

# Model 256

## Pressure Transducers



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

U.S. Patent nos. 6019002; 6014800

### DESCRIPTION

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.

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

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.

### BENEFITS

- 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 CE Conformance Standards

### APPLICATIONS

- Process Control
- Chemical Processing
- Agricultural Irrigation Systems
- Natural Gas Pipeline Monitoring
- Grain Processing
- Industrial Pressure Monitoring

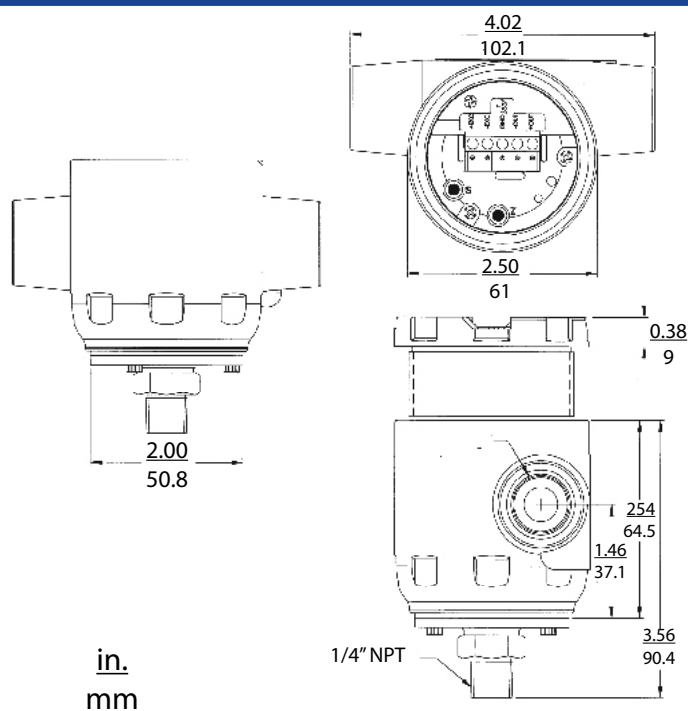
### SPECIFICATIONS

Performance Data			Environmental Data		Electrical Data (Voltage)	
	Ranges	Ranges	Operating <sup>1</sup> Temperature °F (°C)	-40 to +185 (-40 to +85)	Circuit	3-Wire (Exc, Out, Com)
	25 PSI & Higher	Less than 25 PSI	Storage Temperature °F (°C)	-40 to +185 (-40 to +85)	Excitation	9 to 30 VDC
Accuracy RSS <sup>1</sup> (at constant temp) <sup>2</sup>	±0.13% FS	±0.25% FS	Shock <sup>6</sup>	200g	Output <sup>2</sup>	0.1 to 5.1 VDC for Ranges ≥ 25 PSI <sup>6</sup>
Non-Linearity, BFSL	±0.10% FS	±0.22% FS	Vibration <sup>7</sup>	20g	Output Impedance	100 ohms
Hysteresis	0.08% FS	0.10% FS	Environmental Protection	NEMA 4/IP65	Power Consumption	<0.15 watts (approx. 5mA @ 24 VDC)
Non-Repeatability	0.02% FS	0.05% FS	Physical Description		Electrical Data (Current)	
Thermal Effects			Case	Die Cast Aluminum	Circuit	2-Wire
Compensated Range °F	-4 to +176	-4 to 176	Electrical Connections	Two 1/2" Internal Conduit Ports	Output <sup>7</sup>	4 to 20mA <sup>8</sup> for All Ranges
Compensated Range °C	-20 to 80	-20 to ±80	Pressure Fittings	1/4" NPT External	External Load	0 to 800 ohms
Zero Shift %FS/100°F	1.0	1.0	Weight (approx.)	13.4 Ounces	Minimum supply voltage (VDC)	9 + 0.02 x (Resistance of receiver plus line).
Zero Shift %FS/100°C	±0.9	±1.8	Pressure Media		Maximum supply voltage (VDC)	30 + 0.004 x Resistance of receiver plus line)
Span Shift %FS/100°F	1.5	±1.5	Liquids and gases compatible with 17-4 PH Stainless Steel. <sup>4</sup>		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. 5. Calibrated into a 50K ohm load, operable into a 5000 ohm load or greater. 6. Zero output factory set to within ±25 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	
Span Shift %FS/100°C	1.4	±1.4	Environmental Protection	Weather Resistant		
Long Term Stability	0.5% FS/YR	0.5% FS/YR	Physical Description			
Warm-up Shift	0.1% FS Total	0.1% FS Total	Case	Stainless Steel & Valox		

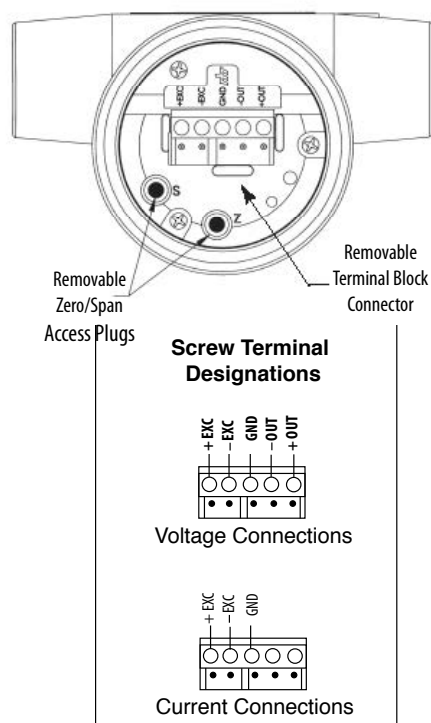
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## Pressure Transducers

### DIMENSIONS



### Wiring



### ORDERING INFORMATION

2 5 6 1 - - - - -

Model	Range Code	Pressure Type		Pressure Fitting	Output	Options	
2561 = 256	See Table 1 Below	G	Gauge	Ranges <25 PSI	Ranges <25 PSI	C	Calibration Certificate

RANGE CODE	PSI	RANGE CODE	BAR
001P	0 to 1	1R6B	0 to 1.6
002P	0 to 2	004B	0 to 4
005P	0 to 5	006B	0 to 6
010P	0 to 10	010B	0 to 8
015P	0 to 15	016B	0 to 16
025P	0 to 25	025B	0 to 25
050P	0 to 50	040B	0 to 40
100P	0 to 100	060B	0 to 60
150P	0 to 150	100B	0 to 100
200P	0 to 200	160B	0 to 160
250P	0 to 250	250B	0 to 250
500P	0 to 500	400B	0 to 400
600P	0 to 600	700B	0 to 700
10CP	0 to 1000		
30CP	0 to 3000		
50CP	0 to 5000		
10KP	0 to 10000		

2M	1/4" NPT Male	11	4-20 mA
1M	1/8" NPT Male	Ranges ≥ 25 PSI	
Ranges ≥ 25 PSI		11	4-20 mA
2M	1/4" NPT Male	22	0.1 - 5.1 VDC
4M	1/2" NPT (Male)		
2F	1.4" NPT (Female)		

Ordering Example: 2561001PG2M11C = Model 256, 0 to 1PSI, Gauge Pressure, 1/4" NPT Pressure Fitting, 4 to 20 MA Output, Calibration Certificate