

# Signet 8550 Flow Transmitters

Member of the ProcessPro® Family of Instruments



Panel Mount



Pipe, Wall, Tank and Integral Mount

## Features

- 2 or 4 wire power
- Available with single or dual input/output
- 4 to 20 mA scaleable outputs
- Permanent & resettable totalizers
- Relay options available
- NEMA 4X enclosure with self-healing window
- Output simulation for complete system testing

## Description


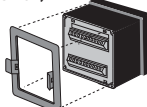


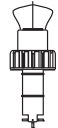
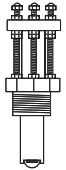



Signet 8550 Flow Transmitters are advanced instruments that convert the signal from frequency and digital (S<sup>3</sup>L) flow sensors into a 4 to 20 mA signal for long distance transmission. Configuration flexibility is maximized with single or dual input/output, two optional relays for process control, two packaging

options for integral/pipe mount or panel installation, and scalability for virtually any flow range or engineering unit. State-of-the-art electronic design ensures long-term reliability, signal stability, and simple user setup and operation.

## Applications

- Flow Control and Monitoring
- Filtration or Softener Regeneration
- Effluent Totalization
- Pump Protection
- Feed Pump Pulsing
- Ratio Control
- Water Distribution
- Leak Detection

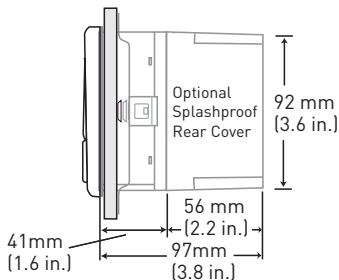
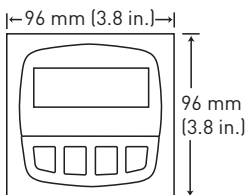
## System Overview

<p><b>Panel Mount</b> Signet 8550 Flow Instrument (Includes mounting bracket and panel gasket)</p>  	<p><b>Pipe, Tank, Wall Mount</b> Signet 8550 Flow Transmitter</p> 	<p><b>Integral Mount</b> Signet 8550 Flow Transmitter</p> 
<p>Signet Flow Sensor (sold separately) 515 2507 2540 525 2536 2551 2000 2552 2100</p> 	<p>Signet Flow Sensor (sold separately) 515 2507 2540 525 2536 2551 2000 2552 2100</p> 	<p>Signet Integral Mount Flow Sensor (sold separately) 3-8510-XX 3-8512-XX</p> 
<p>Signet Fittings (sold separately)</p> 		

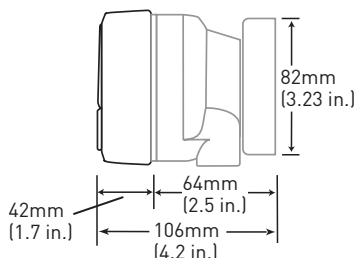


## Dimensions

### 3-8550-XP



### Field version with universal mount



### Model 8550

#### Ordering Notes

- 1) Use the field mount version to directly mount the instrument to the Model 515 or 2536 integral mount sensor. See sensor data sheet for more information.
- 2) Field mount and sensor can be ordered in a package. See Integral Mount for more information.
- 3) Panel Cutout should be 92 mm X 92 mm (3.62 in X 3.62 in.).
- 4) An optional splash proof rear cover for the panel mount version can be ordered separately if needed.

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

## Specifications

### General

Compatibility:

Signet Flow Sensors with frequency outputs

Accuracy:  $\pm 0.5\%$  of reading  
 Display: Alphanumeric 2 x 16 LCD  
 Update Rate: 1 second  
 Contrast: User selectable, 5 levels

### Materials

- Enclosure: PBT
- Panel Case Gasket: Neoprene
- Window: Polyurethane coated polycarbonate
- Keypad: Sealed 4-key silicone rubber

### Electrical

Power: 12 to 24 VDC  $\pm 10\%$ , regulated  
 [-1] 90 mA max.  
 [-2] 220 mA max.  
 [-3] 100 mA max.

