

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, single or dual channel input and is equipped with a 4 to 20 mA output, fully scaleable and reversible for each input channel. Configurations include open collector outputs or relays with status indicators for process control or alarming.

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 relays and 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 (S³L) input for stable and reliable reading
- Available with single or dual sensor input
- Pressure can be displayed in psi, bar or kPa
- Field scaleable 4 to 20 mA output
- Choice of relay or open collector output
- NEMA 4X/IP65
- Chemical resistant enclosure and self-healing window



Applications

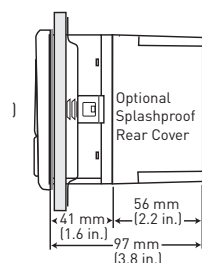
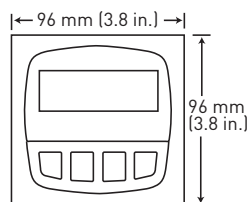
- Pump, Filter or Pipe Protection
- Pressure Regulation/Monitoring
- Over or Under Pressure Alarm
- Pump Servicing
- HVAC
- Chemical Processing
- Scrubber Systems
- Water Management
- Irrigation Systems
- Wastewater

Specifications

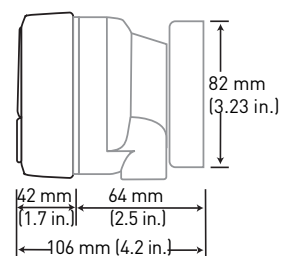
General	
Compatibility	Signet 2450 Pressure Sensor versions with digital output or other sensors with 4 to 20 mA output (via Model 8058)
Accuracy (based on 2450)	±1% of full scale
Display	Alphanumeric 2 x 16 dot matrix LCD
Update Rate	1 second
Contrast	User selected, 5 levels
Materials	
Enclosure	PBT
Keypad	Sealed 4-key silicone rubber
Panel and Case Gasket	Neoprene
Window	Polyurethane coated polycarbonate
Electrical	
Power	12 to 24 VDC ±10% regulated
	-1 21 mA max.
	-2 220 mA max.
	-3 60 mA max.
Current Output	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
Relay Outputs	
Mechanical SPDT contacts	High, Low, Off
Maximum Voltage Rating	5 A @ 30 VDC, 5 A @ 250 VAC resistive load
Hysteresis	User adjustable
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, UL, CUL
	RoHS compliant
	China RoHS
	Manufactured under ISO 9001 for Quality and ISO 14001 for Environmental Management

Dimensions



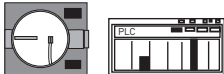



3-8450-XP Panel Mount



Field Version with Universal Mount



System Overview

Panel Mount	Field 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* 	

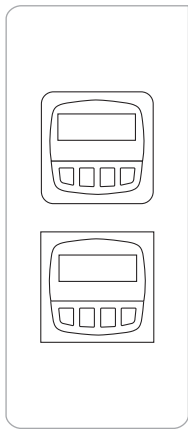
*Refer to the Signet Submersion brochure located in the K-Factors Fittings and More Kit (3-0000-709) for installation suggestions and options.
 8058 signal converter & 8059 external relay module also compatible

Ordering Notes

- 1) 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.
- 2) An optional splashproof rear cover can be ordered separately if needed.
- 3) Use the universal mounting kit with the field mount transmitter to mount to a pipe, tank or wall.
- 4) To mount the panel version on a wall, use the heavy duty wall mount bracket.
- 5) Order RC filter kits to protect relays from voltage spikes.
- 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		
3-8450-1	159 000 041	One input with 4 to 20 mA output and one open collector; uses 2 wire power
3-8450-2	159 000 043	One input with 4 to 20 mA output and two relays; uses 4 wire power
3-8450-3	159 000 045	Two inputs with two 4 to 20 mA outputs and 2 open collectors; uses 4 wire power
Panel mount with mounting bracket and panel gasket		
3-8450-1P	159 000 042	One input with 4 to 20 mA output and one open collector; uses 2 wire power
3-8450-2P	159 000 044	One input with 4 to 20 mA output and two relays; uses 4 wire power
3-8450-3P	159 000 046	Two inputs with two 4 to 20 mA outputs and 2 open collectors; uses 4 wire power

Accessories and Replacement Parts

Mfr. Part No.	Code	Description
Mounting		
3-8050	159 000 184	Universal mounting kit
3-8052	159 000 188	3/4 in. Integral mounting kit
3-8052-1	159 000 755	3/4 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)
3-5000.598	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		
3-8050.396	159 000 617	RC filter kit (for relay use), 2 per kit
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