Signet 8450 Pressure Transmitters

Check out the 9900 Transmitter for your single channel needs

Member of the ProcessPro® Family of Transmitters

Panel Mount

Pipe, Wall, Tank and Integral Mount

The Signet 8450 Pressure Transmitter is a unique instrument that offers local or remote display with current and relay outputs. This model offers exceptional repeatability and accuracy over a wide operating pressure range. The instrument is available in field and panel mount configurations, dual channel input and is equipped with two 4 to 20 mA outputs, fully scaleable and reversible for each input channel. Dual open collector outputs.

The unit also has the ability to accept other sensors with 4 to 20 mA output, via the Signet 8058 Signal Converter. The chemical resistant NEMA 4X/IP65 front face is found in both the highly visible field mount or black panel mount instrument, both featuring a self healing window, a standard ¼ DIN cutout and large push buttons for easy navigation. Programming capabilities are available for single point calibration, setting of outputs, and output simulation function for complete system testing. The dual input version allows difference calculation (ΔP) and offers significant cost savings with independent dual outputs.

Features

- **Digital (S^3L) input for stable and reliable reading**
- **Dual sensor input**
- **Pressure can be displayed in psi, bar or kPa**
- **Field scaleable dual 4 to 20 mA output**
- **Dual open collector output**
- **NEMA 4X/IP65**
- **Chemical resistant enclosure and self-healing window**

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MEASURING EQUIPMENT
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Applications

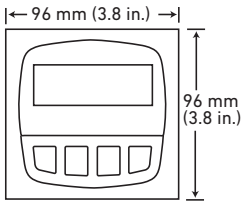
- **Pump, Filter or Pipe Protection**
- **Pressure Regulation/Monitoring**
- **Over or Under Pressure Alarm**
- **Pump Servicing**
- **HVAC**
- **Chemical Processing**
- **Scrubber Systems**
- **Water Management**
- **Irrigation Systems**
- **Wastewater**

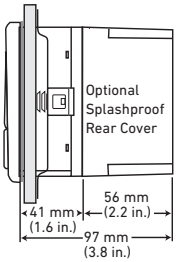
Specifications

General		
Compatibility	Signet 2450 Pressure Sensor versions with digital output or other sensors with 4 to 20 mA output (via Model 8058)	
Accuracy (based on 2450)	±1% of full scale	
Display	Alphanumeric 2 x 16 dot matrix LCD	
Update Rate	1 second	
Contrast	User selected, 5 levels	
Materials		
Enclosure	PBT	
Keypad	Sealed 4-key silicone rubber	
Panel and Case Gasket	Neoprene	
Window	Polyurethane coated polycarbonate	
Electrical		
Power	12 to 24 VDC ±10% regulated	
	60 mA max.	
Current Output	Dual 4 to 20 mA, isolated, passive, fully adjustable and reversible	
Max. Loop Impedance	50 Ω max. @ 12 V	
	325 Ω max. @ 18 V	
	600 Ω max. @ 24 V	
Update Rate	100 ms	
Accuracy	±0.03 mA	
Open-Collector Output	High, Low, Off	
	Optically isolated, 50 mA max, sink, 30 VDC max. with pull-up resistor.	
Hysteresis	User adjustable	
Environmental		
Operating Temperature	-10 °C to 70 °C	14 °F to 158 °F
Storage Temperature	-15 °C to 80 °C	5 °F to 176 °F
Relative Humidity	0 to 95%, non-condensing	
Enclosure	NEMA 4X/IP65 (front face only on panel mount); field mount is 100% NEMA 4X/IP65	
Shipping Weight		
	0.325 kg	0.8 lb
Standards and Approvals		
	CE, FCC, UL, CUL	
	RoHS compliant, China RoHS	
	Manufactured under ISO 9001 for Quality and ISO 14001 for Environmental Management and OHSAS 18001 for Occupational Health and Safety	

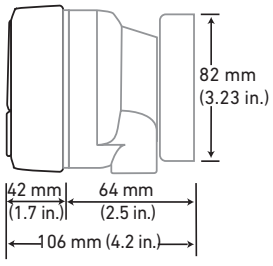
Dimensions

3-8450-XP Panel Mount





Field Version with Universal Mount



System Overview

Panel Mount	Pipe, Tank, Wall	4 to 20 mA input	Integral Mount
Signet 8450 Pressure Instrument	**Signet 8450 Pressure Instrument** with 3-8050 Universal Mount Kit	Customer Supplied Chart Recorder Programmable Logic Controller	**Signet 8450 Pressure Instrument** with 3-8052 Integral Mount Kit
Signet Sensor 2450 All sold separately			
In-Line Installation - Customer supplied Fittings		Submersible Installation - Customer supplied pipe extension or conduit with 3/4 in. FNPT threads*	

*Refer to the Signet Submersion Kit brochure (3-0000.707) located on our website for installation suggestions and options.

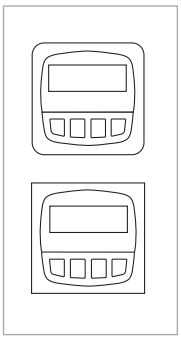
8058 signal converter and 8059 external relay module also compatible

Ordering Notes

1. It is advised to protect the capillary tube located on the back of the sensor with the 3-8052-1.
2. Field mount instruments can be mounted with a sensor in an integral configuration by choosing the following:
   - Order integral adapter kit PN 3-8052 (sold separately) to connect the transmitter directly onto the sensor.
3. An optional splashproof rear cover can be ordered separately if needed.
4. Use the universal mounting kit with the field mount transmitter to mount to a pipe, tank or wall.
5. To mount the panel version on a wall, use the heavy duty wall mount bracket.
6. Panel cutout should be 92 mm X 92 mm (3.62 in X 3.62 in.).

Please refer to Wiring, Installation, and Accessories sections for more information.

Ordering Information



Mfr. Part No.	Code	Input	Output	Power
Pressure Transmitter				
Field mount for pipe, wall, tank, or integral mounting				
3-8450-3	**159 000 045**	Two	Two 4 to 20 mA outputs and two open collectors	4 wire
Panel mount with mounting bracket and panel gasket				
3-8450-3P	**159 000 046**	Two	Two 4 to 20 mA outputs and two open collectors	4 wire

Accessories and Replacement Parts

Mfr. Part No.	Code	Description
Mounting		
3-8050	**159 000 184**	Universal mounting kit
3-8052	**159 000 188**	¾ in. Integral mounting kit
3-8052-1	**159 000 755**	¾ in. NPT mount junction box with liquid tight connector and cap with terminal block
3-8050.395	**159 000 186**	Splashproof rear cover (panel mount only)
3-0000.596	**159 000 641**	Heavy duty wall mount bracket (panel mount only)
3-5000.399	**198 840 224**	Panel adapter, 5 x 5 in. to ¼ DIN
3-5000.598	**198 840 225**	Surface mount bracket (panel mount only)
3-9900.396	**159 001 701**	Angle adjustment adapter kit
Liquid Tight Connectors		
3-9000.392	**159 000 368**	Liquid tight connector kit for rear cover (3 connectors)
3-9000.392-1	**159 000 839**	Liquid tight connector kit, NPT (1 connector)
3-9000.392-2	**159 000 841**	Liquid tight connector kit, PG 13.5 (1 connector)
Other		
3-8058-1S	**special order**	4 to 20 mA to digital signal converter, single input, loop powered
3-8058-2S	**special order**	4 to 20 mA to digital signal converter, dual input, loop powered

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