

**Low Cost, Precision,
Stainless Steel Sensor**
0-5 psig, 0-15 psig, 0-30 psig,
0-100 psig, 0-150 psig,
0-300 psig, 0-500 psig
Corrosive Liquids or Gases

**SSX05G, SSX15G, SSX30G,
SSX100G, SSX150G,
SSX300G, SSX500G
PRESSURE SENSORS**

Features

- Low Cost
- Rugged — Stainless Steel
- 0.30% Accuracy
- Wide Temperature Operation
- Factory Calibrated and Temperature Compensated to Within $\pm 1\%$
- Reliable Semiconductor Technology

Applications

- Energy Management
- Process Control
- Robotics
- Sewage and Water Treatment
- Hydraulics
- Off-Road Vehicles
- Agricultural Vehicles

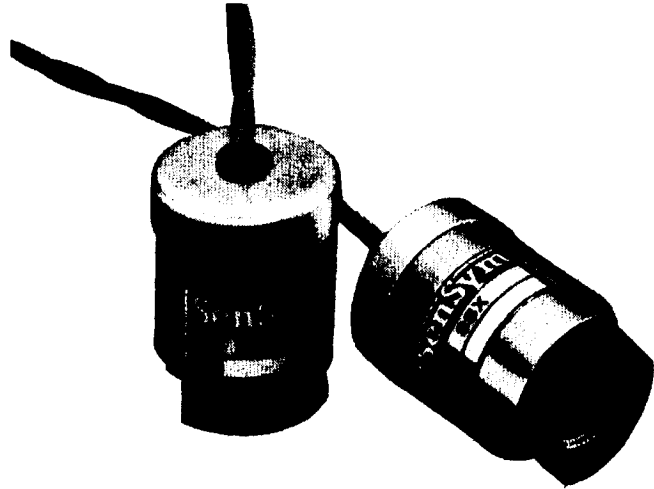
Description

The stainless steel SSX "G" Series devices were developed for pressure applications that involve measurement of a hostile media in harsh environments. These rugged devices are factory calibrated and temperature compensated for operation from 0 to +70°C and with slightly reduced performance, will operate over the range from -40°C to +125°C. This precise laser trimmed factory calibration and temperature compensation allows for field interchangeability without recalibration for most applications.

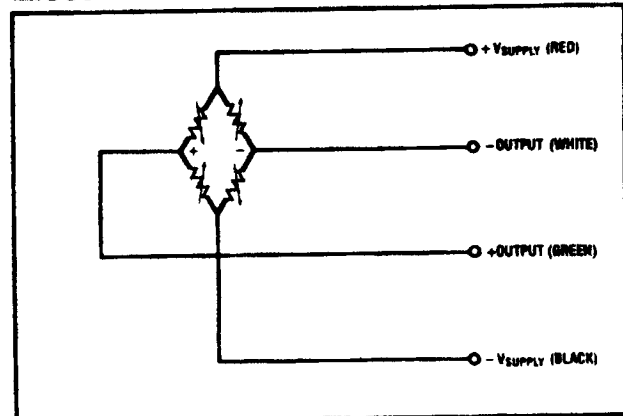
The SSX "G" devices each provide a closely trimmed full scale output when operated from a 12V supply. However, the output of the bridge is ratiometric and operation from any DC supply from +5V to +30V is acceptable.

These devices use the latest in silicon technology to provide accurate, reliable and repeatable pressure sensing that is stable with time and temperature. The stainless steel case and connector cable give these parts excellent resistance to EMI and RFI. The devices feature a $\frac{3}{8}$ " female NPT fitting to allow easy connection to a variety of standard male pressure connection fittings.

The SSX "G" Series devices are rugged and reliable transducers for use in a wide variety of pressure sensing applications where corrosive liquids or gases are monitored. Contact your local Sensym representative or the Sensym factory for further details.



