



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

-7 to +176	-4 to 176
-20 to 80	-20 to ±80
1.0	1.0
±0.9	±1.8
1.5	±1.5
1.4	±1.4
0.5% FS/YR	0.5% FS/YR
0.1% FS total	0.1% FS total
	-20 to 80 1.0 ±0.9 1.5 1.4 0.5% FS/YR

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)	
Shock⁴	200g	
Vibration ⁷	20g	
Environmental protection	NEMA 4/IP65	

Electrical data (current)

Circuit	2-wire
Output ²	4 to 20 mA ^s 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

Specifications subject to change without notice

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

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.

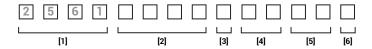


Ordering information

Example part number: 2561001PG2M11C

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

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[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	1	

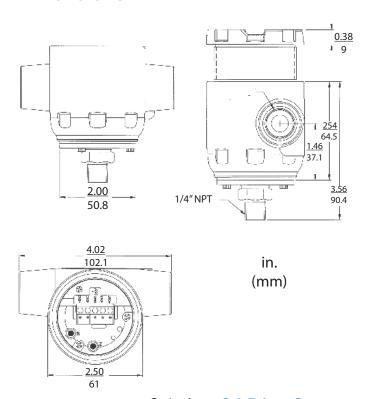
10KP 0 to 10000

	[3]		[4]	
25	sure type		Pressure fitting	
	Gauge		Ranges <25 PSI	
J		2М	1/4" NPT male	
		1М	1/8" NPT male	
			Ranges ≥25 PSI	
		2М	1/4" NPT male	
		4M	1/2" NPT (male)	
		2F	1.4" NPT female	

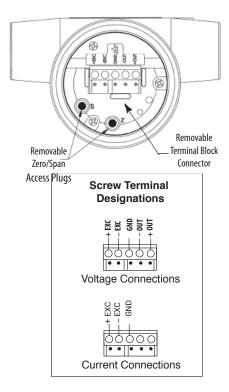
	[5]
	Output
	Ranges <25 PSI
11	4-20 mA
	Ranges ≥25 PSI
11	4-20 mA
22	0.1-5.1 VDC

	[6]
	Options
С	Calibration certificate
С	•

Dimensions



Wiring





Setra Systems, Inc. 159 Swanson Road Boxborough, MA 01719

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