

HAZARDOUS ENVIRONMENT DEPTH/LEVEL TRANSMITTER ATM/N/IS



84

Features

- Fully submersible, 1" diameter
- Accuracy: $\leq \pm 0.1\%$ or $\leq \pm 0.25\%$ FS
- Ranges 40" WC to 360 psi
- 4-20 mA, 2-wire configuration
- Polyurethane cable - Teflon option
- Surge (lightning) protection option

Product overview and applications

The ATM/N/IS series 84 is part of a comprehensive range of pressure transmitters specifically designed for the long term monitoring of ground water, wastewater and tank level measurement. This series 84 provides a conventional 4-20 mA, 2-wire configuration and is certified for use in hazardous locations as specified. Features such as Kevlar strengthened cable, titanium, ballast weights, dataloggers, etc. broaden the installation opportunities.

Examples of applications include:

- Tank level measurement
- Deep wells, lakes, dams, bore holes and reservoirs
- Surface water, irrigation canals and rivers
- Wastewater and sewage treatment plants

Specification

Measurement

Pressure ranges

Any range from 1 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

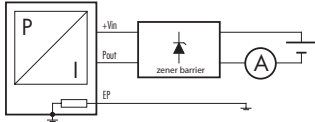
Combined linearity, hysteresis, repeatability, Zero and Span set.
≤ ±0.1% FS (≥ 7 psi FS)
≤ ±0.25% FS available

Long term stability

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

Supply voltage

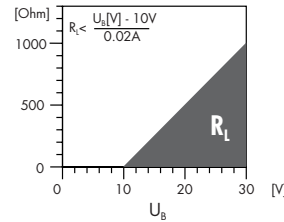
10 - 30 VDC
Influence of supply voltage < 0.1% FS



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 or teflon cable
Fixed or field replaceable version (Fig.3) available

Specification continued

Intrinsically safe

SEE 99 ATEX 2640
EEx 1G ia IIC T3 - T6
FM/CSA, Class 1, Div. 1 approved

Weight

9 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/IS 84
- 2) Electrical connection
 - 17 - Polyurethane cable, blue
 - 22 - Teflon cable, blue
 - 64 - PUR cable, blue w/conduit fitting
- 3) Pressure range, including eng. units, type
- 4) Accuracy
- 5) Output signal
- 6) Cable length
- 7) Any special features: i.e.lightning protection

Example ordering format:

ATM/N/IS 84 - 17 - 15 psig - 0.1% - 4 - 20mA - 20 feet cable

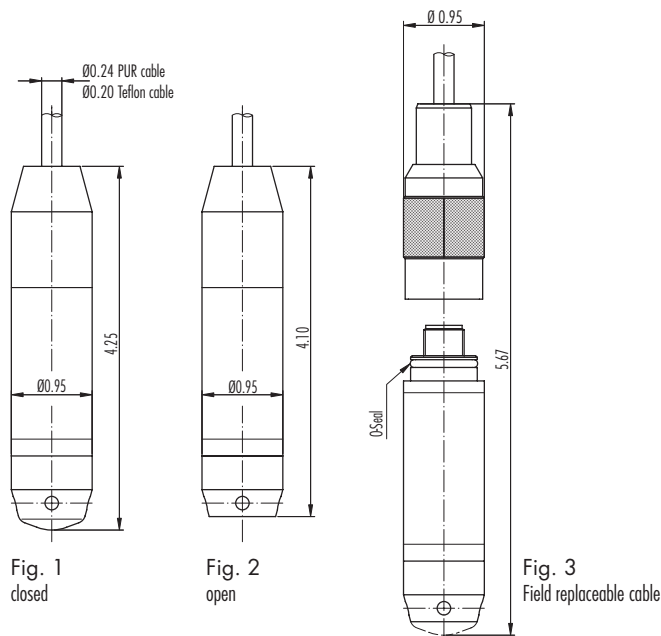
Options

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
- 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

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