

PS-9 SERIES

PS9805 SUBMERSIBLE PRESSURE TRANSDUCER (mV output)

Pressure AND Temperature

Rugged

Accurate

Dependable

Great almost anywhere you need to measure pressure or level – whether it be in a lake, in a tank, or in a well.



FEATURES

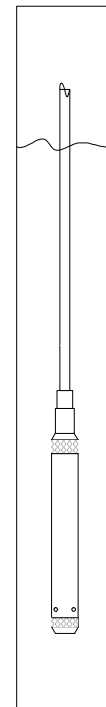
- Pressure AND temperature
- Specifically designed for use with Campbell Scientific measurement and control equipment
- Thermally compensated - *great where water temperatures vary, such as in streams or in industrial tank applications*
- $\pm 0.1\%$ FSO typical accuracy
- Low power - passive operation
- Small diameter (0.75")
- 316 SS, Viton, Teflon construction (titanium optional)
- Available with a variety of cable options - polyethylene, polyurethane, or FEP Teflon
- Over-range protection
- Thermally stable
 - 2% over 40 degrees standard
 - 0.2% over 40 degrees with enhanced calibration option
- 1/4" NPT end cone adapter option
- Calibrated with patented calibration procedures and NIST traceable equipment

APPLICATIONS

- Ground water monitoring
- Tank and tidal levels
- Pump control
- Flow monitoring
- Stream stage
- Aquifer testing

Operation

The PS9805 pressure/temperature transducer requires a minimum of one differential channel and one single ended channel to measure pressure and one single ended channel to measure temperature. Data is processed within the datalogger and the results are converted to the desired units of pressure and temperature.



Typical Installation



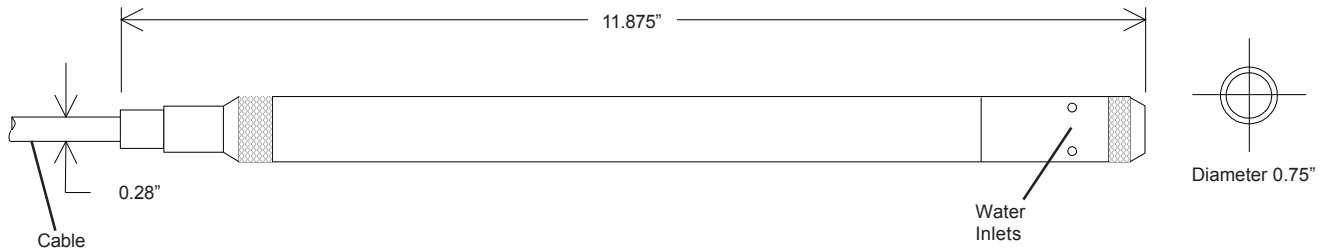
**Instrumentation
Northwest, Inc.**

1-800-776-9355
<http://www.inwusa.com>

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DIMENSIONS AND SPECIFICATIONS



HOW TO ORDER

- Choose the transducer with the required pressure range.
- Determine cable type and specify length.
- Pick options such as military connectors or wire seals.
- Contact INW for a full list of accessories.

| PS9805 SUBMERSIBLE PRESSURE TRANSDUCER RANGES | | | |
|---|----------|--------|----------|
| 3C346T | 1 PSIG | 3C302T | 30 PSIG |
| 3C347T | 2.5 PSIG | 3C303T | 50 PSIG |
| 3C300T | 5 PSIG | 3C304T | 100 PSIG |
| 3C301T | 15 PSIG | | |

| PS9805 CABLE OPTIONS | |
|----------------------|-----------------------------|
| 6E540 | Polyurethane Jacketed Cable |
| 6E542 | Polyethylene Jacketed Cable |
| 6E543 | FEP Teflon Jacketed Cable |

| PS9805 OPTIONS (factory performed or installed) | | | |
|---|----------------------------------|-------|--------------------------|
| 3C282 | Enhanced Temperature Calibration | 3D106 | M-10 Mil-Spec Connectors |

| ACCESSORIES | | | |
|-------------|----------------------|-------|------------------------------------|
| 6E410 | 1/4" NPT Adapter Kit | 6E517 | Transducer Cable Strain Relief Kit |

Information in this document is subject to change without notice.

MECHANICAL

TRANSDUCER

| | |
|------------------------------|---------------------------------------|
| Body Material | 316 stainless steel |
| Wire Seal Materials | Viton® and Teflon® |
| Desiccant | High- and standard capacity available |
| Terminating Connector | Available |
| Weight | .75 pounds |

CABLE

| | |
|-----------------------|---------------------|
| Conductor Type | 9-conductor |
| Vent Tube | Nylon |
| OD | 0.28" maximum |
| Break Strength | 138 pounds |
| Maximum Length | 2000 feet |
| Weight | 4 lbs. per 100 feet |

ELECTRICAL

| | |
|--------------------------------------|---------------------|
| Linearity/ | ±0.1% FSO (typical) |
| Repeatability/ | ±0.1% FSO (typical) |
| Hysteresis* | |
| Typical Output | 15-16 mV/V |
| Voltage Sensitivity at 20° C | |
| Maximum | 3 mV |
| Zero Offset at 20° C | |
| Common Mode Voltage | V _i /2 |
| Bridge Resistance | 4 kohm (typical) |
| at 20° C | |
| Standard | ±2.0% FSO |
| Temperature Error | 0-40 degrees |
| Enhanced Temperature | ±0.2% FSO |
| Error if optional calibration | 0-40 degrees |
| is ordered | |
| Typical | 800 mV |
| Excitation Voltage | |
| Compensated | 0-40° C |
| Temperature Range | |
| Operating | -5° to 70° C |
| Temperature Range | |
| Over Range Protection | 2x Full Scale Range |

*Best fit straight line

Instrumentation Northwest, Inc.



Sales and Service Locations

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