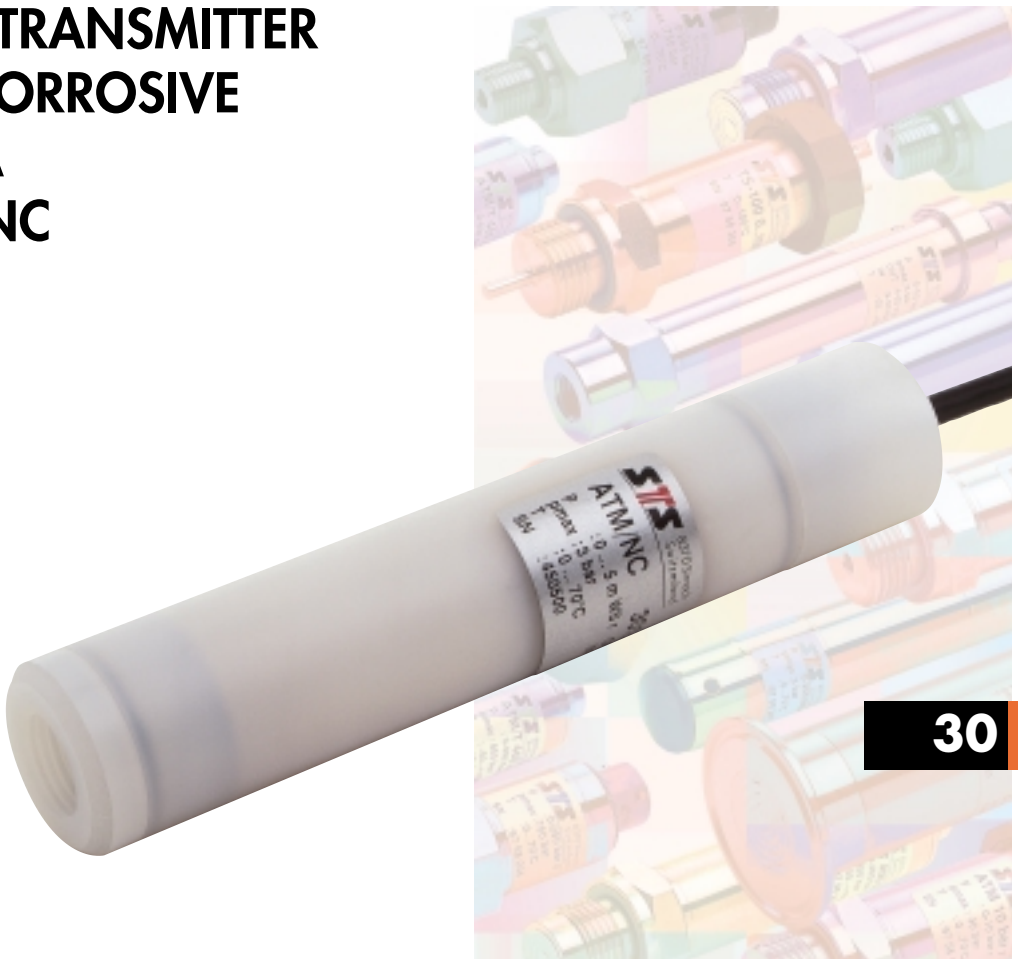
LEVEL TRANSMITTER FOR CORROSIVE MEDIA ATM/NC



Features

- Chemical resistant level transmitter made of PVDF. This transmitter has an excellent resistance to most aggressive chemicals.
- Piezoresistive measuring element
- Gauge or absolute
- Standard DIN pressure ranges from 0...100 mbar to 0...25 bar
- Calibration available for all common pressure units mH2O, mWS, mWC etc.
- Complies with the EMC directive 89/336/EEC
- High reliability
- Short delivery time
- Available with PE, PUR or Teflon cable
- Reverse polarity and short circuit protected

Typical applications

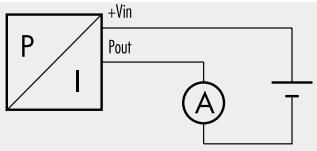
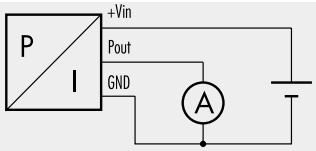
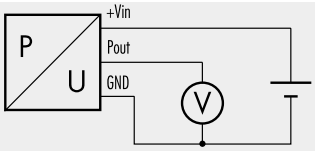
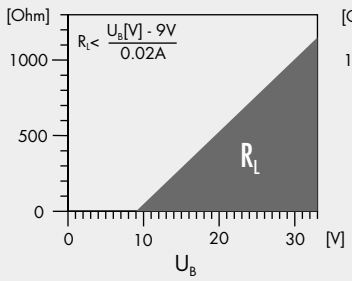
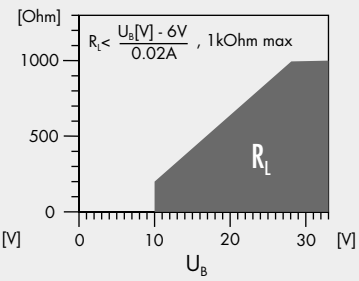
Depth and level measurement in

