

## PRESSURE TRANSMITTER WITH 2 SET POINTS ATM/GR

**CE**

### Features

- Compact and robust stainless steel assembly 1.4435 (316L)
- Piezoresistive measuring element
- Gauge, absolute or sealed gauge
- All pressure ranges between 0...50 mbar and -1...1000 bar available
- 2 limit switches adjustable over 0...100% of the pressure range
- Additional 0/4...20 mA analog output
- High reliability
- Short delivery time
- Customized versions due to modular assembly
- Reverse polarity and short circuit protected
- Media temperature up to 150°C (optional)

### Typical applications

- Machine installations
- Industrial process control
- Heating and ventilation
- Environmental monitoring
- Food industry
- Mobile hydraulics
- Test and calibration systems

## Specifications

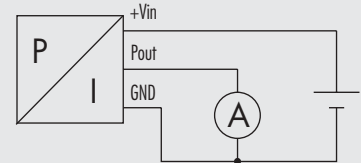
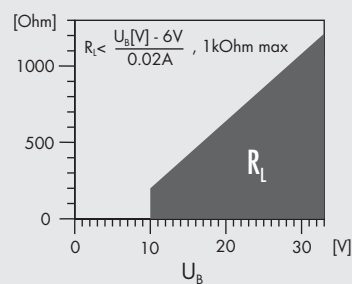
Pressure range	[bar]	0.1 ... 0.5	> 0.5 ... 2	> 2 ... 25	> 25 ... 600	> 600 ... 1000
<b>Overpressure</b>		3 bar	3 x FS (min. 3 bar)	3 x FS	3 x FS (max. 850 bar, optional 1500 bar)	1500 bar
<b>Burst pressure</b>	[bar]	> 200	> 200	> 200	> 850 (optional 1500 bar)	1500
<b>Accuracy</b> <sup>1)</sup>	[± % FS]	≤ 0.5 (optional ≤ 0.25)	≤ 0.5 (optional ≤ 0.25, ≤ 0.1)	≤ 0.5 (optional ≤ 0.25, ≤ 0.1)	≤ 0.5 (optional ≤ 0.25, ≤ 0.1)	≤ 1 (optional ≤ 0.5, ≤ 0.25)
<b>Thermal shift</b>	[± % FS/°C]					
Zero	0...70°C	≤ 0.06 <sup>1)</sup>	≤ 0.03	≤ 0.015	≤ 0.015	≤ 0.015
	-25...85°C	≤ 0.08 <sup>2)</sup>	≤ 0.04	≤ 0.02	≤ 0.02	≤ 0.02
Span	0...70°C	≤ 0.015	≤ 0.015	≤ 0.015	≤ 0.015	≤ 0.015
	-25...85°C	≤ 0.02	≤ 0.02	≤ 0.02	≤ 0.02	≤ 0.02
<b>Long term stability</b> (1 year)		< 4 mbar	< 4 mbar	< 0.2% FS	< 0.2% FS	< 0.2% FS

## Output signal

### Analog output

Load resistance and circuit diagram

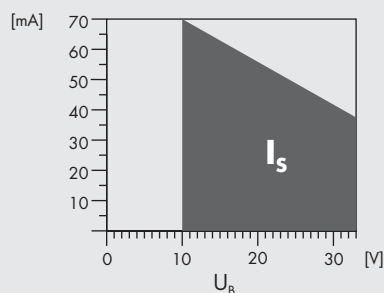
Output signal 0/4...20 mA



### Power supply

Supply voltage  
Supply current

10...33 V DC



reverse polarity and short circuit protected

both relays selected  
without output signal (0/4...20 mA)

### Switches

Switching voltage  
Switching current  
Switching power

Switching difference 0...100% of the pressure range, potentiometer-adjustable  
2 independent relay outputs (change over)  
48 V DC max.  
2 A max.  
60 W max.

Switching functions



The pressure is below both set points:  
both relays are selected.

The pressure is over the set point 1 (relay 1 is released), but below the set point 2 (relay 2 is selected).

The pressure is over both set points:  
both relays are released  
**or**  
the supply voltage is missing.

### Emission

Generic emission standard  
Emission

fulfill the requirements described in the EMC directive 89/336/EEC  
EN 61000-6-3  
EN 5022

## Materials

**Process connection, diaphragm, housing**  
**Seals** (standard)

Stainless steel 1.4435 (316L)  
Viton

(other materials on request)  
(other materials see ordering information)

