

# ANALOG VOLTAGE DEPTH/LEVEL TRANSMITTER ATM.1st/N 19



94

## Features

- Fully submersible, 0.75" diameter
- Accuracy:  $\leq \pm 0.1\%$  FS or  $\leq \pm 0.25\%$  FS  
**Includes linearity, hysteresis, repeatability  
AND zero and span settings**
- Ranges 40" WC to 360 psi
- Titanium or 316L SS construction
- Polyurethane or polyethylene cable
- Fully isolated sensing element

## Product overview and applications

The ATM.1st/N 19 series 94 is part of a comprehensive range of pressure transmitters specifically designed for the long term monitoring of ground water and waste water. The series 94 is available with the most commonly used voltage outputs including 0 to 5 VDC and 0.5 to 4.5 VDC. Features such as Kevlar strengthened cable, titanium, ballast weights and data loggers broaden the installation opportunities. The modular design permits fast delivery for all pressure ranges and standard options.

Examples of applications include:

- Deep wells, lakes, dams and reservoirs
- Bore holes
- Surface water, irrigation canals and rivers
- Tank level measurement

**Specification**

**Measurement**

**Pressure ranges**

Any range from 40"WC to 360 psi FS available, in any engineering units such as psi, Pa, inches H<sub>2</sub>O, bar.

Absolute or gauge types available

**Proof pressure**

FS up to 15 psi: 45 psi  
 FS > 15 psi up to 360 psi: 3 x FS, (max. 360 psi)  
 Consult factory for higher proof pressure

**Operating temperature range**

25 to 125°F (standard)  
 25 to 175°F (option)

**Compensated temperature range**

25 to 125°F (standard)  
 25 to 175°F (option)

**Temperature effects**

±1.5% total for 25 to 125°F, > 30 psi FS  
 ±2% total for 25 to 125°F, 7 to 30 psi FS  
 Prorated for ranges below 7 psi

**Performance**

**Accuracy**

Combined linearity, hysteresis, repeatability, Zero and Span set  
 ≤ ±0.1% FS (≥ 7 psi FS)  
 ≤ ±0.25% FS (< 7 psi FS)

**Long term stability**

0.1% FS/yr for pressure ranges > 30 psi  
 Prorated for ranges below 30 psi  
 Under standard conditions

**Specification continued**

**Supply voltage**

9 - 33 VDC  
 Influence of supply voltage < 0.05% FS

**Load resistance**

Voltage output: R<sub>L</sub> > 10kOhm Influence of load resistance < 0.1% FS

**Output signal**

0 to 5 VDC (3-wire)  
 0.5 to 4.5 VDC (3-wire)  
 1 to 5 VDC (3-wire)  
 0 to 10 VDC (3-wire)  
 Others available consult factory

**Insulation resistance**

> 50 megohms @ 500 VDC (@ 68°F)

**Response time**

< 1ms, 10 to 90% FS

**Construction**

**Pressure media compatability**

Stainless steel 316L, Viton seals  
 Other seal materials available  
 Titanium version available

**Pressure connection**

Closed (Fig. 1) POM nose cone (supplied as standard)  
 Other connections available

**Electrical connection**

Polyurethane or polyethylene cable (Fig. 1)

**Specification continued**

**Weight**

4.5 oz approximate (not including cable)

**Vibration**

10 g, 10 to 2000 Hz

**Mechanical shock**

100 g / 6 ms

**Ordering information**

Please specify the following:

- 1) Model number - ATM.1st/N19 - 94
  - 2) Electrical connection  
 15 - Polyurethane cable  
 13 - Polyethylene cable
  - 3) Pressure range, including eng. units, type
  - 4) Accuracy
  - 5) Output signal
  - 6) Cable length
  - 7) Any special feature
- Example ordering format:  
 ATM.1st/N19 - 94 - 15 - 10 psig - 0.1% - 0 to 5 VDC - 20 feet cable

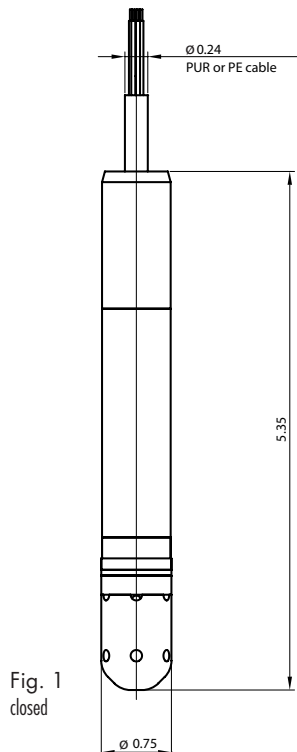
**Options**

STS offers a wide range of options for these and other similar transmitters. Please consult the factory for any special requirements.

**Examples include:**

- Alternate electrical configurations i.e. 0 to 20 mA, 4 to 20 mA, RS 485
- Lightning protection
- Intrinsic safety certification
- Alternate construction i.e titanium
- Alternate seals i.e. EPDM, Kalrez
- Datalogging

**Dimensions (inches)**



Specifications may change without notice.

STS is registered ISO 9001:2008

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