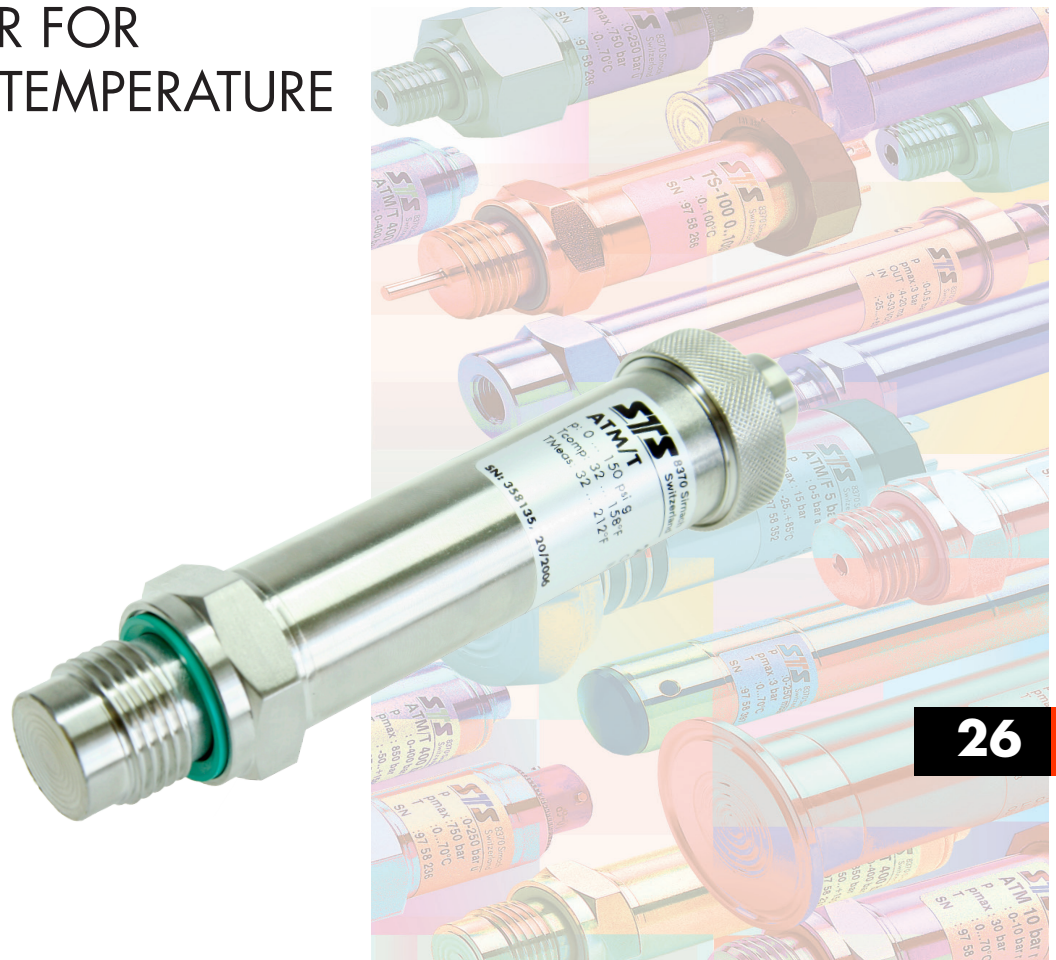


# TRANSMITTER FOR PRESSURE & TEMPERATURE ATM/T



26

## Features

- Accuracy:  $\leq \pm 0.1$  % FS  
*Includes linearity, hysteresis, repeatability AND zero and span settings*
- Pressure ranges from 1 to 8,500 psi
- Temperature ranges from -40 to 300°F
- Temperature Accuracy:  $\pm 4$ °F
- High overload: 3 x FS minimum
- 0/4-20 mA or 0-5/10 VDC Output

## Product overview and applications

The ATM/T series 26 is a precision transmitter based on the STS well proven ATM 23 series but incorporating a PT100 measuring element to provide a dual output of either 4-20 mA or 0-5/10 VDC. Modular construction and the 25 year proven history of STS piezoresistive sensor technology provide manufacturing flexibility and fast delivery for all pressure ranges.

Examples of applications include:

- Machine installations
- Industrial process monitoring and control
- Heating and ventilation
- Hydraulics
- Test and calibration system

**Specification**

**Pressure Measurement**

**Pressure ranges**

Any range from 1 to 8,500 psi FS available, in any engineering units such as psi, Pa, in H<sub>2</sub>O, bar.

