

IQ+FLOW

IQP-700C

Microfluidic Back Pressure Controller



Technical specifications

Measurement & control

Type of media	Chip sensor: dry, clean, non-flammable and non-corrosive gases. Media isolated sensor: gases compatible with SS316L and Viton
Accuracy	$< \pm 0.5\%$ FS
Repeatability	$< \pm 0.1\%$ FS
Response time (sensor)	$\tau_{95\%}$ 5 msec
Operating temperature	5...50°C
Temperature sensitivity	span: $< 0.1\%$ Rd/°C; zero: $< 0.05\%$ FS/°C
Leak integrity, outboard	1×10^{-6} mbar-l/sec He
Pressure range sensor	min. 0.01 - 0.5 bar, max. 0.2 - 10 bar
Max. Kv-value	2.37×10^{-3}

Approvals

Marking	CE
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Mechanical specs

Pressure rating (PN)	0
Ingress protection	IP40
Material wetted parts	body: aluminium or stainless steel SS316L; chip sensor (flow or pressure): Si, SiO _x , epoxy, aluminium; media-isolated sensor (pressure): SS316L
Sealing material	FKM/Viton® seals and plunger (default); FKM/Viton® seals and FFKM/Kalrez® plunger (option)
Process connections	optional: 10-32 UNF threaded internal nut with 1/16" ferrule (SS316 or Peek), 1/16" or 1/8" OD compression type
Weight	120 g (Aluminum) / 180 g (SS316L)

Electrical properties

Power supply	+15...+24 Vdc, 50 mA for meter; add 50 mA for control valve
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)	RS232, RS485, Analog
Modbus RTU/ASCII/FLOW-BUS	RJ45