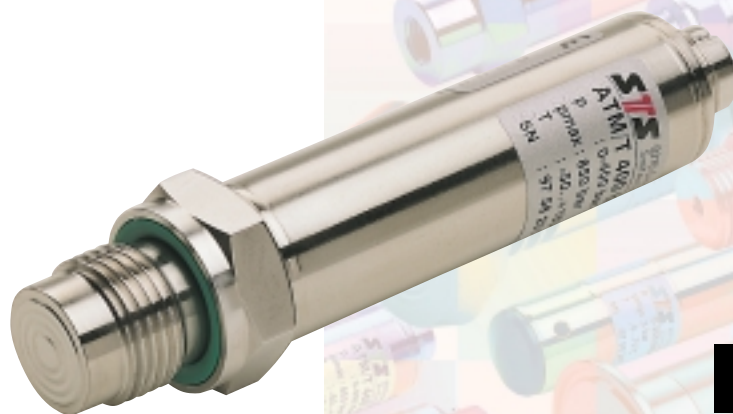


## TRANSMITTER FOR PRESSURE AND TEMPERATURE ATM/T



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### Features

- Compact and robust stainless steel assembly 1.4435 (316L)
- Piezoresistive and Pt 100 measuring element
- Gauge, absolute or sealed gauge
- Standard DIN pressure ranges from 0...100 mbar to 0...1000 bar
- Calibration available for all common pressure units
- Complies with the EMC directive 89/336/EEC
- High reliability
- Short delivery time
- Customized versions due to modular assembly
- Available as level or flange transmitter
- Reverse polarity and short circuit protected
- Media temperature up to 150°C (optional)

### Typical applications

- Machine installations
- Industrial process control
- Heating and ventilation
- Environmental monitoring
- Food industry
- Mobile hydraulics
- Test and calibration systems

## Specifications

Pressure range	[bar]	0.1 ... 0.5	> 0.5 ... 2	> 2 ... 25	> 25 ... 600	> 600 ... 1000
<b>Overpressure</b>		3 bar	3 x FS (min. 3 bar)	3 x FS	3 x FS (max. 850 bar, optional 1500 bar)	1500 bar
<b>Burst pressure</b>	[bar]	≥ 30	≥ 30	3 x FS (min. 25)	> 850 (optional 1500 bar)	1500
<b>Accuracy<sup>1)</sup></b>	[± % FS]	≤ 0.5 (optional ≤ 0.25)	≤ 0.5 (optional ≤ 0.25, ≤ 0.1)	≤ 0.5 (optional ≤ 0.25, ≤ 0.1)	≤ 0.5 (optional ≤ 0.25, ≤ 0.1)	≤ 1 (optional ≤ 0.5, ≤ 0.25)
<b>Thermal shift</b>	[± % FS/°C]					
Zero	0...70°C	0.06	0.03	0.015	0.015	0.015
	-25...85°C	0.08	0.04	0.02	0.02	0.02
Span	0...70°C	0.015	0.015	0.015	0.015	0.015
	-25...85°C	0.02	0.02	0.02	0.02	0.02
<b>Response time</b>		< 1 ms/10...90% FS				
<b>Long term stability (1 year)</b>		< 4 mbar	< 4 mbar	< 0.2% FS	< 0.2% FS	< 0.2% FS

<sup>1)</sup> Zero based non-conformity according to DIN 16086, including hysteresis and repeatability

### Temperature measuring range

#### Temperature measuring range

**-25...100°C**

Optional measuring ranges:

lower range limit

upper range limit

Accuracy (probe, electronics, adjustment):

on request

-50°C

150°C

±2°C

### Output signal

**4 ... 20 mA**

**0 ... 20 mA**

**0 ... 5V / 0 ... 10 V**

#### Type

Current transmitter

Current transmitter

Voltage transmitter

#### Supply voltage (U<sub>b</sub>)

15...30 V DC

15...30 V DC

15...30 V DC

Supply voltage influence

< 0.1% FS

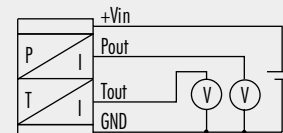
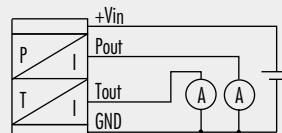
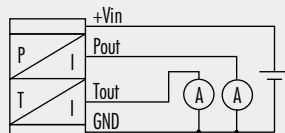
< 0.1% FS

