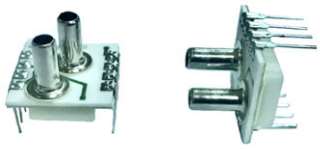


S-Series sensor
Dual In Line Package
mV Output
Temperature Compensated
Constant Voltage/Current

DESCRIPTION

S-Series is a temperature compensated,mV output,ceramic mounted pressure sensor packaged in a rugged Dual In Line package. S-Series uses a silicon MEMS pressure sensor bonded to a ceramic substrate containing thick film resistors that are uniquely laser trimmed for each sensor.

Incorporating a flexible design, the S-Series is available with no, short or long tubes and can be mounted pin up or pins down to allow OEMs to optimize their board design.The S-series is powered using constant current or constant voltage and when configured as in the application note, the integrated gain set or current set resistor will ensure sensor field interchangeability.

The S-series superior die performance, coupled with rugged ceramic substrate ensures long term stability with superior temperature performance over wide operating range.

FEATURES

- 0.1% Pressure Non Linearity
- Constant Voltage/Current
- Dual in-line package
- Wide selection of port
- Absolute, Differential or Gage pressures
- Temperature Compensated

APPLICATIONS

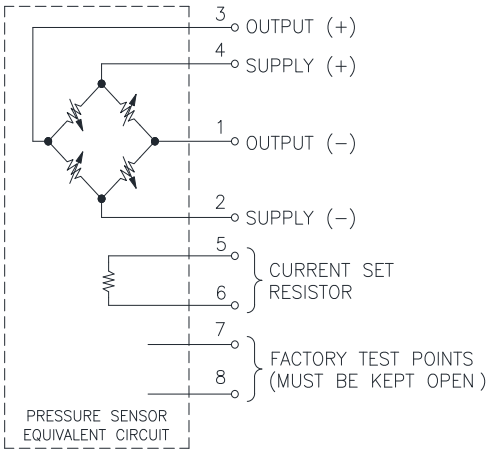
- Medical equipment/instrumentation
- Air Speed and Altitude measurement
- Environmental controls
- Gas flow measurement
- Duct static pressure
- Process Controls
- Pneumatic controls
- Automotive diagnostics

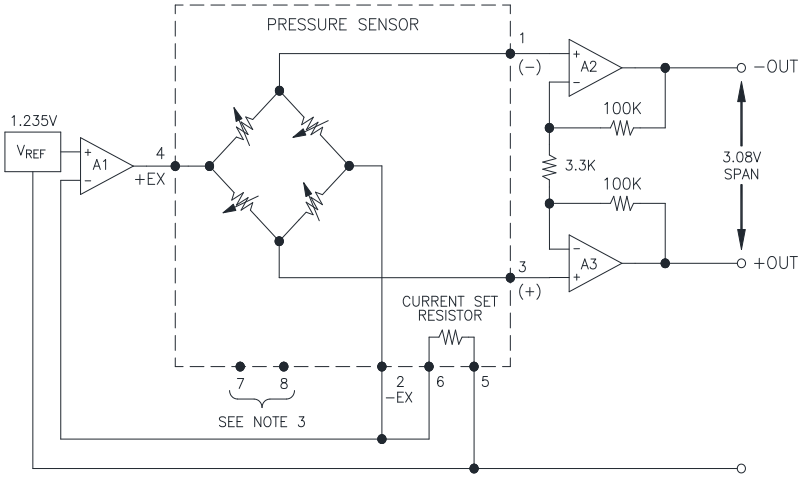
Specifications	Symbol	Min	Typical	Max	Unit
Performance Characteristics					
Supply Voltage		Application Schematic			V
Full-scale output ⩾5PSI	FS	49.5	50	50.5	mV
Full-scale output ＜2PSI	FS	39.5	40	40.5	mV
Supply Current			1.5		mA
Full-scale output		75	100	150	mV
Zero Pressure Offset		-2	-	+2	mV
Full-scale temperature accuracy		-0.5	0.2	+0.5	%FS
Zero position temperature accuracy		-0.5	0.2	+0.5	%FS
Zero-position temperature hysteresis		-0.1	-	+0.1	%FS
Pressure Non Linearity		-0.2	0.1	+0.2	%FS
Hysteresis & Repeatability		-0.15	0.1	+0.15	%FS
Long Term Stability		0.2	0.1	0.2	%FS/Year
Bridge Resistance		2.5	5	6.5	KΩ
Resistance temperature coefficient		0.25	0.3	0.35	%/℃
Compensation Temperature		-20	-	+70	℃
Operating Temperature		-40	-	+125	℃
Storage temperature		-50	-	+150	℃
Overage Pressure		3X			
Wetted Materials		Dry, non-corrosive gas			

