

# IQP-700C

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## IQ+FLOW IQP-700C EPC (P1-CONTROL)

### Microfluidic Back Pressure Controller

- Small footprint ensures space efficiency
- Very small internal volume
- Economical solution, low cost of ownership
- Analog or digital communication



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### Microfluidic Back Pressure Controllers

Bronkhorst® model IQP-700C Back Pressure Controllers are miniature devices which are ideal for use in cramped environments or in systems requiring minimum internal volume e.g. analytical equipment. The Pressure Controller has a chip-based (MEMS) sensor and is suited for pressure ranges between 0,01...0,5 bar and 0,2...10 bar absolute or gauge. Communication with the devices can be either in analog mode or digital over RS232 or RS485.

The ultra compact IQ+FLOW instruments are typically recommended for integration in analytical and medical equipment.

## Technical specifications

### Measurement / control system

Accuracy (incl. linearity and hysteresis)	$\leq \pm 0,5 \% \text{ FS}$ (Based on calibration at ambient temperature)
Repeatability	$\leq \pm 0,2 \% \text{ FS}$
Turndown ratio	1 : 5 (with flow range 1 : 50)
Operating pressure	0... 10 bar g
Fluids	Dry, clean, non-flammable and non-corrosive gases. Absolute pressure sensors not suitable for He.
Operating temperature	5... 50 °C
Temperature sensitivity	span: 0,1% RD/°C; zero: 0,05% FS/°C
Max. Kv-value	$2,37 \times 10^{-3}$
Leak integrity, outboard	$1 \times 10^{-6} \text{ mbar-l/s He}$
Attitude sensitivity	negligible

### Mechanical parts

Material (wetted parts)	aluminium, Si, SiOx, epoxy; option: stainless steel body
Process connections	optional: 10-32 UNF threaded internal nut with 1/16" ferrule (SS316 or Peek), 1/16" or 1/8" OD compression type
Seals	standard: Viton®; other on request
Weight	0,2 kg
Ingress protection	IP40

### Electrical properties

Readout sample time	2 msec
Power supply	+15... 24 Vdc
Max. power consumption	100 mA
Analog output	0...5 (10) Vdc or 0 (4)...20 mA (sourcing output)
Digital communication	RS232, RS485 (Modbus-RTU/ASCII or FLOW-BUS)

### Electrical connection

Power/Analog/RS232/RS485	RJ45 modular jack
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Technical specifications subject to change without notice.

For dimensional drawings and hook-up diagrams please visit the [product page](#) on our [website](#)

## Recommended accessories



### E-8000 SERIES

#### Digital Readout / Control Systems

Bright, wide angle, 1.8" display (TFT technology)

User friendly operation, menu driven with 4 push buttons



### PIPS SERIES

#### Plug-in Power Supply

For lab-style or industrial devices

Interchangeable plugs (Euro, UK, USA, Australian, IEC) for mains connection

## Related products



### **IQ+FLOW IQPD-700C EPC (P1-CONTROL)**

Min. pressure 0,1...0,5 bar  
Max. pressure 2...10 bar  
Ultra compact; downported  
MEMS technology



### **IQ+FLOW IQP-600C EPC (P2-CONTROL)**

Min. pressure 0,025...0,5 bar  
Max. pressure 0,5...10 bar  
Ultra compact  
MEMS technology



### **IQ+FLOW IQP-500C**

Min. pressure 0,01...0,5 bar  
Max. pressure 0,2...10 bar  
Ultra compact  
MEMS technology



### **IQ+FLOW IQF-200C MFC**

Min. flow 0...10 mln/min  
Max. flow 0...5 ln/min  
Pressure rating 10 bar  
Ultra compact  
MEMS technology



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