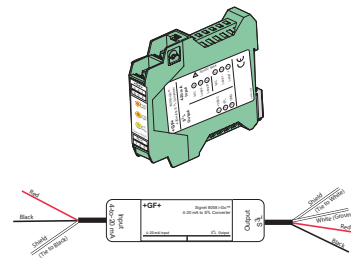


# Signet 8058 i-Go™ Signal Converter

English



3-8058.090 Rev. B 9/05 English



## Description

The 8058 Signal Converter accepts any 4 to 20 milliamp signal and converts it into the serial data format used by the Signet 8250, 8350, 8450 and 8900 instruments known as S<sup>3</sup>L. (Signet Serial Sensor Link)

- When used with the 8900 Multi-Parameter Controller, all programming uses the familiar 8900 setup menus.
- When used with ProcessPro transmitters, the 8058 is configured at the factory to the user's specifications.
- The 8058-1 wire-mount version is easily mounted anywhere in the interconnecting wiring between a single 4-to-20 mA source and the instrument.
- The 8058-2 DIN-rail mounted version converts two separate 4-to-20 mA source signals into the S<sup>3</sup>L format.

## Specifications

### General

Input:	4 to 20mA current loop(s), passive (external power required)
Input range:	3.6 to 22.1 mA
Output:	Digital (S <sup>3</sup> L) output
3-8058-2:	calibrated mA
Accuracy:	±32 µA @ 25°C
Resolution:	<16 µA
Update rate:	500 mS
Temp. Drift:	±1 µA per °C, max.

### Electrical

Power req.:	4.5 to 6.5 VDC @ < 3.0 mA
Max. voltage:	35 VDC
Max. current:	40 mA
Isolation:	Up to 48 Volts AC/DC
Voltage drop:	5 VDC max.
Reverse polarity protected	

### Cable:

3-8058-1:	400 mm (15 in.) input, 200 mm (8 in.) output
3-8058-2:	No cable provided (customer supplied)
Max. recommended cable extensions:	
• Loop in:	300m (1000 ft.)
• S <sup>3</sup> L out:	per S <sup>3</sup> L guidelines

### Environmental

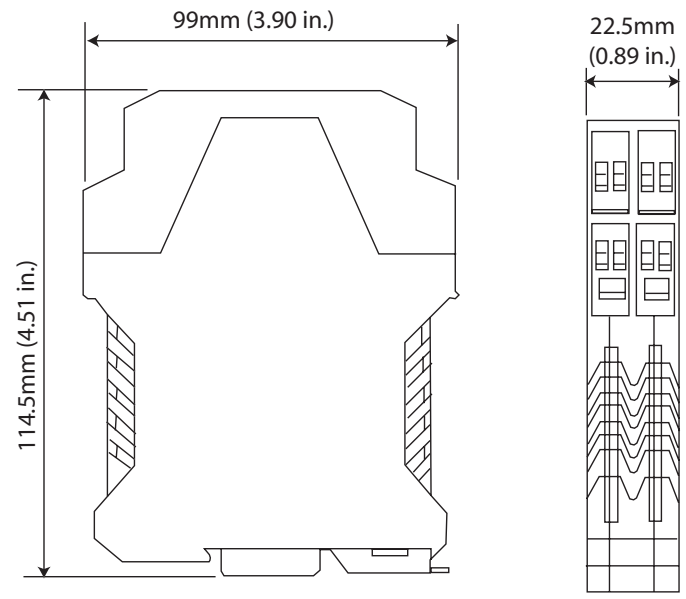
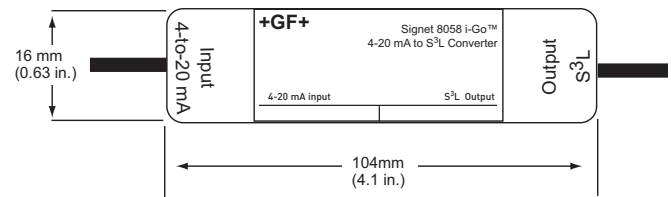
Operating Ambient Temperature:	
-10°C to 55°C (14°F to 131°F)	
Storage Temperature:	
-20°C to 85°C (-4°F to 185°F)	
Relative Humidity:	
• 3-8058-1:	0 to 100%, condensing
• 3-8058-2:	0 to 90%, non-condensing
Shipping Weight:	
• 3-8058-1:	0.12 kg (0.26 lb.)
• 3-8058-2:	0.15 kg (0.35 lb.)

