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

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

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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
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.[4]

Environmental protection	Weather resistant

Environmental data

Operating temperature[3] °F(°C)	-40 to +185 (-40 to +85)
Storage temperature °F(°C)	-40 to +185 (-40 to +85)
Shock[4]	200g
Vibration[7]	20g
Environmental protection	NEMA 4/IP65

Electrical data (current)

Circuit	2-wire
Output[2]	4 to 20 mA[8] 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 VDC
Output	0.1 to 5.1 VDC for ranges ≥ 25 PSI[6]
Output impedance	100 ohms
Power consumption	<0.15 watts (approx. 5mA @24 VDC)

Physical description

Case	Stainless steel

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.
   Span (Full Scale) output factory set to within ±50 mV.
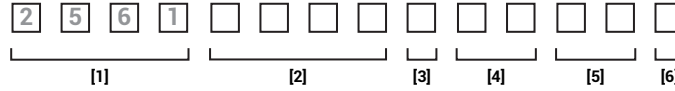7. Calibrated at factory with a 24 VDC loop supply voltage and a 250 ohm load.
8. Zero output factory set to within ±0.08 mA
   Span output factory set to within ±16 mA

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.

2 5 6 1 ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

[1]   [2]   [3] [4]   [5] [6]

[1]

Model	
2561	Model 256

[2]

Range			
Range code	**PSA**	**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		

[3]

Pressure type	
G	Gauge

[4]

Pressure fitting	
Ranges <25 PSI	
2M	1/4" NPT male
1M	1/8" NPT male
Ranges ≥25 PSI	
2M	1/4" NPT male
4M	1/2" NPT (male)
2F	1.4" NPT female

[5]

Output	
Ranges <25 PSI	
11	4-20 mA
Ranges ≥25 PSI	
11	4-20 mA
22	0.1-5.1 VDC

[6]

Options	
C	Calibration certificate

Dimensions

0.38 / 9

254 / 64.5

1.46 / 37.1

3.56 / 90.4

2.00 / 50.8

1/4" NPT

4.02 / 102.1

2.50 / 61

in. (mm)

Wiring

Removable Zero/Span Access Plugs

Removable Terminal Block Connector

Screw Terminal Designations

+ EXC − EXC GND − OUT + OUT

Voltage Connections

+ EXC − EXC GND

Current Connections
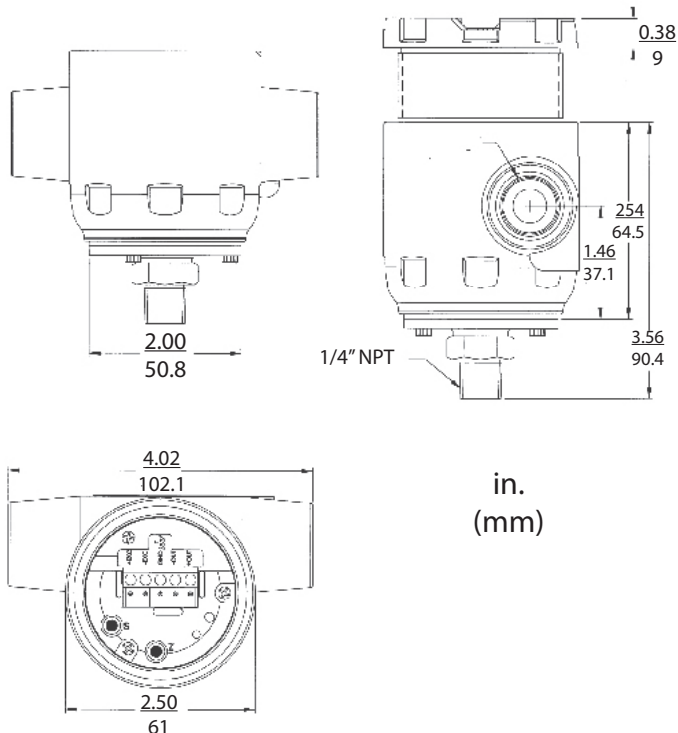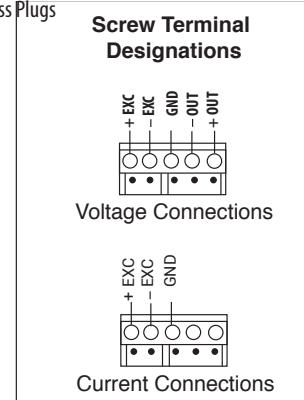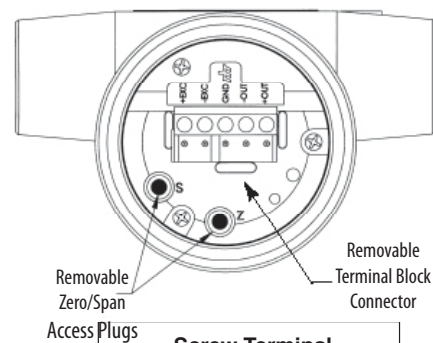
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