+GF+ SIGNET 8550 Flow Transmitters



Description

+GF+ SIGNET 8550 Flow Transmitters are advanced instruments that convert the signal from all +GF+ SIGNET 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.

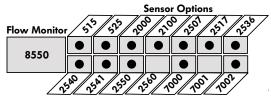
Features

- Permanent & resettable totalizers
- Scaleable outputs
- Relay options
- Mounting versatility
- 2 x 16 character dot matrix LCD
- NEMA 4X enclosure with self-healing window
- Large pushbuttons
- Numbered terminalsOutput simulation for
- complete system testing

Application

- Flow control and monitoring
- Filtration or softener regeneration
- Effluent totalization
- Pump protection
- Feed pump pulsing
- Ratio control
- Water distribution
- Leak detection

Options



| Mounting Version | Part No. | Wire Power | Sensor Input | 4 to 20 mA Output | Open Collector/ Relay |
|------------------|-----------|--|-----------------|---|---------------------------------------|
| Field | 3-8550-1 | 2/4 non-powered and powered sensors | 1 | 1 | 1 O.C. Hi, Lo, Pulse Freq or Off |
| | 3-8550-2 | 4 non-powered and powered sensors | 1 | 1 | 2 Relays Hi, Lo, Pulse or Off |
| | 3-8550-3 | 2/4 non-powered and powered sensors | 2 | 2 Sensor 1, Sensor 2 or delta Flow | 2 O.C.'s Hi, Lo, Pulse Freq or Off |
| Panel | 3-8550-1P | 2/4 non-powered and powered sensors | 1 | 1 | 1 O.C. Hi, Lo, Pulse Freq or Off |
| | 3-8550-2P | 4 non-powered and powered sensors | 1 | 1 | 2 Relays Hi, Lo, Pulse or Off |
| | 3-8550-3P | 2/4 non-powered and powered sensors | 2 | 2 Sensor 1, Sensor 2 or delta Flow | 2 O.C.'s Hi, Lo, Pulse Freq or Off |

Technical Features

Dimensions

Panel Mount Integral/Universal Mount 96 mm (3.8 in.) → ← 96 mm (3.8 in.)→ Panel Cutout 92 x 92 mm) 96 mm (3.8 in.) Optional 82 mm 96 mm (3.8 in.) ٩ (3.23 in.) Rear Cover 3.6 x 3.6 in. (+0.031, -0 in.) mm 56 mm (4.0 in.) 41 mm> -(2.2 in.)-.<u>6 in.)</u> 97mm -(1 (38 in.)

Installation

The transmitter is available in a panel mount or a field version. The field version is mounted to the sensor using the integral mount kit (3-8051) or you may select the universal mount kit (3-8050) to mount the transmitter on a surface near the sensor.

1. Panel Mount

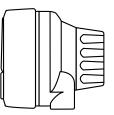
3-8550-XP



All panel mount transmitters (3-8550-XP) include a mounting bracket and gasket for a NEMA 4X watertight panel installation. Panel mount transmitters fit into a standard 1/4 DIN panel cutout.

2. Integral Mount

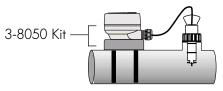
3-8051Kit



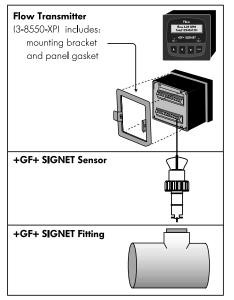
The Integral Mount Kit (3-8051) can be ordered separately and includes a conduit base, locking ring, and integral adapter for mounting the transmitter directly onto a sensor.

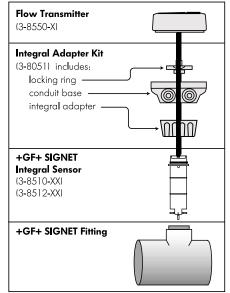
3. Universal Mount

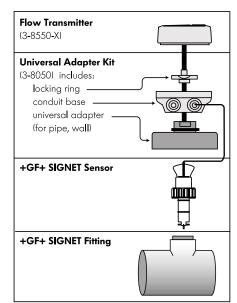
3-8550-X Transmitter



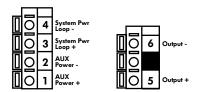
The Universal Mount Kit (3-8050) can be ordered separately and includes a conduit base, locking ring, and universal adapter for mounting the transmitter on a pipe, wall, or other stationary surface.