### Standards and Approvals

- CE
- Emissions and Immunity per EN 61326:  
EN61000-6-2Immunity  
EN55011 Class B Emissions

## Dimensions

3-8058-1 Signal Converter, wire-mount

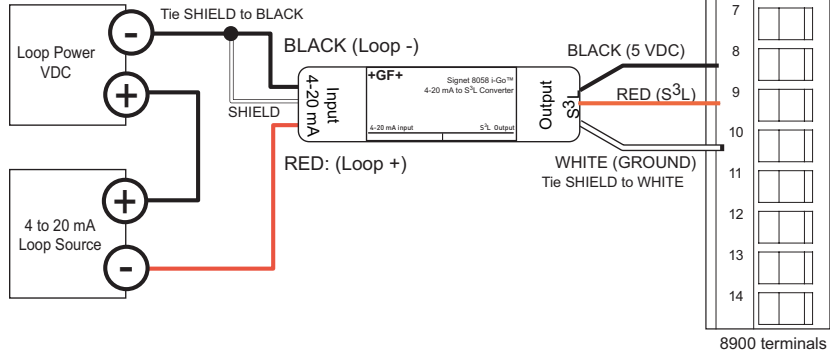
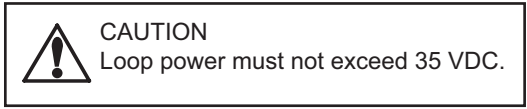


3-8058-2 Signal Converter, DIN-rail mount

### Wiring: 8058-1 Wire Mount to Signet 8900

#### Wiring Tips:

- Do not route sensor cable in conduit containing AC power wiring. Electrical noise may interfere with the signal.
- Routing cable in grounded metal conduit will help prevent electrical noise and mechanical damage.
- Seal cable splices tightly to prevent moisture damage.
- The cable length from the 8058 to the 8900 must not exceed the S<sup>3</sup>L limitations as defined in the 8900 instruction manual.

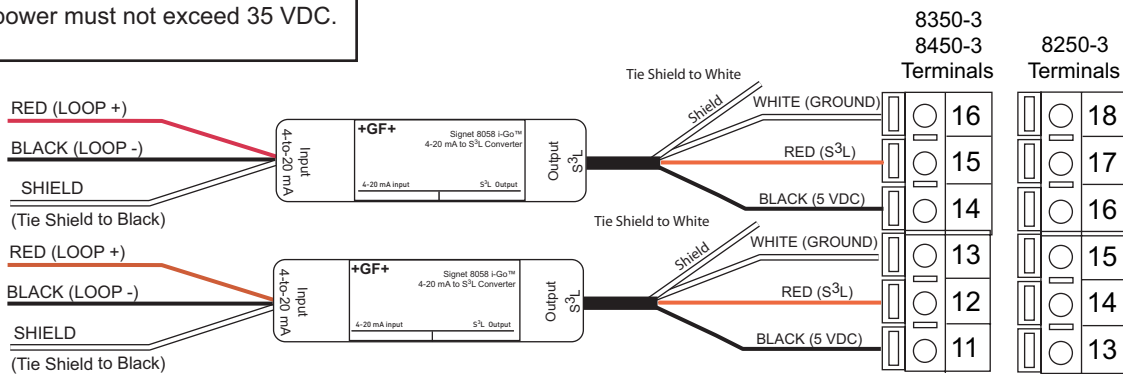
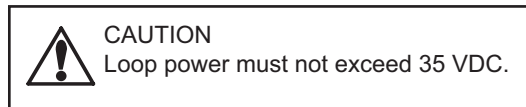
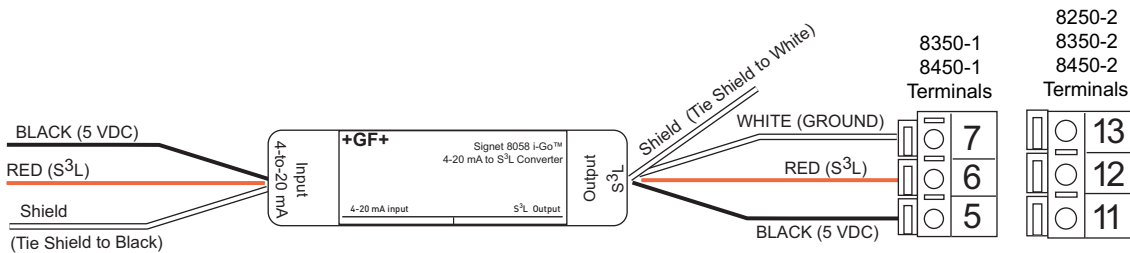