< 0.1% FS

#### Circuit diagram

P: Pressure

T: Temperature



#### Load resistance

$(U_b - 5V) / 0.02A$

$(U_b - 5V) / 0.02A$

$R_L > 10k\Omega$

Load resistance influence

< 0.1% FS

< 0.1% FS

< 0.1% FS

### Materials

#### Process connection, diaphragm, housing

Stainless steel 1.4435 (316L)

(other materials on request)

Seals (standard)

Viton

(other materials see ordering information)

## Electromagnetic compatibility

Standard	Level	Typical interferences
<b>Emission:</b>		
EN 50081-1:1992	Generic emission standard	
EN 55022:1994	Emission, class B	
<b>Immunity:</b>		
EN 50082-2:1995	Generic immunity	
EN 61000-4-2:1995	Electrostatic discharge	4kV contact, 8kV air
ENV 50140:1993	Radiated electro-magnetic field	10V/m, 80-1000 MHz, 80% AM 1kHz
ENV 50204:1995	Radiated electro-magnetic field (GSM)	10V/m, 950 MHz, 200Hz on/off
EN 61000-4-4:1995	Fast transients (burst)	2 kV
ENV 50141:1993	Conducted radio-frequency	10V, 0.15-80 MHz, 80% AM 1kHz
		Cellular phones, radio sets
		Digital portable phones
		Motors, valves
		Cellular phones, radio sets



The pressure transmitter ATM fulfill the emission and immunity requirements described in the EMC directive 89/336/EEC.

## Ordering Information

26 X . XXXX . XXXX . XX . XXX

<b>Type</b>	ATM/T	26				
<b>Pressure type</b>	Gauge	1				
	Absolute	2				
	Sealed gauge	3				
<b>Pressure range</b>	0...100 mbar		00			
	0...160 mbar		01			
	0...250 mbar		02			
	0...400 mbar		03			
	0...600 mbar		04			
	0...1.0 bar		05			
	0...1.6 bar		06			
	0...2.5 bar		07			
	0...4.0 bar		08			
	0...6.0 bar		09			
	0...10 bar		10			
	0...16 bar		11			
	0...25 bar		12			
	0...40 bar		3	13		
	0...60 bar		3	14		
	0...100 bar		3	15		
	0...160 bar		3	16		
	0...250 bar		3	17		
	0...400 bar		3	18		
	0...600 bar		3	19		
0...1000 bar		3	20			
Special calibration			99			
<b>Temp. measuring range</b>	-25...100°C (standard)					
	customized temperature measurement range					
<b>Process connection</b>	G 1/2 M, frontal diaphragm (Fig. 5)			14		
	G 1/2 M, flush diaphragm (Fig. 6)			15		
	Special process connection			99		
<b>Electrical connection</b>	Connector DIN 43650 (screwed on <sup>1)</sup> ) <sup>2)</sup> (Fig. 10)	IP 65			01	
	Connector Binder 723, 5-pin <sup>2)</sup> (Fig. 11)	IP 67			03	
	Connector Binder 723, 5-pin (screwed on <sup>1)</sup> ) <sup>2)</sup> (Fig. 12)	IP 67			43	
	Connector MIL C26482, (10-6) <sup>2)</sup> (Fig. 13)	IP 40			06	
	PE cable <sup>3)</sup> 4) (Fig. 14)	IP 67			13	
	PUR cable <sup>3)</sup> (Fig. 14)	IP 67			15	
	Teflon cable <sup>3)</sup> (Fig. 14)	IP 67			21	
Special electrical connection				99		
<b>Output signal</b>	0... 5 V DC				46	
	0...10 V DC				47	
	0...20 mA				00	
	4...20 mA				05	
	Special output signal				99	
<b>Accuracy</b>	Pressure	Temperature				
	≤ ±0.5 % FS	according to data sheet				0
	≤ ±0.25% FS	according to data sheet				1
	≤ ±0.1 % FS (on request)	according to data sheet				2
<b>Temperature range</b>	Compensated 0...70°C (media temperature 0... 80°C)					0
	Compensated -25... 85°C (media temperature -25...100°C)					1
	Compensated -25... 85°C (media temperature -25...150°C)					2
	Special temperature range					9
<b>Options</b>	Electronics packed in gul: Gauge pressure					C
	Absolute and sealed gauge pressure					D
Special oil filling:	ASEOL Food					G
	Halocarbon					H
Seals:	EPDM					S
	Kalrez					T
Special options						Z

<sup>1)</sup> Zero offset and span adjustable

<sup>4)</sup> Suitable for drinking water (food approved)