Electrical Connection



Ordering Information

To order, use the following part numbers:

Part Number	Operating Pressure Range
SSX05G	0-5 psig
SSX15G	0-15 psig
SSX30G	0-30 psig
SSX100G	0-100 psig
SSX150G	0-150 psig
SSX300G	0-300 psig
SSX500G	0-500 psig

SSX05G, SSX15G, SSX30G, SSX100G, SSX150G, SSX300G, SSX500G

Functional Specifications: Service: Liquid, gas or vapor compatible with 304 stainless steel.¹

Part Number	Operating Pressure Range	Maximum Over Pressure	Full-Scale Output (Nominal)
SSX05G	0-5 psig	20 psig	50 mV
SSX15G	0-15 psig	30 psig	90 mV
SSX30G	0-30 psig	60 psig	90 mV
SSX100G	0-100 psig	200 psig	100 mV
SSX150G	0-150 psig	300 psig	90 mV
SSX300G	0-300 psig	450 psig	60 mV
SSX500G	0-500 psig	600 psig	100 mV

Power Supply	5V _{DC} to 30V _{DC}
Temperature Limits	
Storage	-55°C to +125°C
Operating	-40°C to +125°C
Burst Pressure	1000 psig
Humidity Limit	0 - 100% RH
Vibration	2g from 5Hz to 500Hz
Shock	50g
Case:	Stainless Steel
Wetted Materials	304 Stainless Steel

Performance Specifications: V₊ = 12V, T_A = 25°C. Specifications are typical unless otherwise noted.

Accuracy ² :	< ±0.30% FS at constant temperature
Non-linearity:	< ±0.10% FS (< ±0.50% FSO max)
Repeatability:	< ±0.20% FS
Thermal Effects ³ : 0°C to +70°C	
Null	0.01 (typ) 0.02 (max) % FS/°C
Span	0.01 (typ) 0.03 (max) % FS/°C
Thermal Effects: -40°C to 0°C, +70°C to +125°C	
Null	0.02% FS/°C
Span	0.02% FS/°C
Zero Pressure Output:	0 ± 500µV (max)
Full Scale Output ⁴ :	Nominal ± 1mV (max)
Power Consumption:	0.04 Watts
Excitation Voltage:	12 V _{DC} nominal. Any supply voltage between 5 to 30 V _{DC} can be used.
Input Impedance:	4.0kΩ
Output Impedance:	4.0kΩ
Output Noise:	< 0.01% FSO, at 0.11 < f < 1kHz
Response Time:	1.0ms
Offset Stability ⁵ :	± 0.1% FSO
Span Stability ⁵ :	± 0.1% FSO
Common-Mode Voltage ⁶ :	6.0V _{DC} ± 0.2V

Note 1: For questions regarding media compatibility, please contact the Sensym factory.

Note 2: Accuracy is sum of non-linearity, and repeatability.

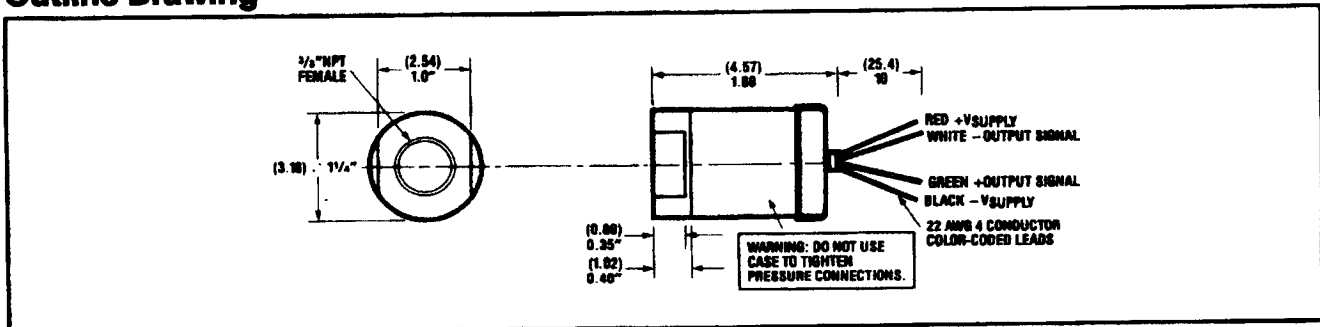
Note 3: Temperature tested and guaranteed at 70°C relative to 25°C. All specifications are shown relative to 25°C.

Note 4: Span guaranteed at 12 V_{DC}. Output is ratiometric to supply voltage.

Note 5: Change in output after 1 year or 1 million pressure cycles.

Note 6: This is the common-mode voltage of the output arms for V_S = 12V_{DC}.

Outline Drawing



WEIGHT: 3 oz. (85.1g)
ELECTRICAL CONNECTION: 4 conductor cable
OPTIONAL MALE PIPE FITTING: See Section 11

Tolerances, unless otherwise noted
 ± 0.01 For Two Decimal Places
 ± 0.005 For Three Decimal Places