

# 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  
***Includes linearity, hysteresis, repeatability AND zero and span settings***
- Ranges 20" WC to 360 psi
- 4-20 mA, 2-wire configuration
- Polyurethane cable - FEP 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 20"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 (process media)

25 to 175°F (process media, option)

**Compensated temperature range**

25 to 125°F

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 FS

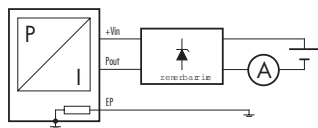
Prorated for ranges below 30 psi FS

Under standard conditions

**Supply voltage**

10 - 30 VDC

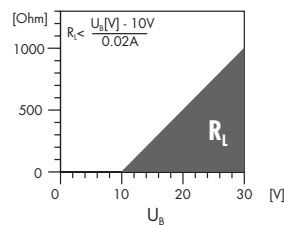
Influence of supply voltage < 0.1% FS



**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 FEP cable

Fixed or field replaceable version (Fig.3) available

**Specification continued**

**Intrinsically safe**

SEV 11 ATEX 0142 X

EEx 1G ia IIC T3 - T6

FM/FM-C, 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 - FEP 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

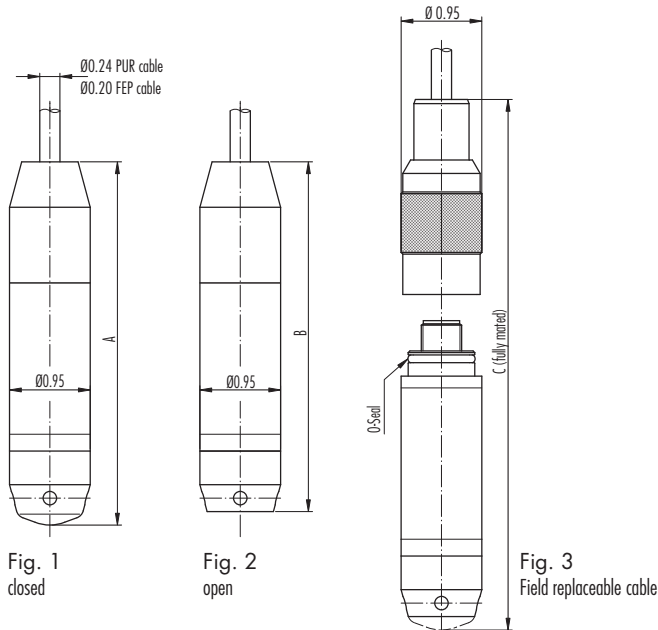
**Dimensions (inches)**

Dimensions:

A: 4.25 standard version  
A: 6.18 with option lightning protection

B: 4.09 standard version  
B: 6.02 with option lightning protection

C: 5.67 standard version  
C: 7.60 with option lightning protection



Specifications may change without notice.

STS is registered ISO 9001-2008

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