

Sensors

Quickly monitor and control your fluid flow and pressure to achieve accurate instrument output and maximized system capabilities with QuickStart™ Sensors from IDEX Health & Science. Now you can easily manage flow and pressure across your entire fluidic system, and save crucial problem-solving time by using our dynamic family of in-line sensors. Our experts have applied decades of knowledge, and over five years of extensive life testing and innovation, to deliver the most advanced transducer technology inside compact, plug-and-play sensors. A fusion of modularity, multiplexing, and intelligent sensing make demanding tasks effortless, giving you exceptional control over every region of your flow path. Each sensor automatically monitors and provides accurate, real-time data with digital output, allowing you to predict failure, mitigate risk of damage, and optimize your system to maintain maximum performance with ease. Super responsive yet small, our modular sensors are simple to integrate into instruments of any size, and can be installed in arrays to deliver essential data in real time.

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QUICKSTART PRESSURE SENSORS

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QUICKSTART FLOW SENSORS



QuickStart™ Pressure Sensors

- › Monitor pressure
- › Detect blockages
- › Prevent failure
- › Pressure range of .25 – 14 bar absolute
- › Operating temperatures of +5 °C – +50 °C
- › Small footprint of 1.1 x 1.5 in
- › Optimized for IVD, BIO, and POC applications
- › Digital output

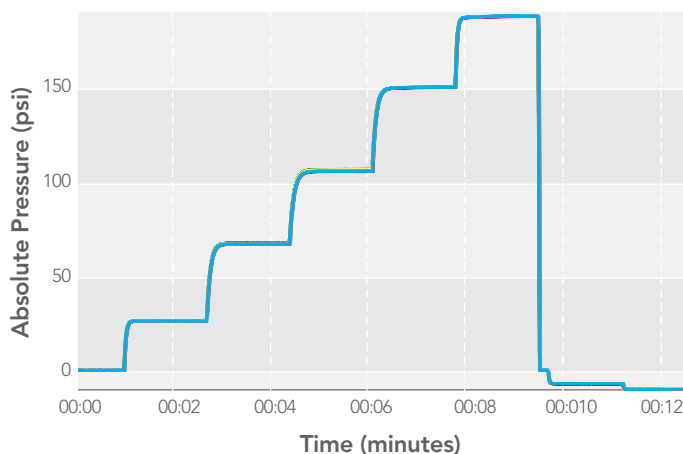
Immediately detect blockages and mitigate risk — *before* important samples are compromised — with QuickStart Pressure Sensors from IDEX Health & Science. Meticulously engineered and broadly tested for precision sensing, our premium QuickStart Pressure Sensors continually monitor system parameters to provide you the information you need to keep your instrument operating reliably. QuickStart Pressure Sensors connect in-line to your system easily, with minimal solution carryover and bubble trapping.



SPECIFICATIONS & DETAILS

Output Signal	Digital
Operating Voltage	5.0 V
Digital Communication Bus	I ² C
Full Scale Pressure Range	0.25 – 14 bar absolute
Accuracy Below Full Scale	< 1% full scale
Repeatability Error from Zero to Full Scale	1% of measured value or 0.05% of full scale (whichever error is larger)
Pressure Detection Response Time	67 ms
Operating Temperature	+5 °C – +50 °C
Ambient Storage Temperature	-30 °C – +100 °C
Proof Pressure	400 psi
Burst Pressure	800 psi

Typical Pressure Sensor Output



This graph shows the overlaid output from ten pressure sensors monitoring the same fluidic channel. High reproducibility and the capability for simultaneous reading of multiple sensors make the units extremely valuable for instrumentation applications. In this plot, the sensors are responding to a series of pressure increases over the sensor range.

Part No.	Description	Qty.
PART NUMBERS AND ACCESSORIES		
I2C PS200F	200 psi Pressure Sensor Standalone Fitting Option	ea.
I2C PS200M	200 psi Pressure Sensor Manifold Option	ea.
I2C PS200F EVAL	200 psi Pressure Sensor Evaluation Kit	ea.
PSCK-I2C	Pressure Sensor I ² C Connection Kit	ea.



QuickStart™ Flow Sensors

- › Control flow
- › Mitigate risk
- › Measure performance
- › Flow rates of -1,000 – 1,000 $\mu\text{L}/\text{min}$
- › Operating temperatures of +5 °C – +50 °C
- › Small footprint of 1.6 x 1.0 x 1.2 in (smaller than most other models on the market)
- › Optimized for IVD, BIO, and POC applications; Chemically compatible with most reagents
- › Digital output

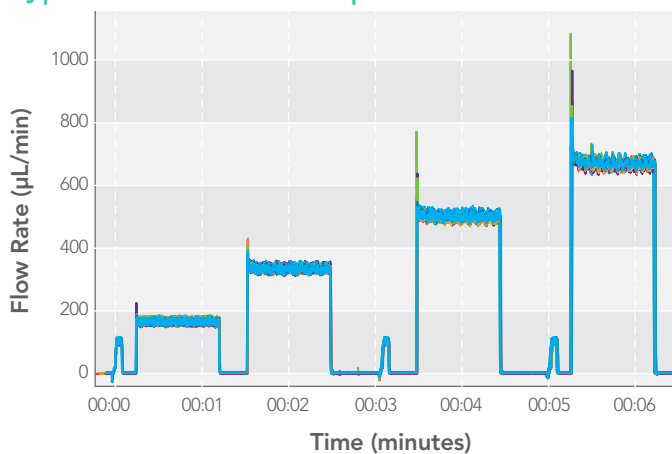
Easily manage your flow rates and receive accurate, instantaneous data on system performance — saving critical analysis time — with IDEX Health & Science QuickStart Flow Sensors. Extensively designed and thoroughly tested for demanding fluid sensing applications, our superior QuickStart Flow Sensors identify flow rate variances to keep you informed of system sensitivities and potential problems that may require immediate attention. QuickStart Flow Sensors are easy-to-mount with a quick in-line connection, and are optimized for real-time analysis.



SPECIFICATIONS & DETAILS

Output Signal	Digital
Operating Voltage	3.3 V – 5.0 V
Digital Communication Bus	I ² C / UART
Full Scale Flow Rate	1,000 $\mu\text{L}/\text{min}$
Sensor Output Limit	1,500 $\mu\text{L}/\text{min}$
Accuracy Below Full Scale	5% of measured value or 0.25% of full scale (whichever error is larger)
Repeatability Error from Zero to Full Scale	.5% of measured value or 0.025% of full scale (whichever error is larger)
Flow Detection Response Time	40 ms
Operating Temperature	+5 °C – +50 °C
Ambient Storage Temperature	-40 °C – +80 °C
Proof Pressure	40 psi (3 bar)
Burst Pressure	100 psi (7 bar)

Typical Flow Sensor Output



This graph shows the overlaid output from ten flow sensors that are used to monitor the same fluidic channel. In this application, a pump and valve are used to infuse fluid through the fluidic circuit at varying rates. A variety of flow rate changes are observed on the sensors, indicating system response to pump flow and valve switching. Simultaneous monitoring of multiple sensors in such a way can easily show how minute adjustments to system components can affect the measured flow in the fluidic circuit.

Part No.	Description	Qty.
PART NUMBERS AND ACCESSORIES		
I2C FS1000F	1,000 μL Flow Sensor Standalone Fitting Option	ea.
I2C FS1000M	1,000 μL Flow Sensor Manifold Option	ea.
UART FS1000F	1,000 μL Flow Sensor Standalone Fitting Option	ea.
UART FS1000M	1,000 μL Flow Sensor Manifold Option	ea.
I2C FS1000F EVAL	1,000 μL Flow Sensor Evaluation Kit	ea.
F5CK-I2C	Flow Sensor I ² C Connection Kit	ea.
F5CK-UART	Flow Sensor UART Connection Kit	ea.