<sup>2)</sup> Cable socket connector not included

<sup>3)</sup> Please specify the required cable length

## Pressure Connection

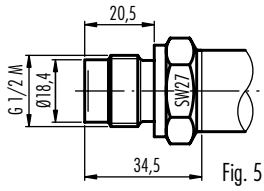


Fig. 5

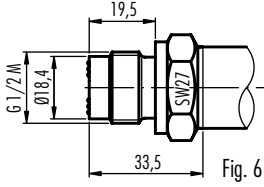
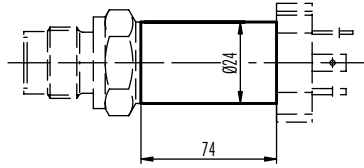


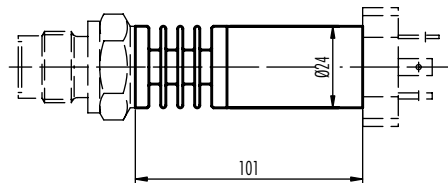
Fig. 6

## Dimensions

Version for media temperature up to 100°C



Version for media temperature up to 150°C



## Electrical Connection

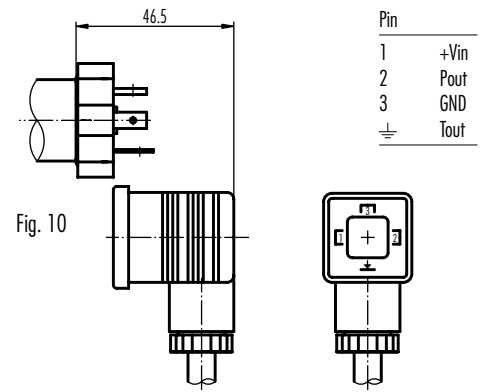


Fig. 10

Pin	
1	+Vin
2	Pout
3	GND
⊥	Tout

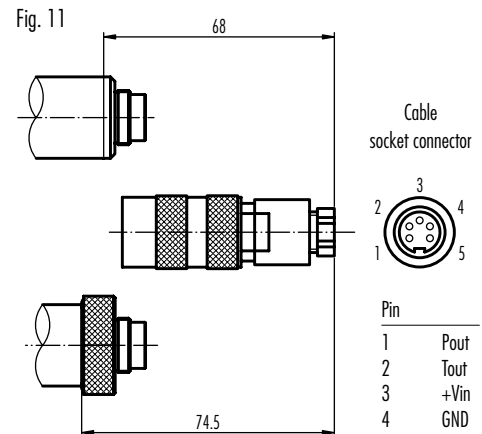


Fig. 11

Pin	
1	Pout
2	Tout
3	+Vin
4	GND

Fig. 12

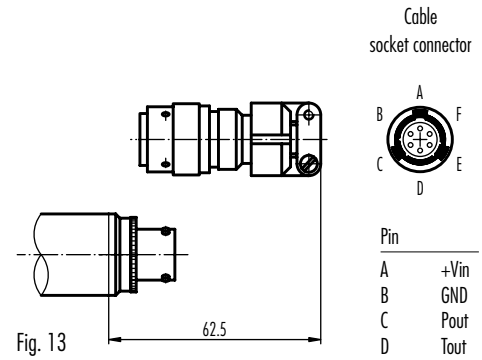


Fig. 13

Pin	
A	+Vin
B	GND
C	Pout
D	Tout

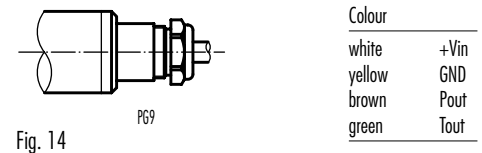


Fig. 14

Colour	
white	+Vin
yellow	GND
brown	Pout
green	Tout

Specifications may change without notice. Release 06/01

## Switzerland

STS Sensor Technik Sirnach AG  
Rüthhofstrasse 8  
CH - 8370 Sirnach  
Tel.: (071) 969 49 29  
Fax: (071) 969 49 20  
e-mail: sales@sts-ag.ch  
Internet: www.sts-ag.ch

## Germany

STS Sensoren Transmitter Systeme GmbH  
Mercedesstrasse 1  
D - 71063 Sindelfingen  
Tel.: (07031) 811 920  
Fax: (07031) 811 958  
e-mail: sts.gmbh@t-online.de  
Internet: www.sts-ag.ch

## Italy

STS Italia s.r.l.  
Via Gesù 5  
I - 20090 Opera (MI)  
Tel.: 02-57607073/074  
Fax: 02-57607110  
e-mail: stsopera@tin.it  
Internet: www.sts-ag.ch

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