

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 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)

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

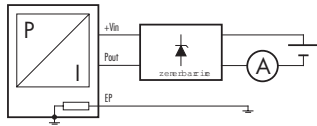
Prorated for ranges below 30 psi FS

Under standard conditions

Supply voltage

10 - 30 VDC

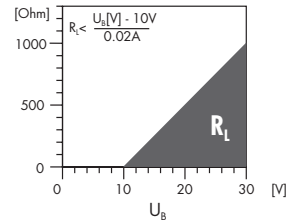
Influence of supply voltage < 0.1% FS



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

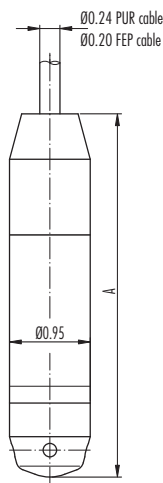


Fig. 1 closed

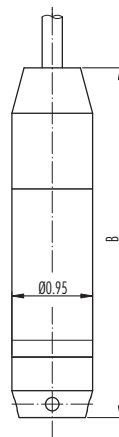


Fig. 2 open

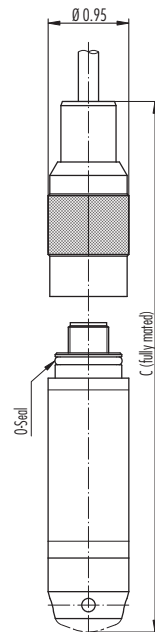


Fig. 3 Field replaceable cable

Specifications may change without notice.

STS is registered ISO 9001-2008

10.00.0225B - 402



PMC-STS, Inc.
11 Old Sugar Hollow Road
Danbury, CT 06810 U.S.A

Tel: 203-792-8686
Fax: 203-743-2051
sales@pmc1.com
www.pmc1.com

Represented by: