



Microfluidic Pressure Sensor

Liquid flow-through pressure sensor - 7.5 μ L dead volume

- › Accuracy down to 0.2 % Full Scale
- › 20 ms Settling time
- › 4 ranges from 5 psi (340 mBar) to 100 psi (7 bar)
- › Compatible with gas and liquids*
- › Ultra small dead volume of 7.5 μ L on small package version
- › Interactivity with other Elveflow instruments

* Limited only to media compatible with polyetherimide, silicon, and fluorosilicone seals

Measure and control pressure anywhere in your setup

- › Our pressure sensors work as Gauge pressure sensors, measuring positive and negative pressure relatively to atmospheric pressure.
- › Several pressure ranges are available from 5 psi (340 mBar) to 100 psi (7 bar).
- › You can plug our liquid pressure anywhere within your microfluidic setup, record the pressure on your computer and adjust the flow accordingly using our pressure pumps. The pressure sensors are fitted for Elveflow pressure pumps.

Specifications

MICROFLUIDIC PRESSURE SENSOR	MPS 1	MPS 2	MPS 3	MPS 4
Sensor Range:	5 psi (340 mBar)	15 psi (1 bar)	30 psi (2 bar)	100 psi (7 bar)
Minimum pressure (psi)	-5	-15	-15	-15
Maximum pressure (psi)	5	15	30	100
Max overpressure (psi)	20	45	60	200
Linearity (%span)	Typ.	0.4	0.1	0.1
	Max	0.5	0.2	0.2
Repeatability & Hysteresis (%span)	+/- 0.2			
Stability over 1 year (%span)	+/- 0.5			
Operating temperature	-40° to +85°C			
Specified temperature range	+0 to +50°C			
Package model	Large		Small	
Connection type	Arrow for 3/32 ID tubing		10-32 thread with ferrule	
Internal dead volume (μ L)	70		7.5	
Recommended tubing diameter (inch)	3/32 ID		1/16 OD	
Material in contact	polyetherimide, silicon and fluorosilicone seal		PEEK, silicon and fluorosilicone seal	
Electrical connection	4 point measurement M8 connector compatible with Elveflow Flow Reader and a Flow Reader 4 point sensor adaptor			