

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



24

Features

- Fully submersible, 1" diameter
- Accuracy: $\leq \pm 0.1\%$ FS or $\leq \pm 0.25\%$ FS
- Ranges 20" WC to 360 psi
- Titanium or 316L SS construction
- Polyurethane cable - PE or Teflon option
- Surge (lightning) protection option

Product overview and applications

The ATM/N series 24 is part of a comprehensive range of pressure transmitters specifically designed for the long term monitoring of ground water and waste water. This series 24 provides a conventional 4-20mA, 2-wire configuration. Features such as Kevlar strengthened cable, titanium, ballast weights, data loggers, etc. 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
- Waste water 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 (process media)

Compensated temperature range

25 to 125°F

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 FS

Prorated for ranges below 30 psi FS

Under standard conditions

Supply voltage

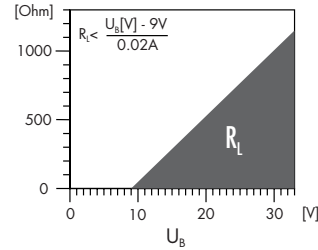
9 - 33 VDC

Influence of supply voltage < 0.1% FS

Specification continued

Load resistance

Influence of load resistance < 0.1% FS



Output signal

4 - 20 mA (2-wire)

4 - 20 mA with surge (lighting) protection (option)

Insulation resistance

> 50 megohms @ 500 VDC (@ 68°F)

Response time

< 1ms, 10 to 90% FS

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 teflon cable

Fixed or field replaceable version (Fig.3) available

Specification continued

Weight

6 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/N 24

2) Electrical connection

15 - Polyurethane cable

13 - Polyethylene cable

21 - Teflon cable

3) Pressure range, including eng. units, type

4) Accuracy

5) Cable length

6) Any special features

Example ordering format:

ATM/N 24 - 15 - 100 psig - 0.1% -

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

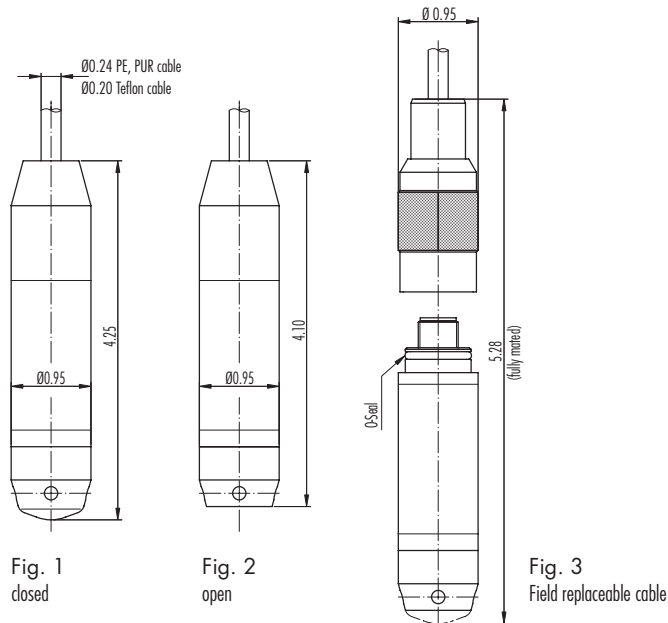
- Alternate seals i.e. EPDM, Kalrez

- Wide range of pressure connectors

- Wide range of electrical connectors

- Datalogging

Dimensions (inches)



Specifications may change without notice.

STS is registered ISO 9001-2000

10.00.0217C - 802



Process Measurement & Controls, Inc.

STS Sensors

11 Old Sugar Hollow Road

Danbury, CT 06810 U.S.A

Tel: 203-792-8686

Fax: 203-743-2051

e-mail: salesUS@sts-sensors.com

Internet: www.sts-sensors.com

Represented by: