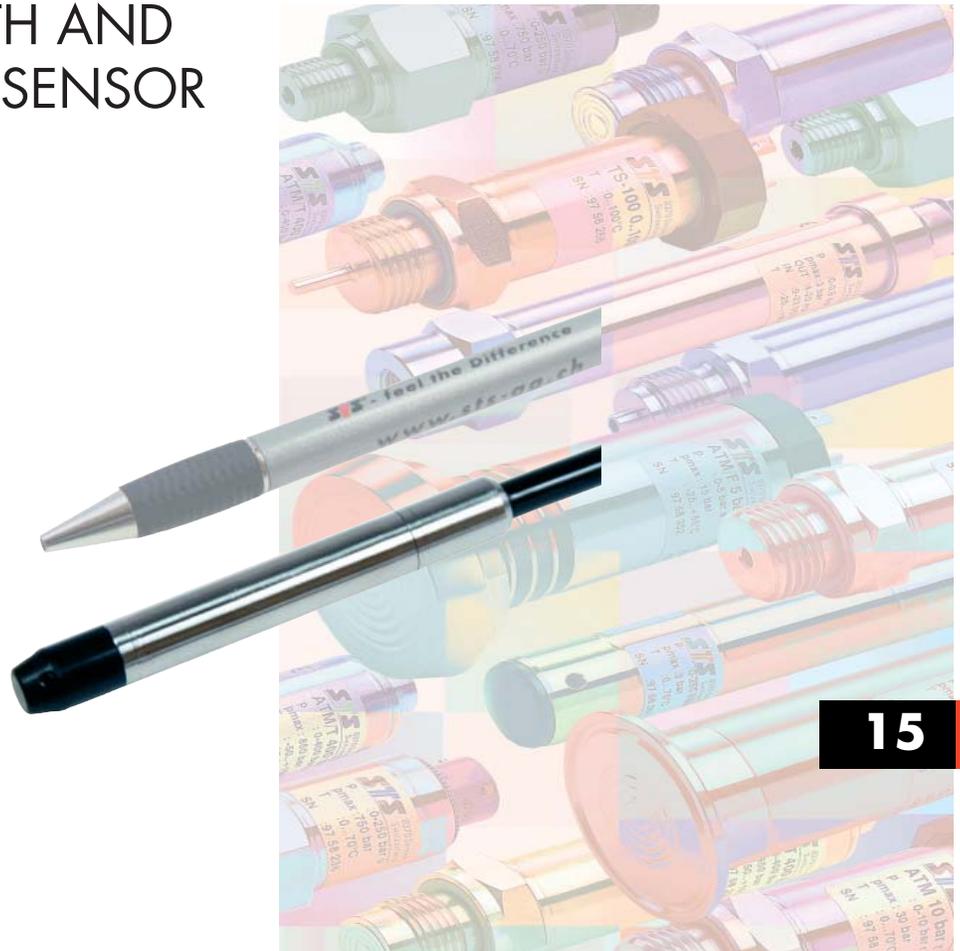


## MINIATURE DEPTH AND LEVEL PRESSURE SENSOR MTM/N10



15

### Features

- Fully submersible, 0.39" diameter
- Accuracies of  $\pm 0.25\%$  or  $\pm 0.5\%$
- Ranges from 0 to 15 psi to 0 to 150 psi
- Gauge or absolute pressure
- Overpressure rating: 3 x FS

### Product overview and applications

The MTM/N10 depth and level pressure sensor is available for applications where space is very limited. The housing diameter of 0.39 inches offers the user an ideal high performance level measurement in small diameter, i.e. 1/2" monitoring wells, stand pipes and bore holes. The stainless steel construction and integral polyurethane cable provide a reliable long term solution for these difficult-to-measure applications. Kevlar is used as a cable reinforcement to avoid any elongation, particularly when longer lengths of up to 5,000 feet are required for deep wells. Long term stability of typically  $\pm 0.1\%$  per year also contributes toward a maintenance-free installation.

STS also offers a range of 1" diameter dataloggers which can be supplied in-line or at the well head for continuous monitoring.

**Specification**

**Measurement**

**Pressure ranges**

Any range from 0 - 15 to 0 - 150 psi FS available, in any engineering units such as psi, Pa, in H<sub>2</sub>O, bar.

**Pressure types**

Absolute and Gauge

**Proof pressure**

15 psi up to 150 psi: > 3 x FS  
max. 175 psi

**Operating temperature range**

25 to 125°F (process media)

**Compensated temperature range**

32 to 85°F

**Temperature effects**

±1.5% total for 25 to 125°F

±2% total for 25 to 125°F, < 30 psi

**Performance**

**Accuracy**

≤ ±0.25% FS combined linearity, hysteresis and repeatability

≤ ±0.5% FS available

Typical hysteresis and repeatability is ±0.02%

The accuracy includes the zero and span settings

**Common mode voltage**

1/2 supply voltage ±10%

**Long term stability**

0.1% FS/yr for pressure ranges > 30 psi

Prorated for ranges below 30 psi

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 above 15 psi up to 30 psi 50 mV

Ranges from 30 up to 150 psi 100 mV

**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, NBR seals

**Pressure connection**

3/8 diameter with nose cone

**Electrical connection**

Polyurethane or Polyethylene cable, 10 feet standard

**Specification continued**

**Weight**

1 oz approximate (not including cable)

**Ordering information**

Please specify the following:

- 1) Model number - MTM/N10
- 2) Electrical connection
  - 0 - Polyurethane cable - 10 feet
  - 1 - Polyethylene cable - 10 feet
- 3) Pressure range, including eng. units, type
- 4) Accuracy
- 5) Any special features

Example ordering format:

MTM/N10 15. 0 - 100 psig - 0.25%  
add 10 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, CANopen
- Lightning protection
- Intrinsic safety certification
- Cooling extension
- Explosion proof certification
- Pressure snubber
- Fully welded construction
- 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)**

