

Pressure and temperature transmitters

ATM/T



Version: 28.03.2012

Technical Specifications

Pressure measuring range (bar)

	0.1 ... 0.5, (1)	> 0.5 ... 2	> 2 ... 25
Overpressure	3 bar	3 x FS (≥ 3 bar)	3 x FS
Burst pressure	≥ 30 bar	≥ 30 bar	3 x FS (≥ 25 bar)
Accuracy, (4), (\pm % FS)	$\leq 0.5 / \leq 0.25$	$\leq 0.5 / \leq 0.25 / \leq 0.1$	$\leq 0.5 / \leq 0.25 / \leq 0.1$
Thermal shift, (\pm % FS/$^{\circ}$C)			
Zero point 0...70 $^{\circ}$ C	≤ 0.06 , (5)	≤ 0.03	≤ 0.015
Zero point -25...85 $^{\circ}$ C	≤ 0.08 , (6)	≤ 0.04	≤ 0.02
Span 0...70 $^{\circ}$ C	≤ 0.015	≤ 0.015	≤ 0.015
Span -25...85 $^{\circ}$ C	≤ 0.02	≤ 0.02	≤ 0.02
Response time, (typ.)	< 1ms / 10...90% FS	< 1ms / 10...90% FS	< 1ms / 10...90% FS
Long term stability, (5)	< 0.5% FS / < 4 mbar	< 0.2% FS / < 4 mbar	< 0.1% FS / < 0.2% FS

	> 25 ... 600, (2), (3)	> 600 ... 1000, (2)
Overpressure	3 x FS ($\leq 850 / \leq 1500$ bar)	1500 bar
Burst pressure	> 850 / ≤ 1500 bar	> 1500 bar
Accuracy, (4), (\pm % FS)	$\leq 0.5 / \leq 0.25 / \leq 0.1$	$\leq 1 / \leq 0.5 / \leq 0.25$
Thermal shift, (\pm % FS/$^{\circ}$C)		
Zero point 0...70 $^{\circ}$ C	≤ 0.015	≤ 0.015
Zero point -25...85 $^{\circ}$ C	≤ 0.02	≤ 0.02
Span 0...70 $^{\circ}$ C	≤ 0.015	≤ 0.015
Span -25...85 $^{\circ}$ C	≤ 0.02	≤ 0.02
Response time, (typ.)	< 1ms / 10...90% FS	< 1ms / 10...90% FS
Long term stability, (5)	< 0.1% FS / < 0.2% FS	< 0.1% FS / < 0.2% FS

(1) 50 mbar on request

(2) Titanium available ≤ 400 bar (burst pressure > 550 bar)

(3) Overpressure and burst pressure 1500 bar (stainless steel) optional

(4) Zero based accuracy according to DIN16086, incl. hysteresis and repeatability at ambient temperature

(5) 1 year (typ. / max.), the long term stability can be improved by ageing (burn-in) the sensor

Temperature measuring range

Standard, (1)	-25...100 $^{\circ}$ C
Lower end of range	-40 $^{\circ}$ C
Upper end of range	150 $^{\circ}$ C
Temperature span	> 30 $^{\circ}$ C
Accuracy, (2)	
0...70 $^{\circ}$ C, (typ. / max.)	$\pm 0.5 / 1.0$ $^{\circ}$ C
-25...85 $^{\circ}$ C, (typ. / max.)	$\pm 1.0 / 1.5$ $^{\circ}$ C
-25...100 $^{\circ}$ C, (typ. / max.)	± 2.0 $^{\circ}$ C

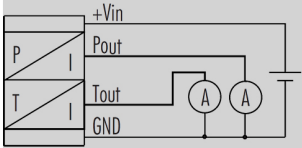
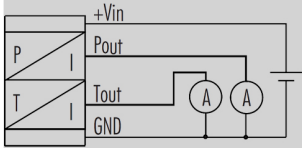
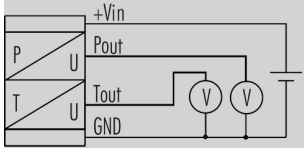
(1) Other temperature measuring ranges on request

