

Pressure Monitoring and Transmitting System

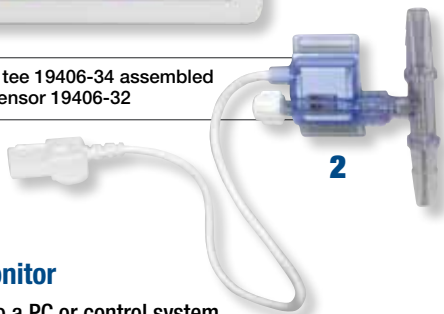
Monitor process pressure accurately

- Ideal for applications such as tangential flow filtration, cross flow filtration, depth filtration, bioreactor monitoring, and chromatography



1

Adaptor tee 19406-34 assembled to luer sensor 19406-32



2

1. PressureMAT™ Monitor

- Data output capability to a PC or control system
- User-configurable min/max alarm set points

The PressureMAT combines a pressure monitor, data logger, alarm, and transmitter in one simple control box. Designed for use with single-use, in-line pressure sensors. Each channel takes pressure readings once per second. Process pressure is displayed on the easy-to-read LCD. System is easily calibrated to zero through a single button. The PressureMAT may also transmit output via a 4 to 20 mA signal or can provide RS-232 data transfer for use in common PC applications, such as the PressureMAT Data Acquisition Software or Excel®, through WinWedge or Hyper Terminal software.



Number of process sensor inputs	Number of outputs	Accuracy	Power	Catalog number	Price
2 pressure	2 relay, 2 analog, or 4 relay	±0.1% full-scale	12 to 24 VDC	GY-19406-03	
4 pressure	4 analog			GY-19406-07	
3 pressure; 1 flow	4 analog			GY-19406-11	

[GY-19406-70](#) PressureMAT data acquisition software

[GY-19406-82](#) RS-232 to USB serial adapter cable, 6 ft (1.8 m)

[GY-19406-87](#) Masterflex® interface cable for LS pump

[GY-19406-95](#) PressureMAT stand



REQUIRED System Components

- 1) PressureMAT™ monitor
- 2) Single-use pressure sensor(s)

2. Single-Use Pressure Sensors

- Economical alternative to stainless steel sensors currently in the market
- Sensors priced for single-use systems but may be reused

Sensors measure static and dynamic process pressure and are perfect components for disposable systems requiring sterilization but also minimal downtime. Sensors feature an integral flow sensor with no dead legs and no fluid path obstructions. All pressure sensors are manufactured in a FDA-registered, ISO 13485-certified facility; in an ISO Class 8 (formerly Class 100,000) cleanroom. Sensors are made from USP Class VI-compliant polycarbonate or caustic-resistant polysulfone. Both materials are gamma stable. Sensors are 100% tested for accuracy and leaks during the manufacturing process. Connect sensor to PressureMAT monitor with 3.6-m reusable cable. Sensors are designed for use up to a maximum pressure of 5.3 bar.

Process-Scale Sensors connect directly as a barbed fitting to the tubing line and are available in 1/4", 3/8", 1/2", 3/4", or 1" hose barb (see [your local dealer](#)).

Small-Scale Sensors are available with luer connections and may connect directly to the fluid line with luer adapters or indirectly by using a 1/4" or 3/8" barbed adapter tee. Both connection setups have been tested for accuracy.

Material	Connection	Catalog number	Price/ea
Process-scale sensors			
Polycarbonate, non-sterile	1/4" tubing ID	GY-19406-21	
	3/8" tubing ID	GY-19406-23	
	1/2" tubing ID	GY-19406-28	
	3/4" tubing ID	GY-19406-29	
Polysulfone, non-sterile	1/4" tubing ID	GY-19406-27	
	3/8" tubing ID	GY-19406-25	
	1/2" tubing ID	GY-19406-22	
	3/4" tubing ID	GY-19406-24	
Small-scale sensors			
Polycarbonate, sterile	Female luer	GY-19406-32	
Polysulfone, non-sterile	Female luer	GY-19406-20	

Note: The single-use sensors will work with third-party pressure monitors. Please contact Cole-Parmer for more information about adapting the sensors to existing monitors.

[GY-19406-34](#) Adapter tee, 1/4" barb x 1/4" barb x male luer, polycarbonate; for 19406-22, -32

[GY-19406-36](#) Adapter tee, 3/8" barb x 3/8" barb x male luer, polycarbonate; for 19406-22, -32

[GY-19406-35](#) Adapter tee, 1/2" barb x 1/2" barb x male luer, polycarbonate; for 19406-22, -32

[GY-19406-80](#) Sensor cable with wire leads for third-party monitors, 12 ft (3.6 m)

Cole-Parmer® Sanitary Pressure Transducers



Get superior accuracy in sanitary applications

- Designed for clean-in-place and steam-in-place installations
- Meet 3A standards—fully sealed to withstand external high-pressure washdowns
- Self-contained electronic package
- Ensures excellent accuracy and long-term stability



Specifications

Accuracy: ±0.1% full scale
Temp range (compensated): 20 to 180°F (–7 to 82°C)
Operating temp: –40 to 260°F (–40 to 125°C)

Process connection: 1 1/2" sanitary Tri-Clamp®
Power: 24 VDC
Electrical connection: 2 wire

Output: 4 to 20 mA
Wetted materials: stainless steel
Dimensions: 3 1/2" (8.9 cm) H



Range	Catalog number	Price
0 to 30 psi	GY-98072-04	
0 to 100 psi	GY-98072-08	
0 to 150 psi	GY-98072-10	