Analog setpoint	0…5 (10) Vdc or 0 (4)…20 mA (sinking)
Digital communication	RS232/RS485 (Modbus RTU/ASCII or FLOW-BUS)

Electrical interfaces

Power (main connector)	RJ45
Function (main connector)	Analog, RS232, RS485
Modbus RTU/ASCII/FLOW-BUS	RJ45

Last modified 14-05-2025.