

SPONSLER INDUSTRIAL SERIES METER MOUNTED AMPLIFIERS & TRANSMITTERS

Sponsler Industrial Series Meter Mounted amplifiers and Transmitters are designed to operate under the most severe industrial conditions. Our amplifiers and transmitters can be used with a variety of pulse generating devices providing outputs of voltage and frequency. These units can be meter mounted or used as stand alone devices. All of our Flow Measuring Systems are guaranteed for quality and state of the art efficiency, which has been a part of our flow measuring systems for over a quarter of a century.

Sponsler Meter Mounted devices can be used for amplifying and conditioning low amplitude signals or to linearly convert a frequency input to an equivalent current output or voltage output. Let Sponsler provide a flow measuring system tailored to your application.

Features:

- Low Cost
- Mounts directly on flowmeter
- Sensitivity field adjustable
- Explosion Proof Enclosure:
FM Approved, C.S.A. Certified
Class I, Groups B, C, D;
Class II, Groups E, F, G
- Approx. Weight 2 lbs..



SPONSLER CO., INC.

Flow Measuring Devices and Controls

Bulletin 5004-CD 8/98



SP712-2



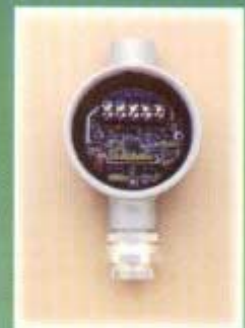
SP717



SP718V



SP711-3



SP714



SP718mA



SP720-2

Model Selection

MODEL SP711-3

A 3-wire analog transmitter designed to linearly convert a frequency input to an equivalent voltage output whose level is switch selectable @ 0-5V/0-10V. When incorporated with a turbine flowmeter a voltage representation proportional to flow is obtainable.

Specifications:

Input Voltage: 12-28VDC; 50mA max.
Protected against polarity reversal

Signal Input: Frequency 0-10K Hz
Amplitude 20mV-35V sine or squarewave
Impedance 10K

Analog Output: 0V @ 0Hz, 5V/10V @ desired full scale frequency
Full scale range: 75Hz-10K Hz selectable
(Consult factory for other ranges)
Response: 95% of change in 1 second
Linearity: 0.3% Full Scale
Tempco < 2% of reading over entire temperature range.
Minimum load resistance 250 ohms

MODEL SP712-2

A 2-wire loop powered analog transmitter designed to linearly convert a frequency input to an equivalent 4-20mA current output. When incorporated with a turbine flowmeter a current representation proportional to flow is obtainable. Data transmission in a current format exhibits excellent noise immunity and the capability of long distance transmission.

Specifications:

Input Voltage: Min.: 7V + (20mA x RL)
Max.: 28V + (4mA x RL)
Protected against polarity reversal

Signal Input: Frequency 0-10K Hz
Amplitude 50mV-35V sine or squarewave
Impedance 10K

Analog Output: 4mA @ 0Hz, 20mA @ desired full scale frequency
Full scale range: 100Hz-10K Hz selectable
(Consult factory for other ranges)
Response: 95% of change in 1 second
Linearity: 0.3% Full Scale
Tempco: < 2% of reading over entire temperature range.

MODEL SP714

A device that amplifies and conditions low amplitude signals such as those developed by a magnetic pickup coil. The amplitude of the squarewave output equals the input supply voltage of the SP714. Signal amplification and conditioning permits trouble free interfacing between low amplitude signal sources and electronic devices requiring pulse inputs.

Specifications:

Input Voltage: 6-28VDC; 12mA @ 12VDC
Protected against polarity reversal

Signal Input: Frequency 0-10K Hz
Amplitude 50mV-35V sine or squarewave
Impedance 10K

Output: 6-28VDC squarewave proportional to input voltage
Minimum load @ 250 ohms
Short circuit protection

Features: Individual LED indicators for power & output signal
Built-in test oscillator that injects 4Hz test signal while test pushbutton depressed

MODEL SP717

A device designed to produce a carrier frequency in conjunction with an RF pickup coil, detect the shift in the carrier frequency (modulation) that occurs with the passage of magnetic material and generate a squarewave output pulse with each shift in the carrier frequency. The amplitude of the squarewave output equals the input supply voltage of the SP717.

