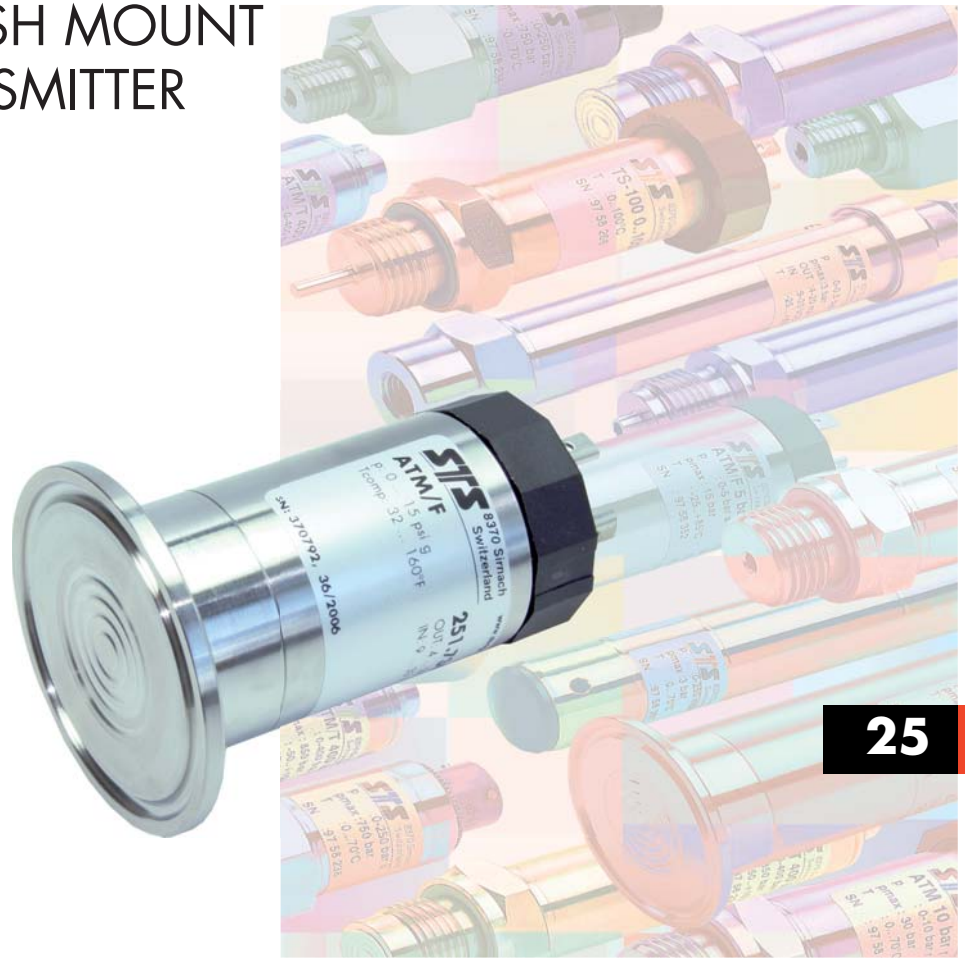


OPEN FACE-FLUSH MOUNT PRESSURE TRANSMITTER ATM/F



25

Features

- Accuracy: $\leq \pm 0.1\%$ FS or $\leq \pm 0.25\%$ FS
- FS ranges from 1 to 360 psi
- Flush mount options, i.e. Tri-clamp
- High overload: 3 x FS
- Surge (lightning) protection option
- 0/4 to 20 mA or 0 to 5/10 VDC

Product overview and applications

The ATM/F series 25 is part of a comprehensive range of transmitters specifically designed for the process industry where the fluids are of a clogging nature requiring a flush mount type of installation. Exceptional reliability is achieved with the high overpressure rating, and the combination of high accuracy and good long term stability offer the user reduced recalibration requirements resulting in a low cost of ownership. Modular design provides manufacturing flexibility and fast delivery.