Sensor Input Range: 0.5 to 1500 Hz

Sensor Power:

- 2-wire: 5 VDC  $\pm 1\%$  @ 1.5 mA
  - 3 or 4 wire: 5 VDC  $\pm 1\%$  @ 20 mA
- Optically isolated from current loop  
 Short circuit protected

Current Output

- 4 to 20 mA, isolated, passive, fully adjustable and reversible
- Max. Loop Impedance:  
 50  $\Omega$  max. @ 12 V  
 325  $\Omega$  max. @ 18 V  
 600  $\Omega$  max. @ 24 V
- Update Rate: 100 ms
- Accuracy:  $\pm 0.03$  mA

### Electrical (continued)

Relay Output:

- Mechanical SPDT contacts:  
 High, Low, Pulse, Off
  - Maximum Voltage Rating:  
 30 VDC @ 5 A , 250 VAC @ 5 A resistive load
  - Hysteresis: User selectable
  - Maximum 400 pulses/min.
- Open-Collector Output:
- High, Low, Pulse, Off
  - Optically isolated,  
 50 mA max. sink, 30 VDC max. pull-up voltage.
  - Hysteresis: User selectable for exiting alarm condition
  - Maximum 400 pulses/min.

### 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)

Shipping Weight 0.325 kg 0.8 lb

### Standards and Approvals

- CE, UL, CUL
- RoHS compliant
- Manufactured under ISO 9001 for Quality and ISO 14001 for Environmental Management

## Ordering Information

Instrument Part Number	
<b>3-8550</b>	ProcessPro® Flow Transmitter
	Sensor Input, Sensor Power, Outputs - Choose One
-1	One input, 2 or 4 wire, 4 to 20 mA and open collector for Hi, Lo, Pulse, or Frequency
-2	One input, 4 wire, 4 to 20 mA and 2 relays for Hi, Lo, or Pulse
-3	Two inputs, 2 or 4 wire, two 4 to 20 mA outputs and 2 open collectors for Hi, Lo, Pulse, or Frequency
	Field or Panel Mount - Choose One
-	Field mount
<b>P</b>	Panel mount; includes mounting bracket and panel gasket
<b>3-8550</b>	<b>- 1</b> Example Part Number - Field mount

Mfr. Part No.	Code	Mfr. Part No.	Code
3-8550-1	<b>159 000 047</b>	3-8550-2P	<b>159 000 050</b>
3-8550-1P	<b>159 000 048</b>	3-8550-3	<b>159 000 051</b>
3-8550-2	<b>159 000 049</b>	3-8550-3P	<b>159 000 052</b>

## Accessories and Replacement Parts

Mfr. Part No.	Code	Description
<b>Mounting Accessories</b>		
3-8050	<b>159 000 184</b>	Universal mounting kit
3-8051	<b>159 000 187</b>	Flow integral mount NPT
3-0000.596	<b>159 000 641</b>	Heavy duty wall mount bracket (panel mount only)
3-5000.598	<b>198 840 225</b>	Surface mount bracket (panel mount only)
3-8050.395	<b>159 000 186</b>	Splashproof rear cover (panel mount only)
<b>Liquid Tight Connectors and Other</b>		
3-9000.392	<b>159 000 368</b>	Liquid tight connector kit for rear cover (includes 3 connectors)
3-9000.392-1	<b>159 000 839</b>	Liquid tight connector kit, NPT (1 connector)
3-9000.392-2	<b>159 000 841</b>	Liquid tight connector kit, PG 13.5 (1 connector)
3-8050.396	<b>159 000 617</b>	RC filter kit (for relay use)



icenta Controls Ltd, North Station Yard, Warminster Road, Wilton, Salisbury, SP2 0AT

Tel: +44 (0)1722 741890 Lo-Call: 0845 895 1020 Fax: +44 (0)1722 742031 Email: sales@icenta.co.uk www.icenta.co.uk