Specifications:

Input Voltage: 6-28VDC; 100mA max.
Protected against polarity reversal

Signal Input: Frequency 0-3500Hz w/50K Hz carrier (requires P/U coil 1-1.3mh)
Impedance 10K

Signal Output: 6-28VDC squarewave proportional to input voltage
Minimum load @ 250 ohms

Features: Individual LED indicators for power and signal output

MODEL SP718mA/SP718V

Devices designed to combine the advantages of the modulated carrier principle with the convenience of an analog output in a single PCB assembly. The SP718's linearly convert the detected carrier frequency shift rate to an equivalent analog output. When incorporated with a turbine flowmeter a current or voltage representation proportional to flow is obtained. Data transmission in a current format exhibits excellent noise immunity and the capability of long distance transmission. The SP718mA produces a 4-20mA analog output. The SP718V produces an analog voltage output whose range is selectable, 0-5 or 0-10VDC.

Specifications: (Both units)

Input Voltage: 110VAC, 60Hz, or 12-16.5VDC, 100mA max.
Observe polarity (consult factory for other inputs)

Signal Input: Frequency 0-3500Hz w/50K Hz carrier (requires P/U coil 1-1.3mh)

Specifications: SP718mA

Analog Output: 4mA @ 0Hz, 20mA @ desired full scale frequency
Load resistance: > 10 ohms min.
< 500 ohms max.

Feature: LED power indicator

Specifications: SP718V

Analog Output: 0V @ 0Hz, 5V/10V @ desired full scale frequency
Full scale range: 60Hz-3500Hz selectable
(Consult factory for other ranges)
Response: 95% of change in 1 second
Linearity: 0.3% Full Scale
Tempco: < 2% of reading over entire temperature range.
Minimum load resistance 1000 ohms

MODEL SP720-2

A 2-wire loop powered modulated carrier amplifier designed to combine the advantages of the modulated carrier principle with the convenience & accuracy of a loop powered 4-20mA transmitter.

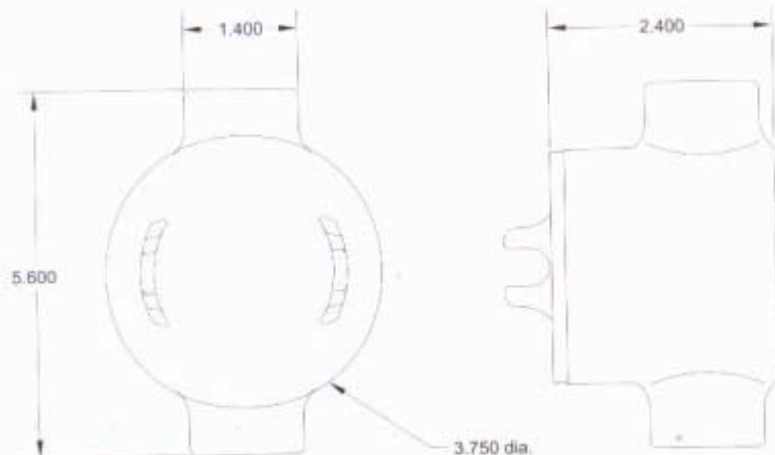
Specifications:

Input Voltage: Min: 7V + (20mA x RL)
Max: 28V + (4mA x RL)
Protected against polarity reversal

Signal Input: Frequency 0-3500Hz w/50K Hz carrier (requires P/U coil 1-1.3mh)

Analog Output: 4mA @ 0Hz, 20mA @ desired full scale frequency.
Full scale range: 35Hz-3500Hz selectable
Response: 95% of change in 1 second
Linearity: 0.3% Full Scale
Tempco: < 2% of reading over entire temperature range

Features: Individual LED indicators for power and signal output



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