Absolute from 0 - 2 to 0 - 360 psia FS

Gauge from 0 - 1 to 0 - 360 psig FS

Sealed from 0 - 150 to 0 - 8,500 psig FS\*

Compound ranges from -15 to 360 psig FS\*\*

Neg. ranges from 0 to -1 to 0 to -15 psig FS\*\*

\* Consult factory for higher pressure ranges

\*\* Consult factory

**Proof pressure**

FS up to 15 psi: 45 psi

FS > 15 psi up to 4000 psi: 3 x FS

FS > 4000 psi up to 8500 psi: 12,000 psi

Consult factory for higher proof pressure

**Burst pressure**

FS up to 350 psi: > 3000 psi

FS up to 8500 psi: > 12,000 psi

Consult factory for higher burst pressure

**Operating temperature range**

-25 to 185°F (ambient)

-40 to 212°F (process media, Fig. 1)

-40 to 300°F (process media with cooling ext., Fig. 2)

**Compensated temperature range**

32 to 160°F (standard)

-15 to 185°F (option)

-40 to 185°F (option)

**Temperature effects**

±1.5% total for 32 to 160°F

±2% total for 32 to 160°F, 7 to 30 psi

±2% total for -10 to 185°F

±2.5% total for -10 to 185°F, 7 to 30 psi

**Temperature Measurement**

**Temperature measuring range**

Any range between -40 to 300°F with a minimum temperature span of 55°F

**Performance**

**Accuracy for pressure**

Combined linearity, hysteresis, repeatability, Zero and Span set

≤ ±0.1% FS (≥ 7 psi FS),

≤ ±0.25% FS available

**Accuracy for temperature**

Accuracy: typical ± 4.0°F

**Specification continued**

**Long term stability**

0.1% FS/yr for pressure ranges > 30 psi

Prorated for ranges below 30 psi

Under standard conditions

**Supply voltage**

15 - 30 VDC

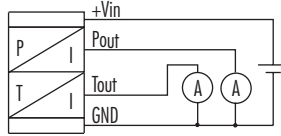
Influence of supply voltage < 0.1% FS

**Output signals for pressure & temp.**

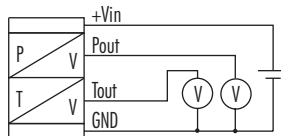
Dual 4 - 20 mA, 0 - 20 mA, 0 - 5 VDC or

0 - 10 VDC

**Circuit diagram for current outputs:**



**Circuit diagram for voltage outputs:**



**Load resistance**

Current output:  $RL \leq (V_{supply} - 5V)/0.02A$

Voltage output:  $RL > 10k\Omega$

Influence of load resistance < 0.1% FS

**Insulation resistance**

> 50 megohms @ 500 VDC (@ 68°F)

**Response time**

< 1ms, 10 to 90% FS

**Construction**

**Pressure media compatibility**

Stainless steel 316L

**Pressure connection**

7/8"-14 UNF male frontal or flush diaphragm

Using a regular pressure connection will position the temperature sensor approximately 3/4" back from the process flowline.

Consult factory for other connections

**Electrical connection**

DIN 43650 (Fig. 3)

6-pin bayonet per MIL-C-26482 (10-6) (Fig. 4)

Polyurethane cable (Fig. 5)

Demountable versions/other types available

**Specification continued**

**Weight**

5 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/T 26
- 2) Electrical connection  
01 - DIN 43650  
06 - 6 pin bayonet (mating connector extra)  
15 - Polyurethane cable
- 3) Pressure range, including eng. units, type
- 4) Temperature measuring range
- 5) Accuracy (pressure)
- 6) Output signal (must be the same for P&T)
- 7) Cable length
- 8) Any special features

Example ordering format:

ATM 26 - 06 - 100 psig - 20 to 120°F - 0.1% - 4 to 20mA

**Options**

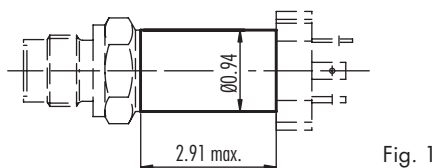
STS offers a wide range of options for these and other similar transmitters. Please consult the factory for any special requirements.

**Examples include:**

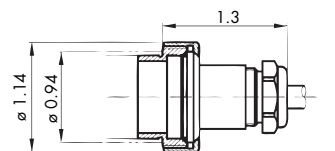
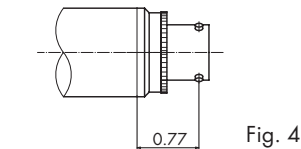
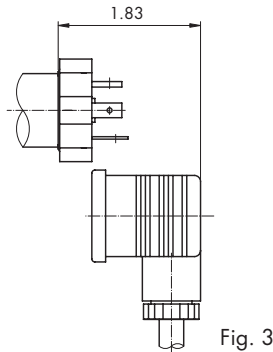
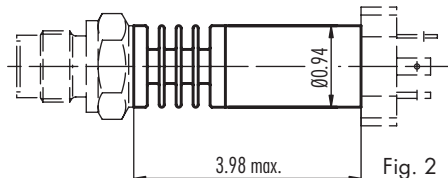
- Alternate electrical configurations  
i.e. 0 to 5 VDC, 0 to 10 VDC, 0 to 20 mA  
RS 485, CANopen
- Lightning protection
- Intrinsic safety certification
- Cooling extension
- Explosion proof certification
- Pressure snubber
- Special oil filling for food application etc.
- Alternate construction i.e titanium, hastelloy
- Alternate seals i.e. EPDM, Kalrez
- Wide range of pressure connectors
- Wide range of electrical connectors
- Datalogging

**Dimensions (inches)**

Version for medium temperature up to 212°F



Version for medium temperature up to 300°F



Specifications may change without notice.

STS is registered ISO 9001:2008

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