

# PRESSURE TRANSMITTER FOR LEVEL MEASUREMENT ATM/K/N



54

## Features

- Compact and robust stainless steel assembly 1.4435 (316L)
- Capacitive ceramic sensor without oil filling
- High resistance and overpressure
- Gauge or absolute
- Pressure ranges from 0...50 mbar to 0...20 bar
- Complies with the EMC directive 89/336/EEC
- High reliability
- Short delivery time
- Customized versions
- Reverse polarity and short circuit protected
- Surge (lightning) protection according to EN 61000-4-5 as an option

## Typical applications

Depth and level measurement in

- Wells
- Bore holes
- Waste water
- Reservoirs
- Lakes, rivers
- Sewage treatment plant

## Specifications

Pressure range	[bar]	0.1	0.2 / 0.4	1	2	4	10 / 20
Overpressure	[bar]	4	6	10	18	25	40
Accuracy <sup>1)</sup>		≤ ±0.25 % FS					
<b>Thermal shift</b>							
Zero	-20...80°C	≤ ±0.01% FS/°C					
Span	-20...80°C	≤ ±0.01%/°C					
<b>Long term stability</b>							
≤ ±0.15 % FS/year							

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

## Electrical connection

Type	Two wire current transmitter 4...20 mA	Load resistance
<b>Supply voltage</b>	9...30 V DC	
with surge (lightning) protection	12...30 V DC	
Supply voltage influence	< 0.1% FS	
<b>Circuit diagram</b>		<p>Load resistance influence &lt; 0.1% FS</p>

## Materials

<b>Housing</b>	Stainless steel 1.4435 (316L)	(other materials on request)
<b>Diaphragm</b>	Ceramic Al <sub>2</sub> O <sub>3</sub> (96%)	
<b>Seals</b> (standard)	Viton	

## 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	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
EN 61000-4-5:1995 <sup>2)</sup>	Surge	10 kA (8/20 μs)	Lightning strikes

<sup>2)</sup> Only with optional surge (lightning) protection



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

## Ordering Information

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<b>Type</b>	ATM/K/N	54				
<b>Pressure type</b>	Gauge	1				
	Absolute	2				
<b>Pressure range<sup>2)</sup></b>	0... 50 mbar	50				
	0... 100 mbar	00				
	0... 200 mbar	40				
	0... 400 mbar	03				
	0... 1.0 bar	05				
	0... 1.6 bar	06				
	0... 2.0 bar	41				
	0... 4.0 bar	08				
	0... 10 bar	10				
	0... 20 bar	42				
	Special calibration	99				
<b>Version</b>	Standard (Fig. 1)	85				
	Special version	99				
<b>Electrical connection</b>	PUR cable <sup>1)</sup>				30	
	PUR cable with G 1/2 M <sup>1)</sup> (Fig. 2)				32	
	Special cable <sup>1)</sup>				99	
<b>Output signal</b>	4...20 mA					05
	4...20 mA surge (lightning) protection					08
<b>Accuracy</b>	≤ ±0.25 % FS					1
<b>Temperature range</b>	-20...80°C compensated					3
<b>Options</b>	Special options					Z

<sup>1)</sup> Please specify the required cable length and media

<sup>2)</sup> mH2O, mWS, mWC etc. available

## Dimensions

Fig. 1

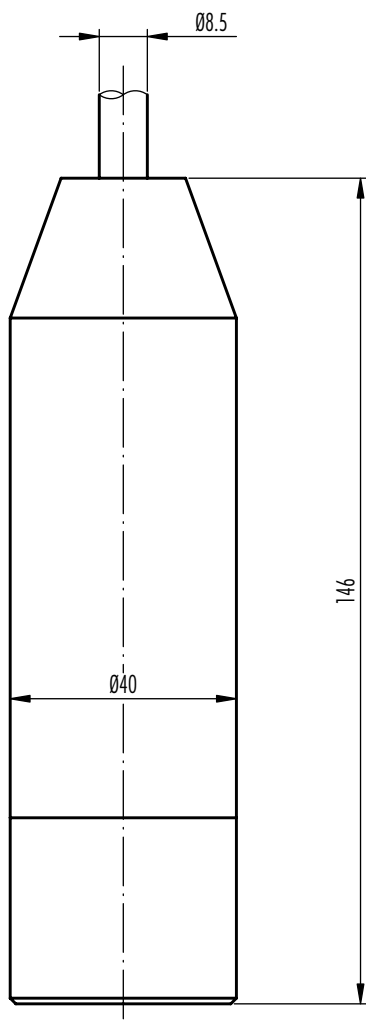
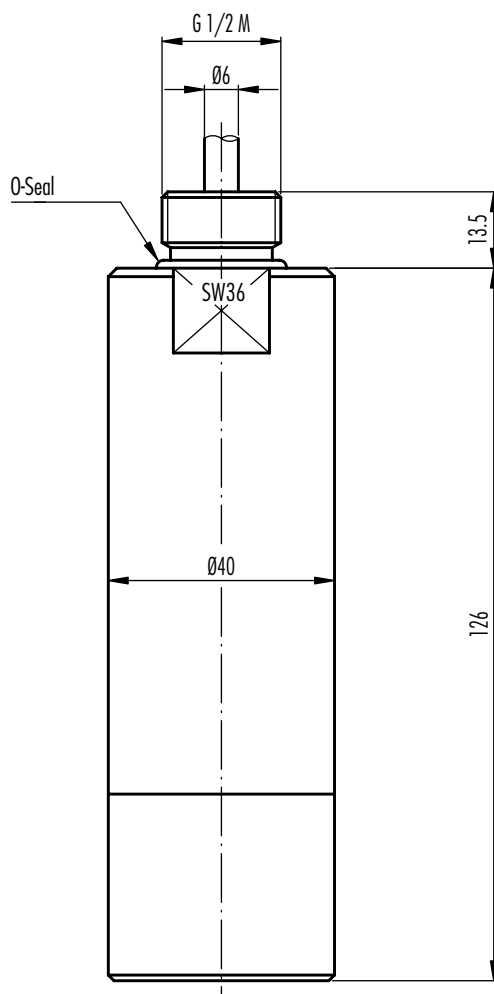


Fig. 2



Colour 2-Wire

white +Vin

yellow Pout

Weight approx. 950 gr.

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

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