

ANALOG 4 - 20 mA DEPTH/LEVEL TRANSMITTER ATM.ECO/N



Features

- Fully submersible, 1" diameter
- Ranges 20" WC to 360 psi
- 316L SS construction - Titanium option
- Polyurethane cable - PE/FEP option
- Many installation options available

Product overview and applications

The ATM.ECO/N is part of a comprehensive range of pressure transmitters specifically designed for the long term monitoring of ground water and wastewater. Features such as Kevlar strengthened cable, titanium, ballast weights, data loggers, etc. broaden the installation opportunities. The modular construction provides manufacturing flexibility and offers fast delivery for all pressure ranges and standard options.

Examples of applications include:

- Wells, lakes and reservoirs
- Bore holes
- Surface water, irrigation canals and rivers
- Wastewater and sewage treatment plants
- Tank level measurement

Specification

Measurement

Pressure ranges

Any range from 20" WC to 360 psi FS available, in any engineering units such as psi, Pa, inches H₂O, 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)

Performance

Total Error Band (TEB)

typ. ±1% total for 25 to 125°F, ≤ 7.25 psi

typ. ±2% total for 25 to 175°F, ≤ 7.25 psi

typ. ±0.7% total for 25 to 125°F, > 7.25 psi

typ. ±1.0% total for 25 to 175°F, > 7.25 psi

Accuracy

Combined linearity, hysteresis, repeatability, Zero and Span set:

≤±0.25% FS (standard)

Consult factory for better accuracies or refer to ATM.1ST/N

Long term stability

<0.1% FS/yr for pressure ranges > 30 psi FS

Prorated for ranges below 30 psi FS

Under standard conditions

Specification continued

Supply voltage

9 - 33 VDC

Influence of supply voltage: typ. < 0.05% FS

Max. load resistance

RL = (Vsupply - 9V)/0.02A

Influence of load resistance < 0.05% FS

Output signal

4 - 20 mA, 2-wire loop powered

Response time:

<1ms (10 to 90%FS)

Insulation resistance

> 50 megohms @ 500 VDC (@ 68°F)

Construction

Pressure media compatibility

Stainless steel 316L, Viton seals

Other seal materials available

Titanium version available

Pressure connection

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

Open (Fig.2) POM nose cone with ø0.59" opening available as option

Other connections available

Electrical connection

Polyurethane, polyethylene or FEP cable

Fixed or field replaceable version (Fig.3) available

Specification continued

Weight

5 oz approximate (not including cable)

Vibration

10 g, 4 to 2000 Hz

Mechanical shock

100 g / 6 ms

Ordering information

Please specify the following:

1) Model number - ATM.ECO/N

2) Electrical connection

15 - Polyurethane cable

13 - Polyethylene cable

21 - FEP cable

3) Pressure range, including eng. units, type

4) Accuracy

5) Cable length

6) Any special features

Example ordering format:

ATM.ECO/N - 15 - 30 psig - 0.25% -

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 5 VDC, 0 to 10 VDC, 0 to 20 mA RS 485

- Lightning protection

- Intrinsic safety certification

- Special oil filling for food application etc.

- Alternate construction i.e titanium

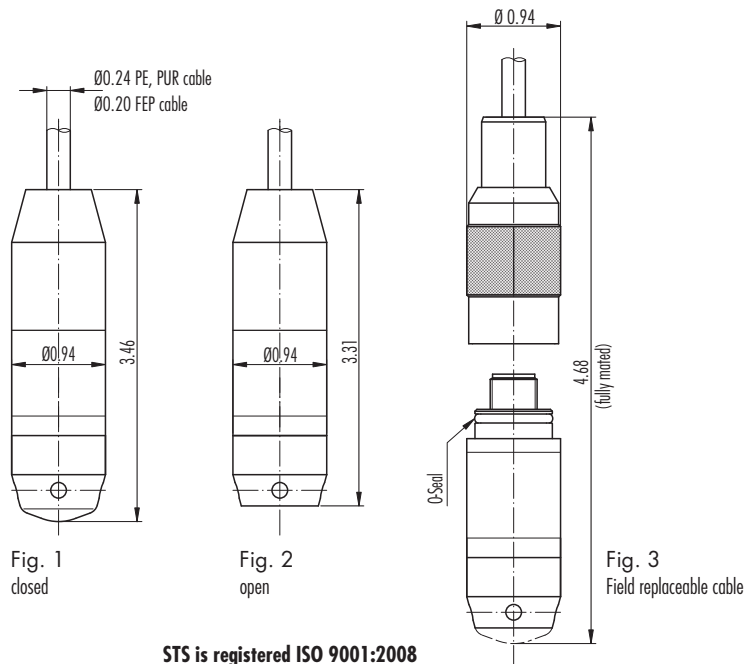
- Alternate seals i.e. EPDM, Kalrez

- Wide range of pressure connectors

- Wide range of electrical connectors

- Datalogging

Dimensions (inches)



Specifications may change without notice.

STS is registered ISO 9001:2008

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