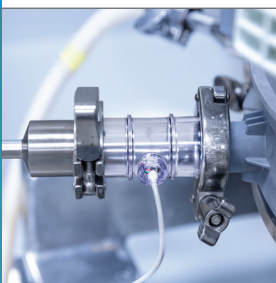


Single-Use Pressure Sensors For Biopharmaceutical Processes



Reliable Pressure Measurement

METTLER TOLEDO Pendotech's Single-Use Pressure Sensors measure static and dynamic pressure of gases and liquids in your bio-pharmaceutical processes – accurately and cost effectively.



Simplified Maintenance

Robust enough to be repeatedly cleaned or can be utilized in disposable applications, our Single-Use Pressure Sensors deliver a dependable alternative to stainless steel pressure transducers.



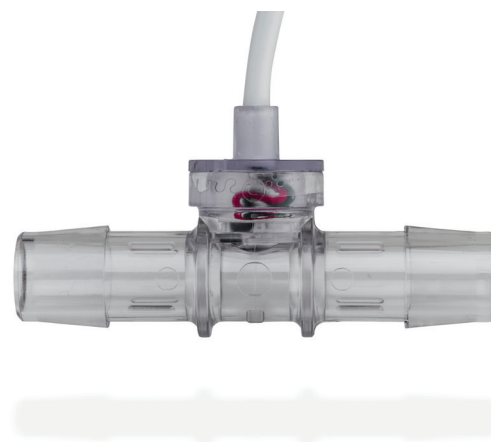
High Measurement Stability

The sensors feature Pendotech High Accuracy Pressure (MEMS-HAP) Chips and are perfect for filtration and chromatography processes, monitoring of glass and disposable bioreactors, filling operations and more.



Versatile

Pendotech's pressure sensors, which are qualified for use up to 75 psi, are compatible with Pendotech's PressureMAT monitor/transmitter, Pendotech's Process Control Systems or other pre-qualified third-party monitors.



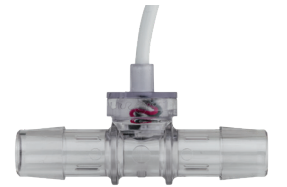
Single-Use Pressure Sensor Simplify Your Pressure Measurements

Pendotech's Single-Use Pressure Sensors™ provide accurate pressure measurement for biopharmaceutical processes. Made from durable materials, these sensors are suitable for both disposable and reusable applications. They feature High Accuracy Pressure (MEMS-HAP™) Chips for precise readings in various settings, including filtration and bioreactor monitoring. Constructed from caustic-resistant polysulfone, they are qualified for use up to 75 psi and can integrate with Pendotech's PressureMAT™ monitor, Process Control Systems, or other qualified third-party monitors for real-time data.

Discover the Single-Use Pressure Sensor:
www.pendotech.com/pressure

Single-Use Pressure Sensor Technical Data

Specifications		
Manufacturing Testing	100% of sensors are tested for critical quality attributes. - Each sensor is leak tested on the liquid side to confirm integral assembly - Sensors with a test port are leak tested on the test port side to confirm proper atmospheric reference - Each sensor is tested electrically to confirm proper electrical performance - Each sensor is tested to be accurate at 60 psi (4.14 bar) within $\pm 5\%$ of reading (± 3.0 psi / 0.21 bar)	
Accuracy	Positive Range	Specification
	0 to 6 psi (0 to 0.41 bar) 6 to 30 psi (0.41 to 2.07 bar) 30 to 60 psi (2.07 to 4.14 bar)	$\pm 2\%$ of reading $\pm 3\%$ of reading $\pm 5\%$ of reading
	Vacuum Range	Specification
	0 to -7 psi (0 to -0.48 bar) -7 to -10 psi (-0.48 to -0.69 bar)	$\pm 3\%$ of reading $\pm 5\%$ of reading
Pressure Range	- 11.5 to 75 psi (- 0.79 to 5.2 bar)	
Biocompatibility	All materials in contact with product fluid path meet USP Class VI requirements, both pre- and post- irradiation	
Regulatory and Compliance Testing	<ul style="list-style-type: none"> • USP Class VI • ISO 10993-5 • ADCF • Particulates • Bacteriostatis and Fungistatis (B&F) • Extractables & Leachables • USP 661 • Bioburden • REACH Compliant • Endotoxin • RoHs Compliant 	
Manufacturing Environment	ISO 9001 certified facility, Class 7 clean room	
Gamma Irradiation	Up to 50 kiloGrays	
X-ray Irradiation	Up to 50 kiloGrays	
Operating Temperature	35.6°F to 104°F (2°C to 40°C) other ranges with process qualification	
Storage Temperature	- 13°F to 149°F (- 25°C to 65°C)	
Input/Output Impedance	270 Ohms to 400 Ohms	
Excitation Voltage	2.5 to 10 volts DC (for best long-term stability, use a lower excitation voltage)	
Sensor Output	0.2584 mV/Volt/psi	
Connector	Rating: IP67 when connected to reusable cable	
Shelf Life	5 years	
Packaging	White Tyvek and clear pouch with easy-open chevron seal; box of 25 sensors in polyethylene bags (except sterile sensors are not in polybags)	



Sensor with IP67 connector



1/2 inch flange to barb sensor

Ordering Information

Luer Sensors	Order Nr.
Pressure Sensor Luer PS Non-sterile	30961415
Pressure Sensor Luer PC Non-sterile	30961416
Pressure Sensor Luer PS 30 psi Cert	30961449
Pressure Sensor Luer PS 60 psi Cert	30961450
Pressure Sensor Luer PS 6 psi Cer	30961448
Pressure Sensor Luer PS IP67	30961455
Pressure Sensor Luer PC sterile	30961417
Pressure Sensor Luer PC30 psi Cert sterile	30961453
Pressure Sensor Luer PC60 psi Cert sterile	30961454
¼ in x ¼ in (0.64 x 0.64 cm) polycarbonate adaptor tee with luer port	PDKT-103-03
3/8 in x 3/8 in (0.95 x 0.95 cm) polycarbonate adaptor tee with luer port	PDKT-104-03
½ in x ½ in (1.27 x 1.27 cm) polycarbonate adaptor tee with luer port	PDKT-105-03
Polysulfone 3-way stopcock with M/F luer inlet /outlet F branch	PDKT-V3PS-000
Hose Barb & Sanitary Flange (non-sterile)	Order Nr.
Polysulfone	
1/8 in (0.318 cm) hose barb	PREPS-N-012
1/4 in (0.64 cm) hose barb	PREPS-N-025
3/8 in (0.95 cm) hose barb	PREPS-N-038
1/2 in (1.27 cm) hose barb	PREPS-N-050
3/4 in (1.91 cm) hose barb	PREPS-N-075
1 in (2.54 cm) hose barb	PREPS-N-100
1/2 in (1.27 cm) sanitary flange	PREPS-N-5-5
1 in (2.54 cm) sanitary flange	PREPS-N-1-1
1 1/2 in (3.81 cm) sanitary flange	PREPS-N-15-15
1 in (2.54 cm) sanitary flange to 1 in (2.54 cm) hose barb	PREPS-N-1-100
1/2 in (1.27 cm) sanitary flange to 3/8 in (0.95 cm) hose barb	PREPS-N-5-038
1/2 in (1.27 cm) sanitary flange to 1/2 in (1.28 cm) hose barb	PREPS-N-5-050
Polycarbonate	Order Nr.
¼ in (0.64 cm) hose barb	PRESS-N-025
3/8 in (0.95 cm) hose barb	PRESS-N-038
½ in (1.28 cm) hose barb	PRESS-N-050
¾ in (1.91 cm) hose barb	PRESS-N-075
1 in (2.54 cm) hose barb	PRESS-N-100
Reusable Cable	Order Nr.
Cable Adapter for Pendotech Single-Use Pressure Sensor – 12 ft (3.657 m)	PDKT-650-298
Cable Adapter for Pendotech Single-Use Pressure Sensor – 24 ft (7.31 m)	PDKT-650-298-24
Cable Adapter to Minim 2 for Single-Use Pressure Sensor – 1 ft (0.3 m)	PDKT-650-298M2
Cable Adapter with RJ12 phone connector to Midgee Monitor for Single-Use Pressure Sensor – 6 ft (2 m)	PDKT-650-298MG
Cable Adapter with RJ12 phone connector to Pall Minim for Single-Use Pressure Sensor – 6 ft (2 m)	PDKT-650-298MN
Accessories	Order Nr.
Test cable assembly for PressureMAT accuracy check	PMAT-TCA
Pressure Sensor Cable Dust Cover / Zero Simulator for PressureMAT	PDKT-650-298CVR
Pressure Sensor Extension Cable (12 ft/4 M)	PMAT-EXT-12F
Panel Mount Receptacle for Sensors	PDKT-650-298BH
PressureChecker pressure sensor and monitor verification tool	PDKT-650-950



PDKT-650-298CVR



PDKT-650-950



PMAT-EXT-12F

Ordering Information: Serialized Sensors with Individual NIST Certificates

Depending on the implementation of the sensors and end-user's preferences, documented values of a sensor reading across a range of applied pressures may be desired. As a product option, select part numbers are available with a serial number in addition to the lot number along with a NIST Certificate report for each sensor with the NIST traceable reference used. Part numbers listed with suffix identifiers (– B, – 30, – 60, or – 75) added to the part number include individual NIST Certificates. While every sensor undergoes the standard acceptance test to meet lot requirements, these serialized sensors have additional testing and documentation of the actual readings at each applied pressure. The applied pressures and readings on the NIST certificate are based on the range of testing required.

NIST Certificate (Add suffix to end of pressure sensor part #)	Min order qty: 5
Single-Use Pressure Sensor with 0 – 6 psi (0 to 0.41 bar) NIST certificate	– B
Single-Use Pressure Sensor with 0 – 30 psi (0 to 2.07 bar) NIST certificate	– 30
Single-Use Pressure Sensor with 0 – 60 psi (0 to 4.14 bar) NIST certificate	– 60
Single-Use Pressure Sensor with 0 – 75 psi (0 to 5.17 bar) NIST certificate	– 75

Ordering Information for Serialized Sensors with Individual NIST Certificates

- Sensors are available with the individual serial numbers and individual NIST Certificates in addition to the lot certification. Contact Pendotech for more information.

Pressure Sensors With Water-tight IP67 Connector

- All sensors available with IP67 connector BINDER part # 99 9209 00 04. Add –W suffix to part number; minimum order quantity is 100. Sample part #: PREPS-N-050-W (sensor with IP67 connector)

NOTICE: NOT FOR ABOVE 75 PSIG (5.2 BAR). Each prospective user must test the sensor for its proposed application to determine its suitability for the purpose intended prior to incorporating the sensor into any process or application. The sensor is not designed, intended or authorized for use as components in life support or medical devices. Product is not designed for any application in which the failure of the product could result in personal injury, death or property damage. For warranty see www.pendotech.com/warranty.