Examples of applications include:

- Food, beverage and dairy industries
- Pharmaceutical
- Wastewater
- Pulp and paper
- Tank level measurement

Specification

Measurement

Pressure ranges

Any range from 1 to 360 psi FS available, in any engineering units such as psi, Pa, in 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
Consult factory for higher proof 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, > 30 psi FS
±2% total for 32 to 160°F, 7 to 30 psi
±2% total for -10 to 185°F, > 30 psi FS
±2.5% total for -10 to 185°F, 7 to 30 psi
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 available

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

9 - 33 VDC for current output signals
10/15 to 30 VDC for voltage output signals
Influence of supply voltage < 0.1% FS

Load resistance

Influence of load resistance < 0.1% FS
4 to 20 mA:
RL ≤ (Vsupply - 9V)/0.02A
0 to 20 mA:
RL ≤ (Vsupply - 6V)/0.02A, 1kOhm max.
Voltage output:
RL > 10kOhm max.

Output signal

4 - 20 mA (2-wire)
0 - 20 mA (3-wire)
0 - 5 VDC (3-wire)
0 - 10 VDC (3-wire)
Surge (lighting) protection (option)
Others available consult factory

Insulation resistance

> 50 megohms @ 500 VDC (@ 68°F)

Response time

< 1ms/10 to 90% FS

Construction

Pressure media compatibility
Stainless steel 316L

Pressure connection

Tri-clamp 1", 1½"
Other connections on request

Electrical connection

DIN 43650 (Fig. 3)
6-pin bayonet per MIL-C-26482 (10-6) (Fig. 4)
Polyurethane cable (Fig. 5)
Demountable versions and other types available

Specification continued

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/F 25
- 2) Electrical connection
 - 01 - DIN 43650 (mating connector extra)
 - 06 - 6 pin bayonet (mating connector extra)
 - 15 - Polyurethane cable (black)
- 3) Pressure range, including eng. units, type
- 4) Accuracy
- 5) Output signal
- 6) Cable length
- 7) Size of pressure connection
- 8) Any special feature: i.e. lightning protection

Example ordering format:

ATM/F 25 - 01 - 100 psig - 0.1% - 4 - 20mA - 1½" Tri-clamp

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. RS485, programmable units
- Special oil filling for food application etc.
- Wide range of pressure connectors
- Wide range of electrical connectors
- Intrinsic safety certification
- Datalogging

Dimensions (inches)

Version for medium temperature up to 212°F

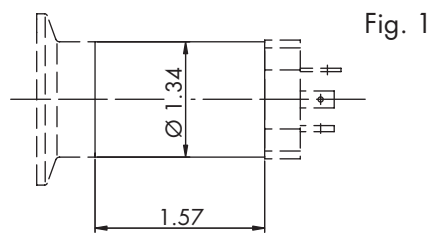


Fig. 1

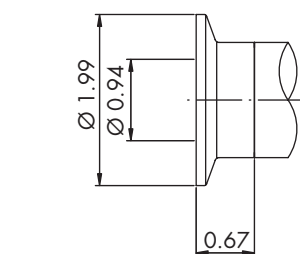


Fig. 2

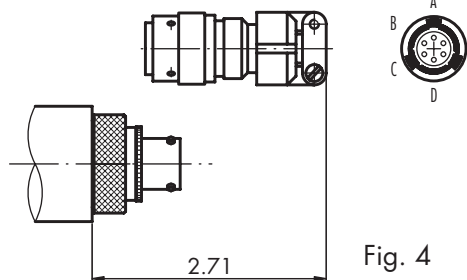


Fig. 3

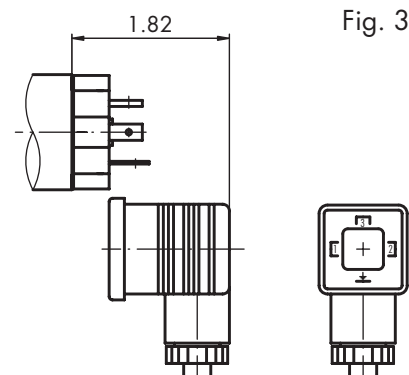


Fig. 4

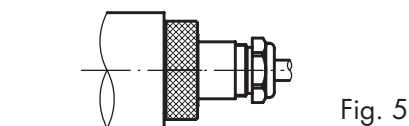


Fig. 5

Specifications may change without notice.

STS is registered ISO 9001-2000

10.00.0228B - 711



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