(2) Probe, electronics, calibration

Temperature range

Operating temperature	-25...85 $^{\circ}$ C
Process temperature	-40...150 $^{\circ}$ C
Storage temperature	-25...85 $^{\circ}$ C

Electrical specifications

	4 ... 20 mA	0 ... 20 mA	0 ... 5 V / 0 ... 10 V
Power supply	15...30 V DC	15...30 V DC	15...30 V DC
Supply influence	< 0.1% FS	< 0.1% FS	< 0.1% FS
Current consumption			3 mA
Circuit diagram			
Load resistance	$(U_b - 5V) / 0.02A$	$(U_b - 5V) / 0.02A$	$R_L > 10k\Omega$
Load influence	< 0.1% FS	< 0.1% FS	< 0.1% FS

Qualifications

	Description	Level	Typical interferences
EN 61000-4-2	Electrostatic discharge	4 kV contact 8 kV air	
EN 61000-4-3	Irradiated RF	10V/m (0.08...1 GHz, 3s)	Radio sets, wireless phones
EN 61000-4-4	Transients (burst)	2 kV	Motors, valves
EN 61000-4-6	Conducted RF	10 V (0.15...80 MHz, 3 s)	Frequency converters

Physical specifications

Materials	
Transducer	Stainless steel (316L / 1.4435), titanium (Gr. 2), (1)
Housing	Stainless steel (316L / 1.4404), titanium (Gr. 2)
Seals	Viton (Standard), EPDM, Kalrez
Cable	PUR, PTFE, PE

(1) Hastelloy (C-276) on request

Equipment

Overview

10.00.0091	Accessories overview

Additional documents

Operating and safety instructions

	Article number
10.88.0092	DMM029

Ordering information

		X. XXXX.	XXXX.	XX.	XXX
Type					
	ATM/T	26			
Pressure type					
	Gauge	1			
	Absolute (vacuum)	2			
	Sealed gauge	3			
Pressure measuring range					
	Any pressure measuring ranges between 0...100 mbar and 0...1000 bar available, (1), (2), (3)	XX			
Process connection					
	G 1/2 M, frontal diaphragm, (Fig. 5)	14			
	G 1/2 M, flush diaphragm, (Fig. 6)	15			
	Customized connection available	XX			
Electrical connection					
	DIN 43650, demountable, IP 65, (Fig. 10), (4)		01		
	Binder 723, 5-pin, IP 67, (Fig. 11), (4)		03		
	Binder 723, 5-pin, demountable, IP 67, (Fig. 12), (4)		43		
	MIL C26482, 10-6, IP 40, (Fig. 13), (4)		06		
	PE cable, IP 67, (Fig. 14), (5), (6)		13		
	PUR cable, IP 67, (Fig. 14), (5), (7)		15		
	PTFE cable, IP 67, (Fig. 14), (5)		21		
	Customized connection available		XX		
Output signal					
	4...20 mA		05		
	0...20 mA		00		
	0... 5 V DC		46		
	0...10 V DC		47		
Accuracy					
	$\leq \pm 0.5$ % FS			0	
	$\leq \pm 0.25$ % FS			1	
	$\leq \pm 0.1$ % FS (on request)			2	
Temperature range					
	0...70 °C compensated (allowed process temperature: 0...80 °C)			0	
	-25...85 °C compensated (allowed process temperature: -25...100 °C)			1	
	-25...85 °C compensated (allowed process temperature: -25...150 °C)			2	
Option 1					
	Special oil filling: ASEOL Food (for food applications)				G
	Special oil filling: Halocarbon (for oxygen applications), (8), (9)				H
Option 2					
	Electronics packed in gel: Gauge pressure				C
	Electronics packed in gel: Absolute pressure				D
Option 3					
	Version titanium				K
	Seals: Viton (standard)				U
	Seals: EPDM				S
	Seals: Kalrez				T
	Aging				Z