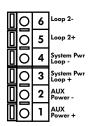


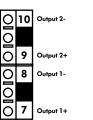


Rear Terminal View



Terminal 8550-1







9 Sensr Gnd

08

0

7

Sensr IN (RED)

O 16 Snsr 2 Gnd (SHIELD)

Terminal 8550-3

Technical Data

General

Compatibility:

+GF+ SIGNET Flow Sensors with frequency outputs (all except 2560 and 7001)

Accuracy: ± 0.5% of reading @ 25°C Enclosure:

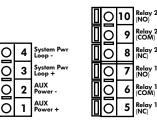
- Rating: NEMA 4X/IP65 front
- Case: PBT
- Panel Case Gasket: Neoprene
- Window: Polyurethane coated polycarbonate
- Keypad: Sealed 4-key silicone rubber
- Shipping Weight: 0.325kg (0.8 lbs.) Display:
- Alphanumeric 2 x 16 LCD
- Update rate: 1 second
- Contrast: User selectable, 5 levels

Environmental

Operating temperature: -10 to 70°C (14 to 158°F) Storage temperature: -15 to 80°C (5 to 176°F) Relative humidity: 0 to 95%, non-condensing

Standards and Approvals

- CE, UL listed
- Manufactured under ISO 9001 and ISO 14001
- NEMA 4X and IP65





Terminal 8550-2

Note: The terminal blocks are not labeled on the back of the unit. An adhesive label is supplied with terminal descriptions to serve as a remote terminal display.

Electrical

Power:

- 12 to 24 VDC ±10%, regulated

 (-1) 61 mA max.;
 (-2) 200 mA max.;
 (-3) 122 mA max.

 Sensor Input:
- Range: 0.5 to 1500 Hz
- Sensor power:
 2-wire: 1.5 mA @ 5 VDC ± 1%
 3 or 4 wire: 20 mA @ 5 VDC ± 1%
- Optically isolated from current loop
- Short circuit protected

Current output:

- 4 to 20 mA, isolated, fully adjustable and reversible
- Max loop impedance: 50Ω max. @ 12 V, 325Ω max. @ 18 V, 600Ω max. @ 24 V
- Update rate: 100 ms
- Accuracy: ±0.03 mA

Relay output:

- Mechanical SPDT contacts: Hi, Lo, Pulse, Off
- Maximum voltage rating: 5 A @ 30 VDC, 5 A @ 250 VAC resistive load
- Hysteresis: User selectable
- Max 300 pulses/min.

Open-collector output: Hi, Lo, Pulse, Off

- Open-collector, optically isolated, 50 mA max. sink, 30 VDC max. pull-up voltage.
- Max 300 pulses/min.
- Hysteresis: User selectable

Ordering Information

Accorrige

| Mfr. Part No. | Code | Description |
|---------------|-------------|--|
| 3-8550-1 | 159 000 047 | Flow transmitter, Field mount |
| 3-8550-1P | 159 000 048 | Flow transmitter, Panel mount |
| 3-8550-2 | 159 000 049 | Flow transmitter, Field mount with relays |
| 3-8550-2P | 159 000 050 | Flow transmitter, Panel mount with relays |
| 3-8550-3 | 159 000 051 | Flow transmitter, Field mount with dual input/output |
| 3-8550-3P | 159 000 052 | Flow transmitter, Panel mount with dual input/output |

| Accessories | | |
|---------------|-------------|---|
| Mfr. Part No. | Code | Description |
| 3-8050 | 159 000 184 | Universal mounting kit |
| 3-8050.395 | 159 000 186 | Transmitter NEMA 4X cover |
| 3-8051 | 159 000 187 | Flow Integral Mnt NPT |
| 3-8052 | 159 000 188 | 3/4 in. Integral Mounting Kit |
| 3-8050.396 | 159 000 617 | RC Filter kit (for relay use) |
| 3-8050.392 | 159 000 640 | Model 200 retro-fit adapter |
| 3-0000.596 | 159 000 641 | Heavy duty wall mount bracket |
| 3-5000.598 | 198 840 225 | Surface Mount Bracket |
| 3-9000.392 | 159 000 368 | Liquid tight connector kit for rear cover (includes 3 connectors) |
| 3-9000.392-1 | 159 000 839 | Liquid tight connector kit, NPT (1 piece) |
| 3-9000.392-2 | 159 000 841 | Liquid tight connector kit, PG13.5 (1 piece) |
| | | |

Engineering Specifications

- The transmitter shall meet appropriate CE, & UL standards.
- The transmitter shall be manufactured under ISO 9001 and ISO 14001 certified processes.
- The transmitter shall be field or panel mountable.
- The transmitter shall have flow rate and dual totalization capability.
- The display units shall be fully scaleable.
- The device shall meet NEMA 4X and IP65 standards.
- The operating voltage shall be 12 to 24 VDC.
- The transmitter shall have a 4 to 20 mA output with an open collector output, 5 to 30 VDC or a 4 to 20 mA output with 2 relays, or dual 4 to 20 mA output with dual open collector with delta capability.
- The transmitter shall have simulate capability.
- The transmitter shall be +GF+ SIGNET 8550 Flow Transmitter.