EQUIVALENT CIRCUIT

APPLICATION CIRCUIT

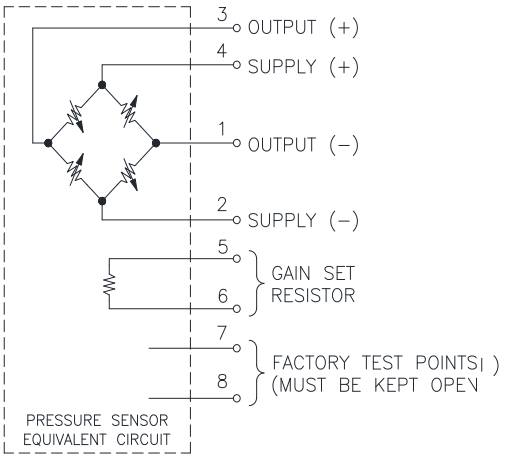
CONSTANT VOLTAGE

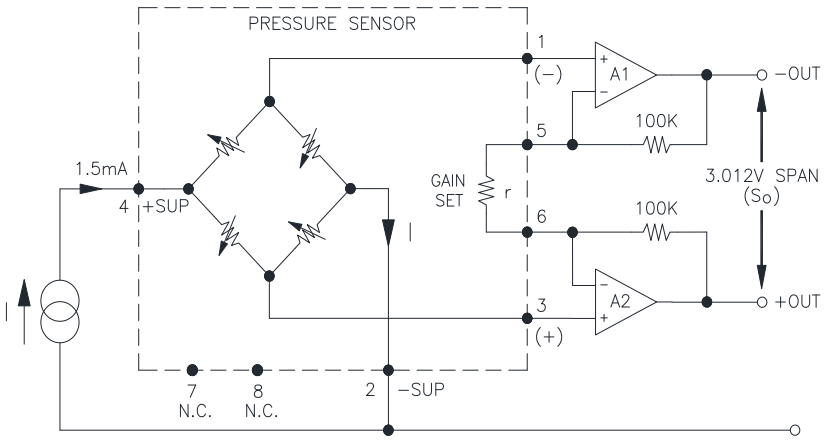




APPLICATION SCHEMATIC

CONSTANT CURRENT

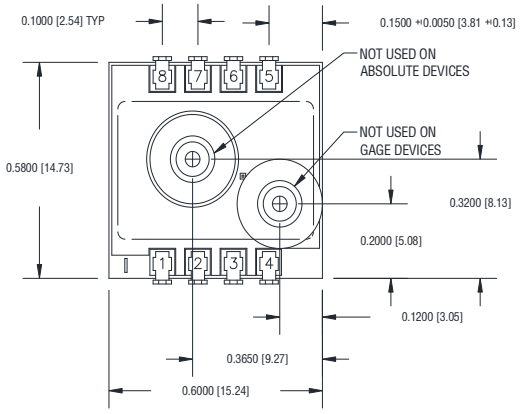


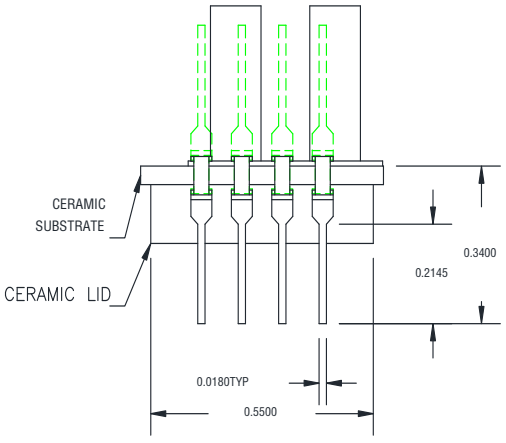


APPLICATION SCHEMATIC

MECHANICAL DIMENSIONS in [mm]

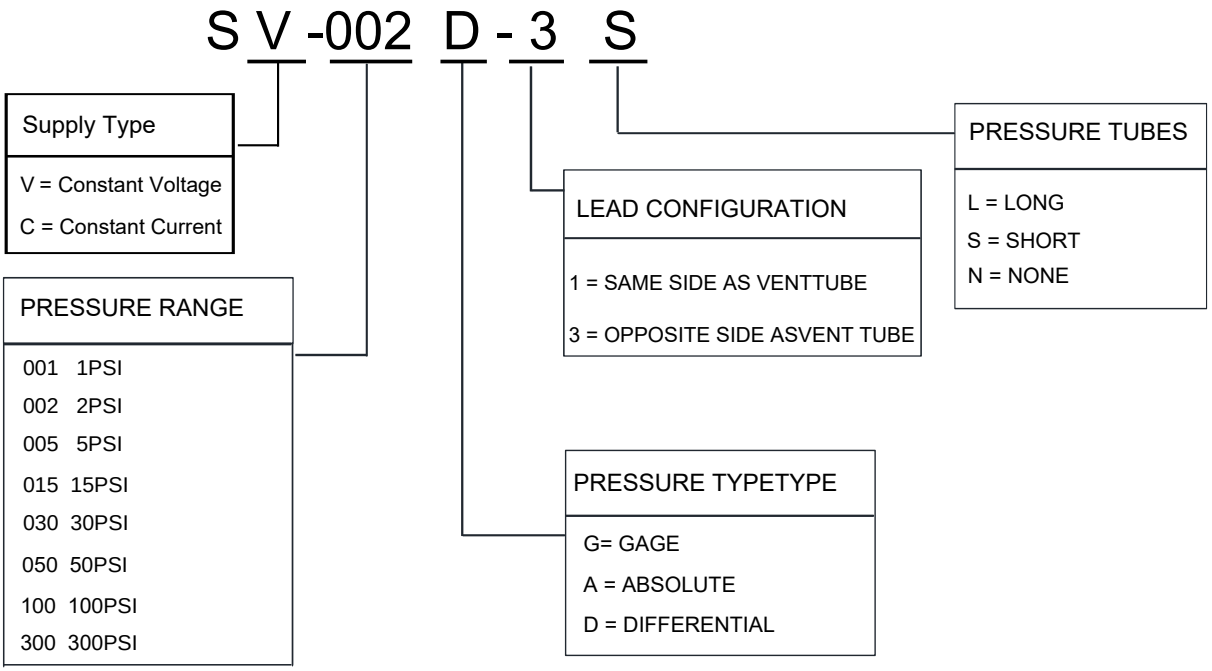
METAL TUBE/CERAMIC SUBSTRATE AND LID





PAD NO	FUNCTION
1	−OUT
2	−EX
3	+OUT
4	+EX
5,6	GAIN
7,8	TEST

PART NUMBERING FOR ORDERS



Part Number Example: SV-002D-3S