- Aggressive fluids
- Chemicals
- Waste water

Specifications

Pressure range [bar]	0.1 … 0.5	> 0.5 … 2	> 2 … 25
Overpressure	3 bar	3 x FS (min. 3 bar)	3 x FS
Burst pressure [bar]	> 200	> 200	> 200
Accuracy [1] [± % FS]	≤ 2.0	≤ 1.0	≤ 0.5
Accuracy [2]	≤ 0.5	≤ 0.5	≤ 0.5
Thermal shift [2] [± % FS/°C]			
Zero 0…70°C	0.06	0.03	0.015
-25…85°C	0.08	0.04	0.02
Span 0…70°C	0.015	0.015	0.015
-25…85°C	0.02	0.02	0.02
Long term stability (1 year)	< 4 mbar	< 4 mbar	< 0.2% FS

[1] Zero based non-conformity according to DIN 16086, including hysteresis and repeatability
[2] Only if diaphragm is made in titanium

Output signal	4 … 20 mA	0 … 20 mA	0 … 5 V / 0 … 10 V
Type	Two wire current transmitter	Three wire current transmitter	Three wire voltage transmitter
Supply voltage	9…33 V DC	9…33 V DC	15…30 V DC
Supply voltage influence	< 0.1% FS	< 0.1% FS	< 0.1% FS
Circuit diagram			
Load resistance			R_L > 10kOhm
Load resistance influence	< 0.1% FS	< 0.1% FS	< 0.1% FS

Materials		
Housing	PVDF	
Diaphragm	Titanium, stainless steel 1.4435 (316L) with teflon protection	
Seals (standard)	Viton	(other materials see ordering information)

Electromagnetic compability

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

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

Ordering Information

			30	X	XXXX	XXXX	XX	XXX
Type	ATM/NC		30					
Pressure type	Gauge			1				
	Absolute			2				
Pressure range [4]	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			
	Special calibration				99			
Version	Open, TD in titanium	(Fig. 1)			90			
	Open, TD with teflon foil	(Fig. 1)			91			
Electrical connection	PE cable [1] [2]					13		
	PUR cable [1] [2]					15		
	Teflon cable [1]					21		
	Special cable [1] [2]					99		
Output signal	0… 5 V DC					46		
	0…10 V DC					47		
	0…20 mA					00		
	4…20 mA					05		
	Special output signal					99		
Accuracy	≤ ±0.5 % FS / ≤ ±1.0 % FS / ≤ ±2.0 % FS						9	
	(dependent on pressure range and version)							
Temperature range	Compensated 0…70°C (media temperature 0…80°C) [2] [3]						0	
	Compensated -25…85°C (media temperature -25…85°C) [2] [3]						1	
	Special temperature range						9	
Options	Electronics packed in gel: Gauge pressure							C
	Absolute pressure							D
	Special oil filling: ASEOL Food							G
	Halocarbon							H
	Seals: EPDM							S
	Kalrez							T
	Protective cap (brass or POM)	(Fig. 2)						W
	Special options							Z

[1] Please specify the required cable length and media

[2] For media temperature > 50°C a teflon cable must be used

[3] Only if diaphragm is made in titanium

[4] mH2O, mWS, mWC etc. available

Dimensions

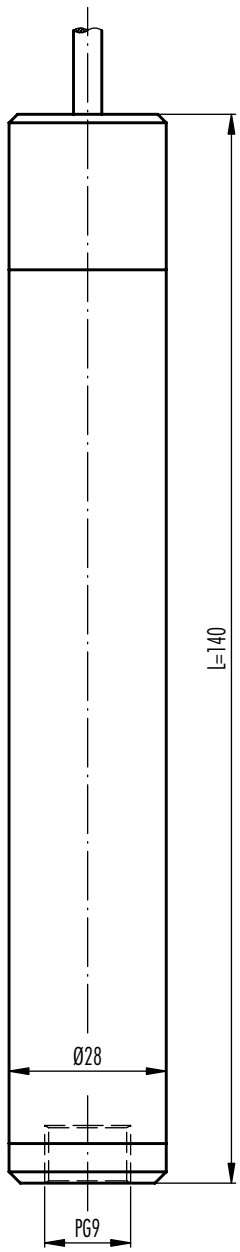


Fig. 1

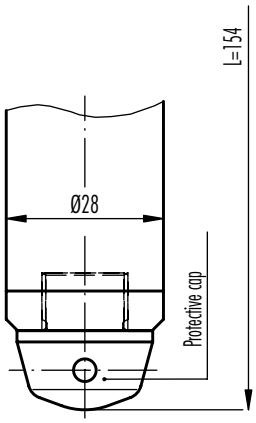


Fig. 2

Colour	2-Wire	3-Wire
white	+Vin	+Vin
yellow	Pout	GND
brown		Pout

Specifications may change without notice. Release 06/01

Switzerland

STS Sensor Technik Sirnach AG
Rütihofstrasse 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

represented by