- (1) 50 mbar on request
- (2) Titanium available \leq 400 bar (burst pressure > 550 bar)
- (3) mbar, PSI, kPa etc. available
- (4) Cable socket connector not included
- (5) Please specify the required cable length and medium
- (6) Suitable for drinking water (food approved)
- (7) For operating temperature > 50°C, PE or PTFE cable must be used
- (8) Maximum pressure measuring range \leq 270 bar (burst pressure > 400 bar)
- (9) min. Medium temperature -25 ° C

Technical drawings

Pressure Connections

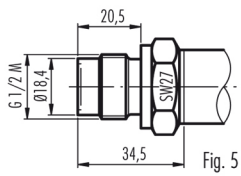


Fig. 5

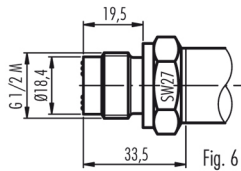
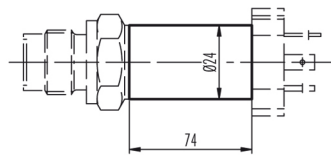


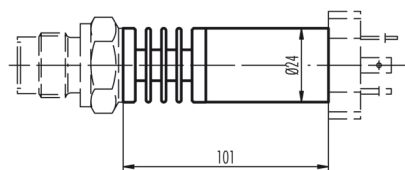
Fig. 6

Dimensions

Version for media temperature up to 100°C



Version for media temperature up to 150°C



Electrical Connections

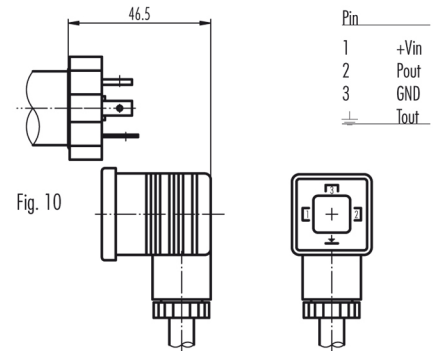


Fig. 10

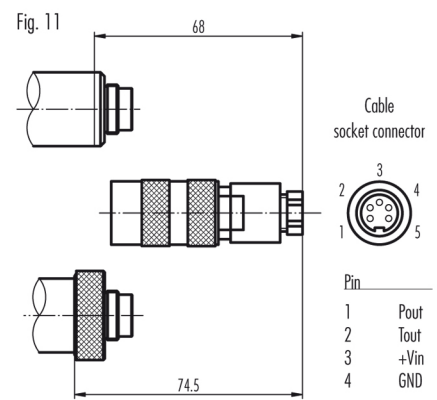


Fig. 12

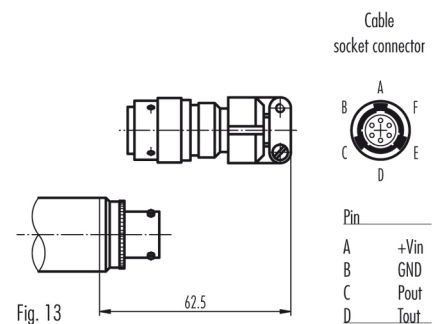


Fig. 13

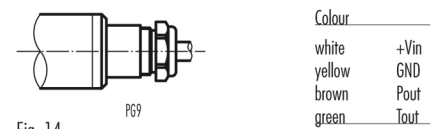


Fig. 14

Specifications may change without notice.

STS Great Britain:

STS Great Britain Ltd.
Higham Dairy Farm, Bumphill Lane, Alfreton | Derbyshire | Great Britain, DE55 6AH
contact@stssensors.com | www.stssensors.co.uk

STS Headquarters, Switzerland:

STS Sensor Technik Sirmach AG
Rüthhofstrasse 8, 8370 Sirmach, Switzerland
sales@stssensors.com | www.stssensors.com

STS France:

STS France
844 Route de la Caille, 74350 Allonzier la Caille, France
info-fr@stssensors.com | www.stssensors.fr

STS Germany:

STS Sensoren Transmitter Systeme GmbH
Poststrasse 7, 71063 Sindelfingen, Germany
info-de@stssensors.com | www.stssensors.de

STS Italy:

STS Italia s.r.l.
Via Gesù 5, 20090 Opera (Milano), Italy
info-italia@stssensors.com | www.stssensors.it