<sup>1)</sup> 50 – 99 mbar: ≤ 0.12    <sup>2)</sup> 50 – 99 mbar: ≤ 0.16

## Ordering Information

		27	X	. XXXX	. XXXX	. XX	. XXX
<b>Type</b>	ATM/GR	27					
<b>Pressure type</b>	Gauge	1					
	Absolute	2					
	Sealed gauge	3					
<b>Pressure range</b>	All pressure ranges between 0...50 mbar and -1...1000 bar available		XX				
<b>Process connection</b>	G 1/4 female (Fig. 1)				00		
	G 1/4 M (Fig. 2)				11		
	G 1/4 M, Manometer DIN 16288 (Fig. 3)				12		
	G 1/2 M (Fig. 4)				13		
	G 1/2 M, frontal diaphragm (Fig. 5)				14		
	G 1/2 M, flush diaphragm (Fig. 6)				15		
	G 1/2 M, Manometer DIN 16288 (Fig. 7)				16		
	1/4 NPT M				10		
	1/2 NPT M (Fig. 8)				19		
Other process connector available				XX			
<b>Electrical connection</b>	Connector Binder 723, 12-pin <sup>1)</sup> (Fig. 10)	IP 67			45		
	PVC cable <sup>3)</sup> (Fig. 11)	IP 67			10		
	Other connector available				XX		
<b>Output signal</b>	0...20 mA				14		
	4...20 mA				15		
<b>Accuracy</b>	≤ ± 0.5 % FS					0	
	≤ ± 0.25 % FS					1	
	≤ ± 0.1 % FS (on request)					2	
<b>Temperature range</b>	Compensated 0...70°C (media temperature 0...80°C)					0	
	Compensated -25...85°C (media temperature -25...100°C)					1	
	Compensated -25...85°C (media temperature -25...150°C)					2	
	Special temperature range					9	
<b>Options</b>	Throttle <sup>2)</sup>						A
	Electronis packed in gel:	Gauge pressure					C
		Absolute and sealed gauge pressure					D
	Special oil filling:	ASEOL Food					G
		Halocarbon					H
	Seals:	EPDM					S
		Kalrez					T
Special options						Z	

<sup>1)</sup> Cable socket connector not included

<sup>2)</sup> Available only with fig. 2, fig. 4 or fig. 7

<sup>3)</sup> Please specify the required cable length

## Process Connection

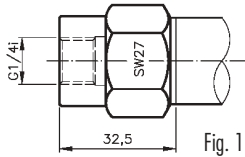


Fig. 1

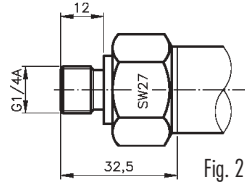


Fig. 2

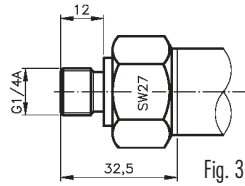


Fig. 3

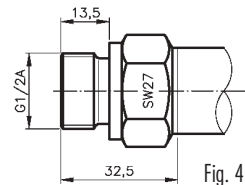


Fig. 4

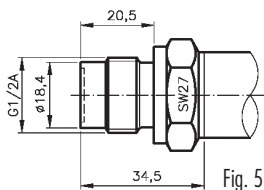


Fig. 5

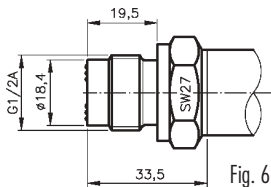


Fig. 6

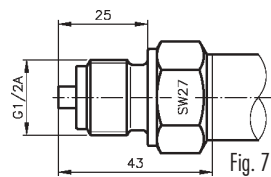


Fig. 7

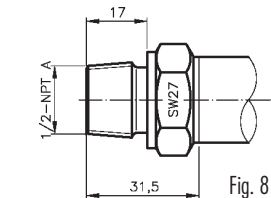
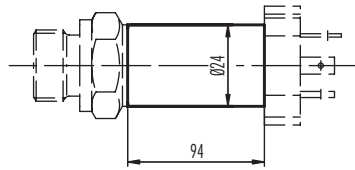


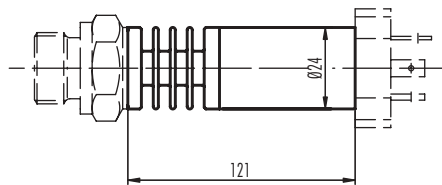
Fig. 8

## Dimensions

Version for media temperature up to 100°C

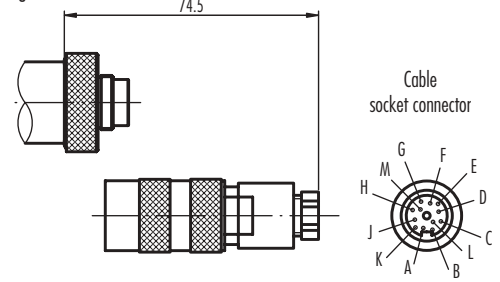


Version for media temperature up to 150°C

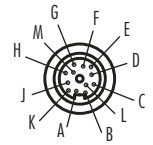


## Electrical Connection

Fig. 10



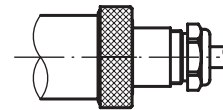
Cable socket connector



Pin

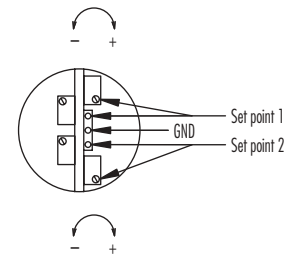
A	+Vin
L	Pout
B	GND
E	NC1
D	COM1
F	NO1
H	NC2
G	COM2
J	NO2

Fig. 11



Colour

white	+Vin
brown	Pout
yellow	GND
green	NC1
orange	COM1
violett	NO1
red	NC2
blue	COM2
black	NO2



Connector side

Specifications may change without notice.

DED015A

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