

2400 Slimline Borehole Transducer/Transmitters

- ▶ Triple sealed to ensure immersible integrity
- ▶ <10ms switch on/settling period
- ▶ 19mm diameter

Gems Sensors 2400 Series immersible pressure transducer has been specifically designed to meet the rigors of long term immersibility. A custom designed hermetic header guarantees that water cannot enter the transducer even if the cable sheath is damaged during use. The large bore vent tube is connected directly to the back of the sensor which provides rapid venting, even on the longest cable run. The sensor itself is impervious to the effects of water guaranteeing long service life even in areas of high humidity, which can cause condensation. The all welded electronics enclosure is completely segregated from all other areas with the electronics themselves designed to provide fast switch on and settling to ensure maximum battery life and ease of calibration.

Specifications

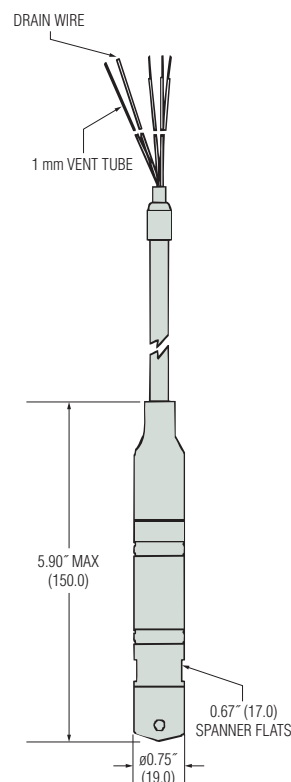
Input	
Pressure Range	0 to 4 to 0 to 200mWG (mA & V) 0 to 10, 20, 50,100, 200mWG (mV)
Proof Pressure	1.5 x Fs nominal range
Burst Pressure	3 x Fs
Fatigue Life	Designed for more than 100 million FS cycles
Performance	
Long Term Drift	0.2% FS/year (non-cumulative)
Accuracy	0.25% FS typical
Thermal Error	0.5% Typical 30°F to 120°F (0°C to 50°C)
Compensated Temperatures	15°F to 120°F (-10°C to +50°C)
Operating Temperatures	-40°F to +180°F (-40°C to +80°C)
Zero Tolerance	1% of span
Mechanical Configuration	
Pressure Port	G1/4" AT external fitted with nosecone
Wetted Parts	316 Stainless Steel, Polyurethane, Acetal
Electrical Connection	Polyurethane Cable
Enclosure	IP68 to 650ft (200mWG)
Vibration	35g peak sinusoidal, 5 to 2000 Hz
Shock	Withstands free fall to IEC 68-2-32 procedure 1
Approvals	CE
Weight	Approx. 100 grams (additional; cable 75 g/m)

Individual Specifications

Voltage Output units	
Output	0 to 10V
Supply Voltage (Vs)	13 to 28 VDC
Supply Voltage Sensitivity	0.026% span/V
Min. Load Resistance	(FS output / 2) Kohms
Current Consumption	Approx 6 mA @ 8 VDC
Current Output units	
Output	4-20 mA (2 wire)
Supply Voltage (Vs)	24 VDC, (8-28 VDC)
Supply Voltage Sensitivity	0.026% span/V
Max. Loop Resistance	(Vs-7) x 50 ohms
Millivolt units	
Output	100mV ±1mV
Supply Voltage	10 VDC regulated (15 VDC max)
Bridge Resistance	3.5KOHM ± 20% @ 77°F (25°C)
Sink Weight	P/N 198700



Dimensions in. (mm)



2400 B 1 010 @ 7 psi

For electrical output codes B&S specify in 1psi increments the full scale calibration required.

Cable Length
001 = 1 metre, 999 = 999 metres etc

Code Millivolt
1 10mWG
2 20mWG
3 50mWG
4 100mWG
5 200mWG

Code
1 6 to 14psi (4 to 10mWG)
2 15 to 28psi (11 to 20mWG)
3 29 to 57psi (21 to 40mWG)
4 58 to 142psi (41 to 100mWG)
5 143 to 284psi (101 to 200mWG)

Code Electrical Output
A 100 mV Not Rangeable
B 4-20 mA
S 0-10 VDC

PRESSURE TRANSDUCERS