

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



Features

- Fully submersible, 1" diameter
- Accuracy: $\leq \pm 0.1\%$ FS or $\leq \pm 0.25\%$ FS Includes linearity, hysteresis, repeatability AND zero and span settings
- Ranges 20" WC to 360 psi
- Titanium or 316L SS construction
- Polyurethane cable PE or FEP 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 H₂0, 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

total for 25 to $125^{\circ}F$, > 30 psi FS ±1.5% total for 25 to 125°F, 7 to 30 psi FS ±2% Prorated for ranges below 7 psi

Performance

Accuracy

Combined linearity, hysteresis, repeatability, Zero and Span set $\leq \pm 0.1\% \text{ FS} \ (\geq 7 \text{ psi FS})$ \leq ±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

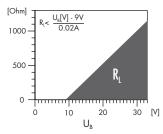
9 - 33 VDC

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 compatability

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

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 FEP 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

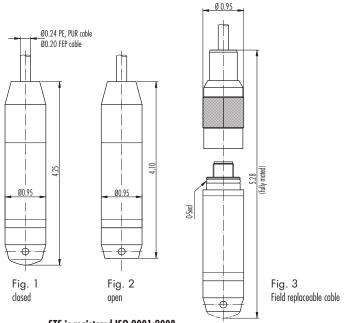
Options

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 9001:2008

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