

Pressure Transmitter

ATM/K - Analog Pressure Transmitter with Ceramic Measuring Cell



CUSTOMER BENEFITS

- Corrosion and abrasion resistance for use in for example wastewater applications
- Robust ceramic measuring cell results in long life time of the diaphragm
- Fast customization thanks to configurable product design
- Compact design requires minimal space

Technical Specification

PRESSURE MEASURING RANGE (BAR)

	0.1	0.2 / 0.4	1
Overpressure	4 bar	6 bar	10 bar
Accuracy, (1), ($\pm$ % FS)	≤ 0.25	≤ 0.25	≤ 0.25
Thermal shift ($\pm$ % FS/ $^{\circ}$ C)			
Zero point -20 ... 80 $^{\circ}$ C	≤ 0.01	≤ 0.01	≤ 0.01
Span -20 ... 80 $^{\circ}$ C	≤ 0.01	≤ 0.01	≤ 0.01
Long term stability, (2)	< 0.15 % FS	< 0.15 % FS	< 0.15 % FS

	2	4	10 / 20
Overpressure	18 bar	25 bar	40 bar
Accuracy, (1), ($\pm$ % FS)	≤ 0.25	≤ 0.25	≤ 0.25
Thermal shift ($\pm$ % FS/ $^{\circ}$ C)			
Zero point -20 ... 80 $^{\circ}$ C	≤ 0.01	≤ 0.01	≤ 0.01
Span -20 ... 80 $^{\circ}$ C	≤ 0.01	≤ 0.01	≤ 0.01
Long term stability, (2)	< 0.15 % FS	< 0.15 % FS	< 0.15 % FS

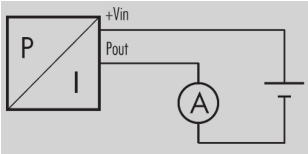
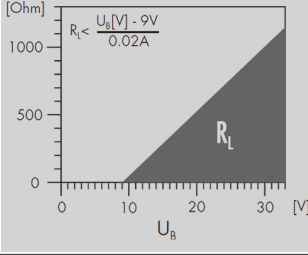
(1) Zero based accuracy according to DIN-16086, incl. hysteresis and repeatability at ambient temperature

(2) 1 year (typ.)

TEMPERATURE RANGE

Operating temperature	-25 ... 85 $^{\circ}$ C
Process temperatur	-40 ... 125 $^{\circ}$ C
Storage temperatur	-25 ... 85 $^{\circ}$ C

ELECTRICAL SPECIFICATIONS

	4 ... 20 mA
Power supply, (1)	9 ... 30 VDC
Supply influence	< 0.1% FS
Circuit diagram	
Load resistance	
Load influence	< 0.1% FS

(1) Power supply with optional surge (lightning) protection: 15 ... 30 VDC

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)	Radio sets, wireless phones
EN 61000-4-4	Transients (burst)	2 kV	Motors, valves
EN 61000-4-5, (1)	Surge	10 kA (8 / 20 μs)	Overvoltage
EN 61000-4-6	Conducted RF	10 V (0.15 ... 80 MHz)	Frequency converters

(1) Only with optional overvoltage protection

PHYSIKALISCHE SPEZIFIKATIONEN

Materials	
Transducer	Ceramic Al2O3 (96%)
Housing	Stainless steel (316L / 1.4404)

Equipment

OVERVIEW

10.00.0091	Accessories overview
HART001	Cable Socket Connector DIN43650

Additional documents

OPERATING AND SAFETY INSTRUCTIONS

10.88.0092	Article number DMM029

Ordering information

		X.	XXXX.	XXXX.	XX.	XXX
Type						
	ATM/K	53				
Pressure type						
	Gauge	1				
	Absolute (vacuum)	2				
	Seald gauge	3				
Pressure measuring range						
	100 mbar ... 20 bar	XX				
Process connection						
	G 1/2 M, 10 mm bore (Fig. 2)	13				
	Customized	99				
Electrical connection						
	DIN-43650, with metal threaded part, demountable, IP 65 (Fig. 10), (1)		01			
	M16 (Binder 723), 5-pin, demountable, IP 67, (Fig. 12), (1)		43			
	PUR cable, black, IP 67		15			
	PUR cable, black, submersible back IP 68		24			
	Customized		99			
Output signal						
	4 ... 20 mA		05			
Accuracy						
	$\leq \pm 0.25 \% \text{ FS}$			1		
Temperature range						
	-20 ... 80°C compensated (allowed process temperature: -40 ... 125°C)			3		
Option 1						
Option 2						
Option 3						
	Special version					Z

(1) Cable socket connector not included

Technical drawings

Pressure connections / Dimensions

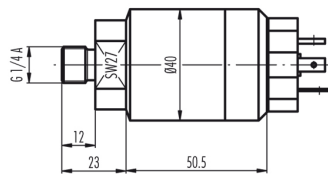


Fig. 1

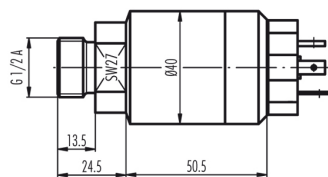


Fig. 2

Electrical connections

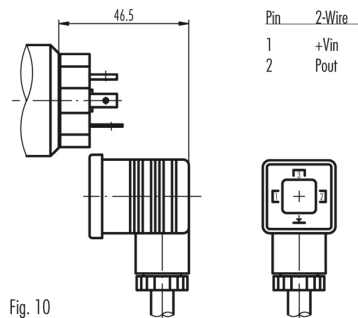


Fig. 10

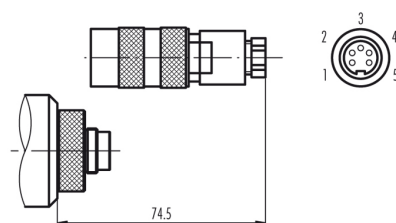


Fig. 12

Specifications may change without notice.

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

STS China:
STS Sensor Technology (Shanghai) Co. Ltd
Room 2603-2606 | North Building, Fortune | 108 Square
Lane 1839 | Qixin Road | Minhang District | Shanghai | China
sales@stssensors.com | www.stssensors.com.cn

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 Great Britain:
STS Great Britain Ltd.
Box 3942 | Warwick | CV34 9AE | United Kingdom
contact@stssensors.com | www.stssensors.co.uk

STS Italy:
STS Italia s.r.l.
Via Lambro 36 | 20090 Opera (MI) | Italy
info-italia@stssensors.com | www.stssensors.it