

Model 261TSG

Submersible Level Transmitter with Sensor-Guard

INDUSTRIAL TRANSMITTERS

Applications

- Lift Stations
- Storage Tanks
- Waste Water Systems
- Process Sludge
- Rivers and Lakes
- Wet Wells

Model 261TSG



Features

- Ranges from 0–40 in. H₂O thru 0 to 300 psi
- Diaphragm has large 5.9 in² Sensing Area for increased sensitivity
- 4–20mA and 0–10Vdc Standard Industrial Output Signals
- Zero Point adjustment can be made using permanent magnet
- 4:1 Turndown with optional programming tool
- Barrier plate helps protect diaphragm providing years of clog-free operation
- PUR-cable has integral capillary tube for relative pressure balancing (includes GORE-TEX® filter)
- 316L Stainless steel wetted parts

The **TRERICE 261TSG** “Submersible Transmitter with Sensor-Guard” provides accurate measurement of sludge levels, pump lift stations and other viscous applications where clogging of the sensor is a common problem. The flush diaphragm has 5.9 in² of surface area providing increased sensitivity, while the 316L barrier plate and cage assembly help eliminate the buildup of debris, grease and bio-solids.

By use of the optional programming tool this transmitter provides 4 to 1 turn down, adjustable zero-point & span, allowing for multiple units of measure. The stainless steel/thin-film sensor element of the 260TSB is directly welded to the process connection so no seals are required, this insures a high degree of reliability and stability. 316L stainless steel wetted parts provide long-term durability even in the harshest environments.

HOW TO ORDER

| Model | Accuracy | Units of Measure | Range Code | Electrical Connection | Cable Length | Output Signal |
|--------|---------------------------|--------------------------------|---------------------------|---|---|--|
| 261TSG | C 0.5% FS (0.35% BFSL) | U in H ₂ O A psi | See Standard Ranges | E4 PUR Cable E5 PUR Cable-Heavy Duty E6 FEP Cable | Specify Length in Feet (ie., 600 ft. max) | 3 4-20mA (2-wire) 2 0-10 Vdc (3-wire) |

Multiple electrical connections, output signals and process connections are available. Please consult factory.

Specifications

| | | | |
|---|---|--|-------------|
| Models | 261TSG • Submersible Level Transmitter | | |
| Sensor Element | Oil filled, Silicone Membrane | | |
| Process Connection | Direct Submersion with Sensor-Guard | | |
| Materials of Construction | | | |
| Wetted Parts: | 316L stainless steel, Polyurethane (PUR) Cable | | |
| Pressure Transmission Liquid | Silicone Oil | | |
| Accuracy at 77° F (25°C) | BFSL | Full Scale | |
| | Non-Linearity: | 0.15% | 0.30% |
| | Hysteresis: | 0.10% | 0.10% |
| | Repeatability: | 0.10% | 0.10% |
| Operating Temperature Ranges | | | |
| Medium: | +14/+158°F (-10/+70°C) | | |
| Ambient: | +14/+158°F (-10/+70°C) | | |
| Temperature Error Band | | | |
| Temperature compensated to within 1% between 14°F to 158°F (-10 to +70°C) | | | |
| Humidity | Fully Submersible | | |
| Electronic Connection | | | |
| PUR (Polyurethane) Cable, PUR Cable-Heavy Duty FEP (Fluorinated-Ethylene-Propylene) Cable | | | |
| Output Signal | | | |
| 4-20mA (2 wire) and 0-10Vdc (3 wire) | | | |
| Overpressure Limit | | | |
| Ranges ≤ 3 psi at least: | 2.5 x FS | | |
| burst pressure at least: | 6 x FS | | |
| 5-300 psi at least: | 1.5 x FS | | |
| burst pressure at least: | 2.9 x FS | | |
| Response Time (10-90%) | < 4 ms | | |
| Power Supply | | | |
| Output Signal: | Minimum | Maximum | Recommended |
| 4-20mA: | 10Vdc | 32Vdc | 24Vdc |
| 0-10Vdc: | 12Vdc | 32Vdc | 24Vdc |
| Load Resistance | 4-20mA: | ≤ $\frac{V_{SUPPLY} - 10 \text{ Vdc}}{0.02 \text{ A}}$ | |
| | 0-10 Vdc: | > 5 kOhm | |
| Circuit Protection | | | |
| Protected against reverse polarity and short circuits | | | |
| CE Conformity RoHS2 Directive 2011/65/EU EMC Directive: 2014/30/EU - PED Directive: 2014/68/EU Applied standards: EN 61326-1:2013, EN 61326-2-3:2013 | | | |
| Ingress Protection Rating IP68 / NEMA 6P | | | |
| Approximate Shipping Weight 4.0lbs (1.80kg) Cable only: .02 lbs (0.009kg) per foot | | | |

