

PASSIVE (MILLIVOLT) DEPTH/LEVEL TRANSMITTER TM/N



22

Features

- Fully submersible, 1" diameter
- Ranges 20" WC to 360 psi
- Titanium or 316L SS construction
- Polyurethane cable - PE/Teflon option
- Many installation options available

Product overview and applications

The TM/N series 22 is part of a comprehensive range of pressure transmitters specifically designed for the long term monitoring of ground water and wastewater. Features such as Kevlar strengthened cable, titanium, ballast weights, data loggers, etc. broaden the installation opportunities. The modular construction provides manufacturing flexibility and offers fast delivery for all pressure ranges and standard options.

Examples of applications include:

- Wells, lakes and reservoirs
- Bore holes
- Surface water, irrigation canals and rivers
- Wastewater 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.

Pressure types

Absolute and Gauge

Proof pressure

FS up to 15 psi: 45 psi
 FS > 15 psi up to 360 psi: 3 x FS
 max. 360 psi

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

≤ ±0.25% FS BSL which includes typical hysteresis and repeatability of ±0.02%
 ≤ ±0.1% FS BSL on request

Also available with ≤ ±0.5% FS including combined linearity, hysteresis, repeatability and zero and span settings

Common mode voltage

1/2 supply voltage ±10%

Long term stability

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

Specification continued

Supply voltage

10 VDC standard, will operate 1 - 15 VDC

Output signal

Output ratiometric with supply voltage
 For 10 VDC supply full scale outputs are:

Ranges up to 4 psi	15 mV
Ranges above 4 psi up to 9 psi	25 mV
Ranges above 9 psi up to 15 psi	35 mV
Ranges above 15 psi	50 mV

Higher output signals on request

Input impedance

> 10k ohm

Bridge resistance

3k ohm typical

Insulation resistance

> 50 megohms @ 500 VDC (@ 68°F)

Response time

< 0.1ms/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

All sensors carry the CE mark

Weight

3.5 oz approximate (not including cable)

Ordering information

Please specify the following:

- 1) Model number - TM/N 22
- 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:
 TM/N 22. 15. - 100 psig - 0.25% - 20 feet cable

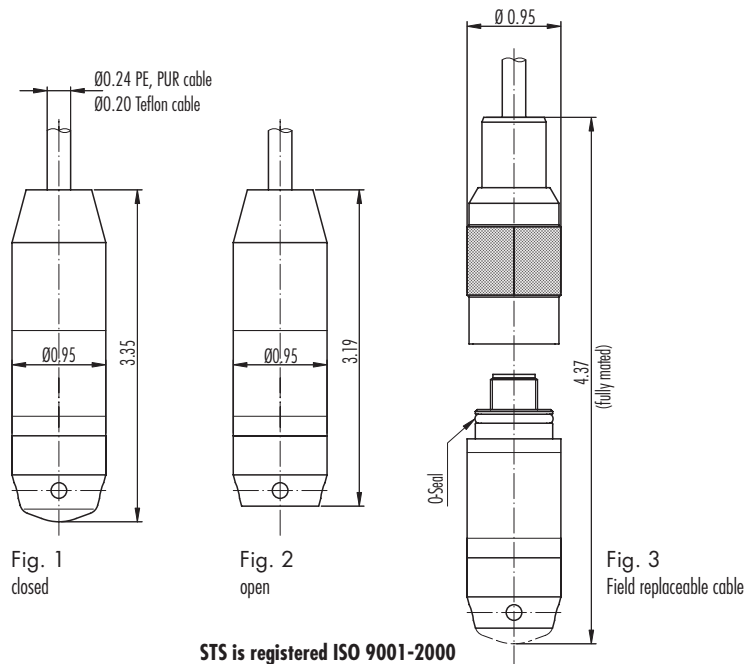
Options

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 5VDC, 0 to 10 VDC, 0 to 20 mA, 4 to 20 mA, RS485, CANopen
- Lightning protection
- Intrinsic safety certification (current output)
- Special oil filling for food application etc.
- Alternate construction i.e titanium, hastelloy
- 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

10.00.0210C - 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: