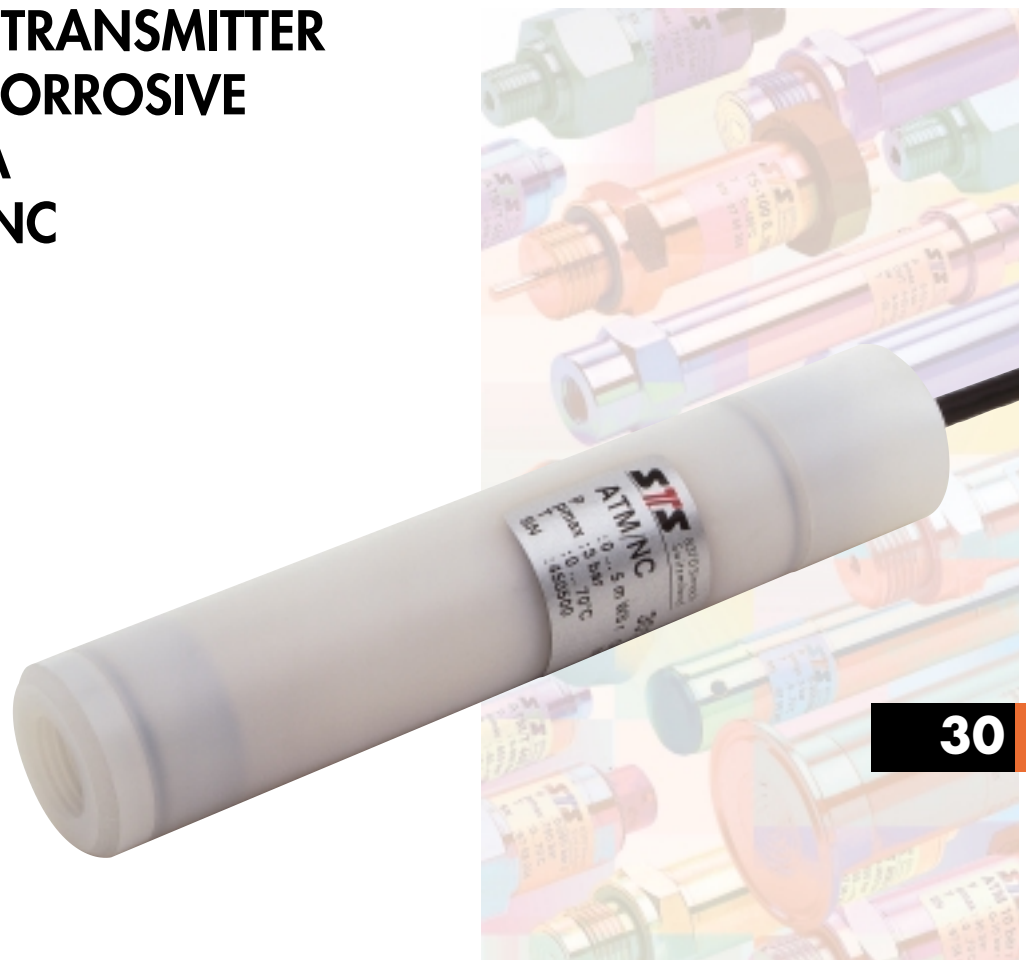


LEVEL TRANSMITTER FOR CORROSIVE MEDIA ATM/NC



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

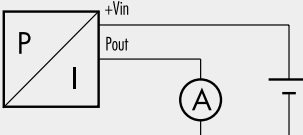
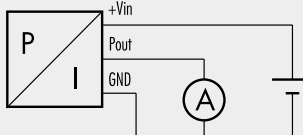
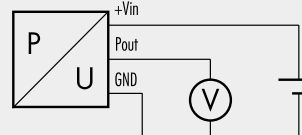
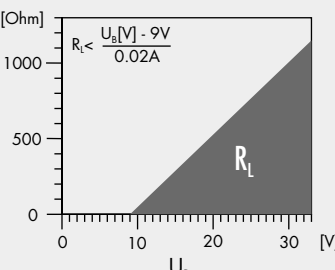
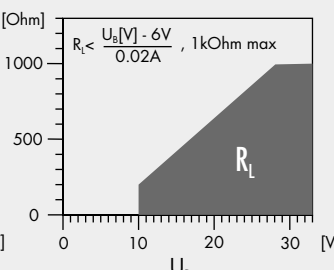
- Depth and level measurement in
- Aggressive fluids
 - Chemicals
 - Waste water

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			$R_L > 10k\Omega$
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 compatibility

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

		30	X	XXXX	XXXX	XX	XXX
Type	ATM/NC	30					
Pressure type	Gauge	1					
	Absolute	2					
Pressure range⁴⁾	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 (dependent on pressure range and version)						9
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

⁴⁾ mH2O, mWS, mWC etc. available

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

³⁾ Only if diaphragm is made in titanium

Dimensions

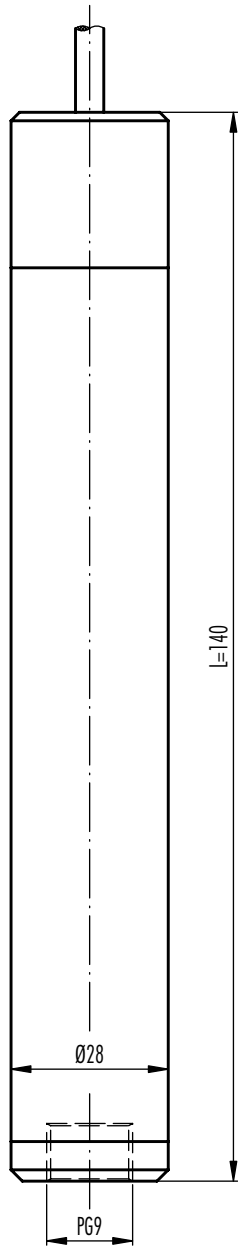


Fig. 1

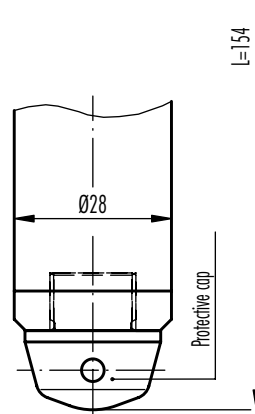


Fig. 2

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

Specifications may change without notice. Release 06/01

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