Sample Order Number: **260TSB C U/300 E4 100 3**

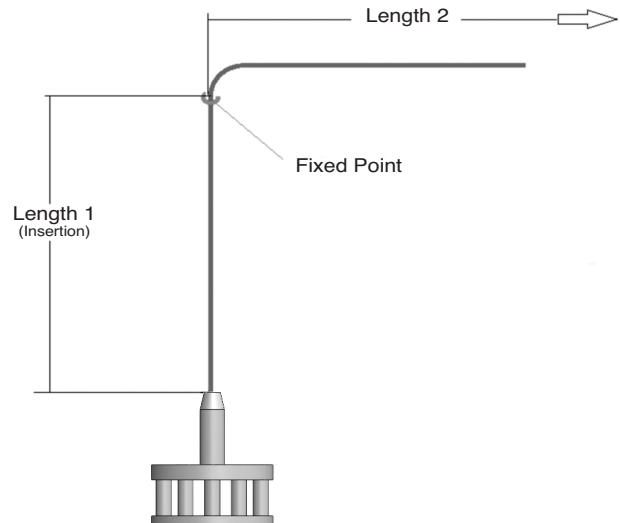
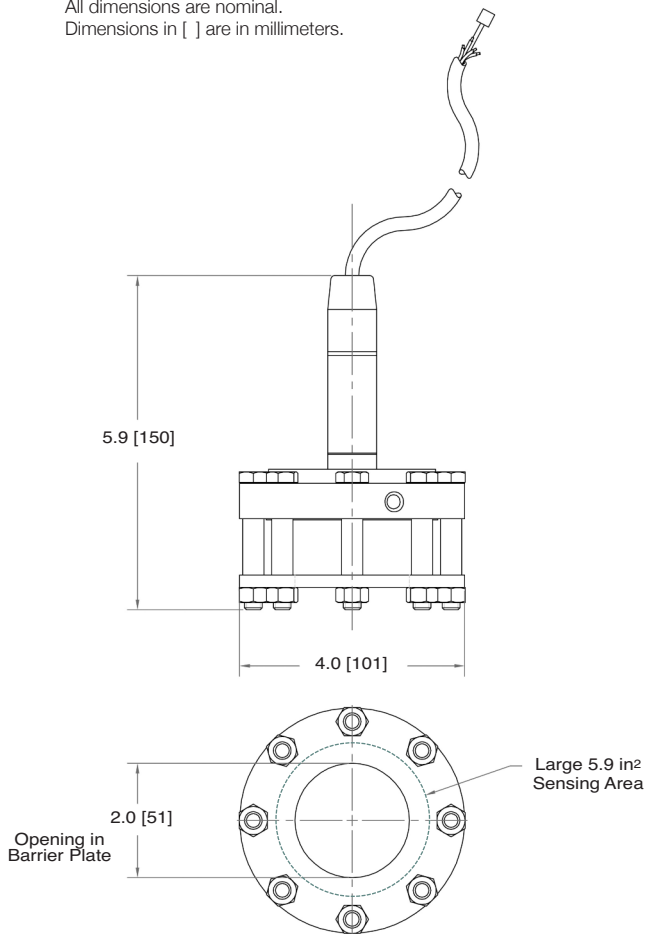


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INDUSTRIAL TRANSMITTERS

All dimensions are nominal.
Dimensions in [] are in millimeters.



Maximum Cable Lengths

| Code | Cable Material | Max. Cable (length 1) | Max. Cable (length 2) |
|------|--------------------------------------|-----------------------|-----------------------|
| E4 | PUR (Polyurethane) | 65 feet (20 m) | 535 feet (165 m) |
| E5 | PUR (Polyurethane) Heavy Duty | 130 feet (40 m) | 470 feet (145 m) |
| E6 | FEP (Flourinated-Ethylene-Propylene) | 100 feet (30 m) | 500 feet (150 m) |

Standard Ranges

| in. H ₂ O Ranges (U) | | | |
|---------------------------------|-------------------------------|--------------------------|---------------------------|
| Range Code | Specific Range | Overpressure Limit | Burst Pressure |
| 0/40 | 0 to 40 in. H ₂ O | 100 in. H ₂ O | 240 in. H ₂ O |
| 0/60 | 0 to 60 in. H ₂ O | 150 in. H ₂ O | 360 in. H ₂ O |
| 0/100 | 0 to 100 in. H ₂ O | 250 in. H ₂ O | 600 in. H ₂ O |
| 0/160 | 0 to 160 in. H ₂ O | 400 in. H ₂ O | 960 in. H ₂ O |
| 0/200 | 0 to 200 in. H ₂ O | 500 in. H ₂ O | 1200 in. H ₂ O |
| 0/300 | 0 to 300 in. H ₂ O | 750 in. H ₂ O | 1800 in. H ₂ O |

| psi Ranges (A) | | | |
|----------------|----------------|--------------------|----------------|
| Range Code | Specific Range | Overpressure Limit | Burst Pressure |
| 0/3 | 0 to 3 psi | 8 psi | 18 psi |
| 0/5 | 0 to 5 psi | 10 psi | 21 psi |
| 0/10 | 0 to 10 psi | 21 psi | 31 psi |
| 0/15 | 0 to 15 psi | 30 psi | 60 psi |
| 0/30 | 0 to 30 psi | 45 psi | 87 psi |
| 0/60 | 0 to 60 psi | 90 psi | 174 psi |
| 0/100 | 0 to 100 psi | 150 psi | 290 psi |
| 0/160 | 0 to 160 psi | 240 psi | 464 psi |
| 0/200 | 0 to 200 psi | 300 psi | 580 psi |
| 0/300 | 0 to 300 psi | 450 psi | 870 psi |

Actual working pressures should never exceed the maximum process connection rating. "Overpressure Limits" and "Burst Pressures" shown refer to the sensor and body of the transmitter and are for reference purposes only.