



# Model 256 Pressure Transducer

# Features

- Low cost
- High accuracy
- NEMA-4/IP-65
- Wide operating temperature range
- Compatible with a wide range of gases or liquids
- · Corrosive resistant all stainless steel wetted parts
- · Choice of voltage or current output
- Operates on low cost unregulated power supply
- Meets CS conformance standards

# Applications

- Process control
- Chemical processing
- Agricultural irrigation systems
- Natural gas pipeline monitoring
- Grain processing
- Industrial pressure monitoring



The Model 256 is one of the most rugged and reliable sensors available. Specifically designed for NEMA4/IP65 service the 256 is packaged in a die-cast aluminum enclosure and includes Setra's robust capacitive design, making it resistant to environmental effects such as shock, vibration, temperature and EMI/RFI.

### Different varieties

Available in a wide variety of gauge pressure ranges, the 256 features adjustable potentiometers for zero and span settings.

### Description

Only 3.6" high x 4.0" wide, the Model 256 is designed for compact installations. The removable cover provides easy access to the internal terminal strip for wiring. Installation is quick and easy with 1/2 inch internal threaded conduit ports for electrical termination.

**Note**: Setra quality standards are based on ANSI-Z540-1. The calibration of this product is NIST traceable.

U.S. Parent nos. 6019002



## Specifications

#### Performance data

	Ranges	Ranges
	25 PSI & Higher	Less than 25 PSI
Accuracy	±0.13% FS	±0.25% FS
Non-linearity (BFSL)	±0.10% FS	±0.22% FS
Hysteresis	0.08% FS	0.10% FS
Non-repeatability	0.02% FS	0.05% FS

#### **Thermal effects**

Compensated range°F	-7 to +176	-4 to 176
	1.0 1110	+ 10 110
Compensated range°C	-20 to 80	-20 to ±80
Zero shift %FS/100°F	1.0	1.0
Zero shift %FS/100°C	±0.9	±1.8
Span shift %FS/100°F	1.5	±1.5
Span shift %FS/100°C	1.4	±1.4
Long term stability	0.5% FS/YR	0.5% FS/YR
Warm-up shift	0.1% FS total	0.1% FS total

#### **Physical description**

Case	Die cast aluminum
Electrical connection	Two 1/2" internal conduit ports
Pressure fittings	1/4" NPT external
Weight	13.4 ounces

#### **Pressure media**

Liquids and gases compatible with 17-4 PH stainless steel.<sup>4</sup>

Environmental protection

Weather resistant

1 RSS of Non-Linearity, Hysteresis, and Non-Repeatability.

2. Units calibrated at nominal 70°F. Maximum thermal error computed from this datum.

3. Operating temperature limits of the electronics only. Pressure media temperature may be considerably higher or lower.

4 Note: Hydrogen not recommended for use with 17-4 PH Stainless Steel.

Specifications subject to change without notice

#### **Environmental data**

<b>Operating temperature</b> <sup>3</sup> °F(°C)	-40 to +185 (-40 to +85)
Storage temperature °F(°C)	-40 to +185 (-40 to +85)
Shock⁴	200g
Vibration <sup>7</sup>	20g
Environmental protection	NEMA 4/IP65

#### **Electrical data (current)**

Circuit	2-wire
Output <sup>2</sup>	4 to 20 mA <sup>8</sup> for all ranges
External load	0 to 800 ohms
Min. supply voltage (VDC)	9 + 0.02 x (resistance of receiver plus line)
Max. supply voltage (VDC)	30 + 0.004 x (resistance of receiver plus line)

#### **Electrical data (current)**

Circuit	3-wire (Exc, Out, Com)	
Excitation	9 tp 30 VD	
Output	0.1 to 5.1 VDC for ranges ≥ 25 PSI <sup>6</sup>	
Output impedance	100 ohms	
Power consumption	<0.15 watts (approx. 5mA @24 VDC)	

#### **Physical description**

Case

Stainless steel

5. Calibrated into a 50K ohm load, operable into a 5000 ohm load or greater.

6. Zero output factory set to within  $\pm 25$  mV.

Span (Full Scale) output factory set to within  $\pm 50$  mV.

7. Calibrated at factory with a 24 VDC loop supply voltage and a 250 ohm load.

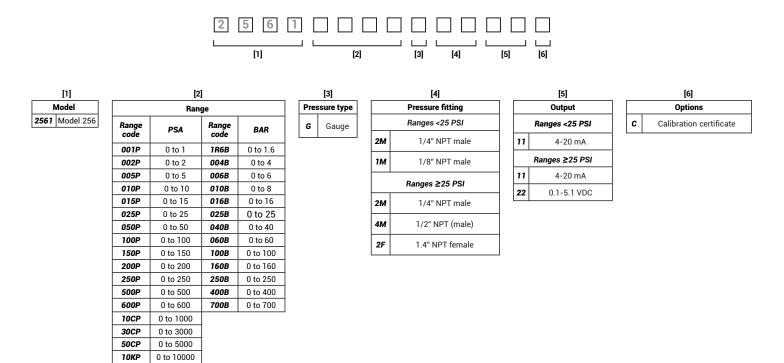
8. Zero output factory set to within ±0.08 mA Span output factory set to within ±16 mA



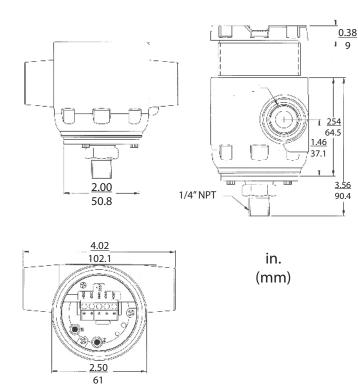
# Ordering information

Example part number: 2561001PG2M11C

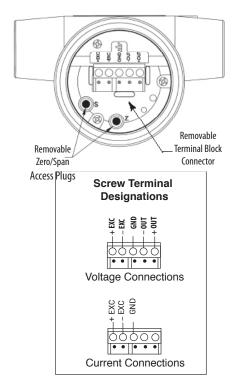
Model 256, 0 to 1 PSI, Gauge Pressure, 1/4" NPT Pressure Fitting, 4 to 20 MA Output, Calibration Certificate.



### Dimensions



## Wiring







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