

# 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

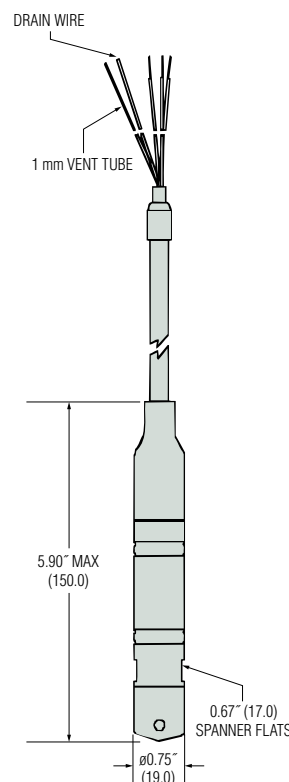
<b>Input</b>	
<b>Pressure Range</b>	0 to 4 to 0 to 200mWg (mA & V) 0 to 10, 20, 50,100, 200mWg (mV)
<b>Proof Pressure</b>	1.5 x Fs nominal range
<b>Burst Pressure</b>	3 x Fs
<b>Fatigue Life</b>	Designed for more than 100 million FS cycles
<b>Performance</b>	
<b>Long Term Drift</b>	0.2% FS/year (non-cumulative)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

## Individual Specifications

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