1. Wire the 8058 between the 4-20 mA loop source and the 8900 S<sup>3</sup>L input terminals as illustrated.
2. In the 8900 menu, assign a channel for this input, and specify the input parameter. If the 4-20 mA SOURCE is one of the standard 8900 input parameters (flow, pH, Conductivity, etc.) select that channel type. If the 4-20 mA SOURCE is not included in the 8900 menu, select OTHER (4-20) and then set additional labels and abbreviations per the 8900 instructions.
3. Follow complete instructions in the 8900 manual to set up the new channel.

### Wiring: 8058-1 Wire Mount to Signet 8250, 8350, and 8450 ProcessPro Transmitters

When used in conjunction with the Signet ProcessPro Pressure, Temperature or Level Transmitters, the 8058 serves to expand the operating range beyond the specifications of sensors available directly from Signet.

1. Order the 8058 according to the instructions on page 4. The 8058 MUST be factory configured for these applications.
2. Connect the 8058 between the 4-20 mA loop source and the ProcessPro S<sup>3</sup>L input terminals as illustrated.
3. Follow the complete CALIBRATION instructions in the ProcessPro manual.



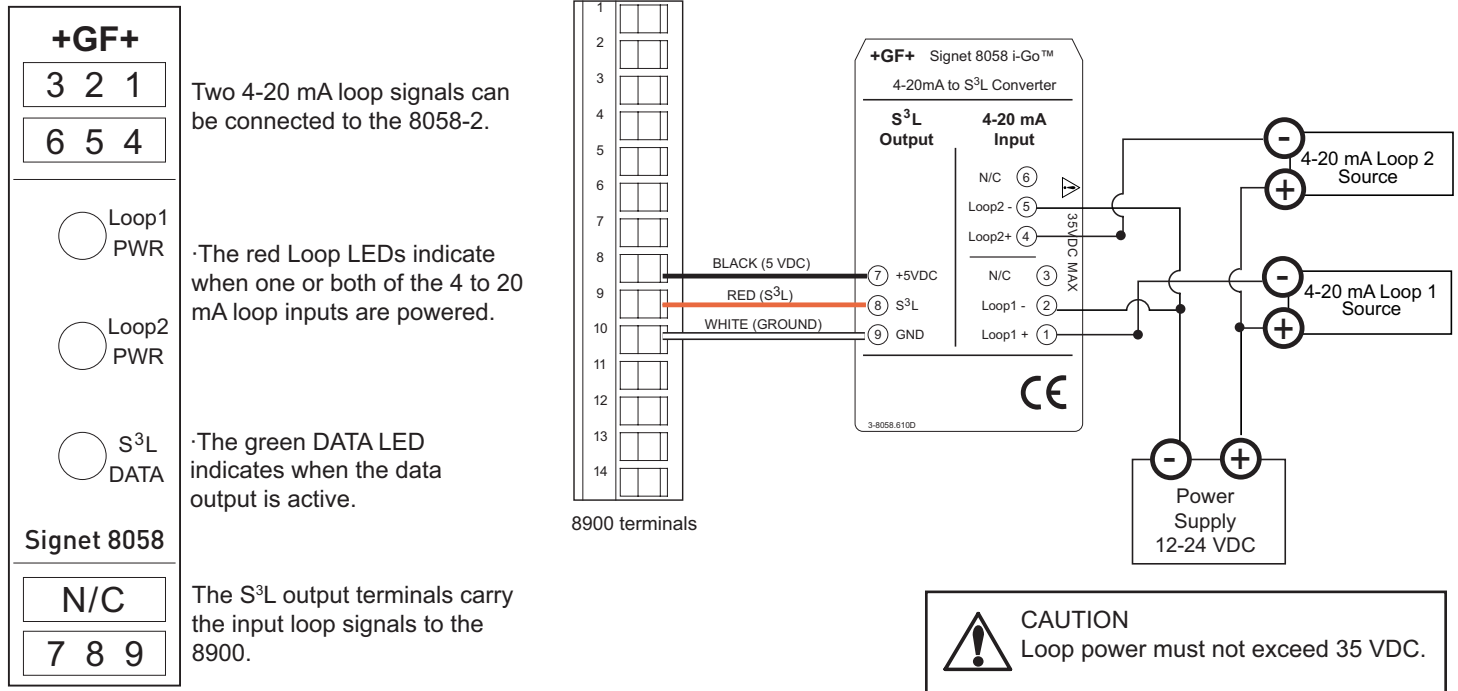
## Wiring: 8058-2 DIN Rail Mount to Signet 8900 Multi-Parameter Controller

The 8058-2 accepts two 4 to 20 mA loop input signals and converts them into two S<sup>3</sup>L serial data signals for input to the Signet 8900, where each loop is completely independent. The 8058 transmits information to identify the two signals by using the serial number of the 8058 converter:

- The manufacture date of the 8058 is included in the serial number label on the instrument.
- The 8058 converter transmits the serial number onto the S<sup>3</sup>L bus as the id for the Loop 1.
- The 8058 transmits a second serial number for Loop 2 by adding 12 to the month. (6040630.... becomes 6041830....)

**Loop 1:** ~~X~~ **04 06 30 1234**  
 Disregard Year mfg mfg mfg Sequential  
**Loop 2:** ~~X~~ **04 18 30 1234**

1. Wire the 8058 between the 4-20 mA loop source and the 8900 S<sup>3</sup>L input terminals as illustrated.
2. In the 8900 menu, assign a channel for this input, and specify the input parameter. If the 4-20 mA SOURCE is from one of the standard 8900 input parameters (flow, pH, Conductivity, etc.) select that channel type. If the 4-20 mA SOURCE is a type not included in the 8900 menu, select "OTHER (4-20)" and then set additional labels, abbreviations and units per the 8900 instructions.



## Wiring: 8058-2 DIN Rail Mount to Signet 8250, 8350, and 8450 ProcessPro Transmitters

When using the 8058-2 with the Signet 8250-3, 8350-3 or 8450-3, both loop sources must be of the same TYPE, and the 8058-2 MUST be factory-configured to the correct range.

1. Order the 8058-2 according to the instructions on page 4. The 8058 MUST be factory configured for these applications.
2. Connect the 8058 between the 4-20 mA loop source and the ProcessPro S<sup>3</sup>L input terminals as illustrated.
3. Follow the complete CALIBRATION instructions in the ProcessPro manual.

