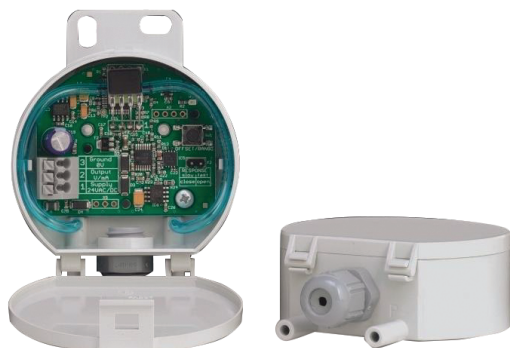


# 982R

Differential pressure transmitter for air and non-corrosive gases



*The 982R series differential pressure transmitters with piezoresistive pressure sensors are suitable for measuring the differential pressure, the overpressure and the vacuum of non-aggressive and non-flammable gases.*

- 0...10 V / 4...20 mA output signal
- Adjustable pressure range
- Protection class IP54
- Easy offset calibration
- Configurable response time

## Application

The differential pressure transmitter is used in building automation to monitor pressure in air and other noncorrosive gases. Many models are available in different measurement ranges for an optimal adaptation to the application

Possible application areas are:

- Building automation, air conditioning systems and clean room monitoring
- Valve and flap control
- Filter, ventilation and blower monitoring
- Control of air flows

## Function

The differential pressure transmitter is stable and accurate over time. The upper value of the pressure range can be adjusted between 50% and 100% of its value. This allows the

factory setting value to be adjusted according to the desired application.

The zero-point (reference measuring point) can be shifted as required by simply pressing the push-button. If the offset calibration is carried out in a pressureless condition, this point can be considered as the zero-point state. If offset calibration is carried by applying a certain pressure value, the entire measuring range is shifted by this applied pressure value.

A jumper is available for changing the response time of the output signal. If the jumper is in place, the response time is slow (factory setting), which is useful for suppressing brief pressure peaks. If the application requires a fast response time, the jumper must be removed.

## Installation

The unit can be mounted in any position as the zero offset calibration eliminates any possible position error.

### MAIN OFFICE BRESSANONE

I-39042 Bressanone (BZ) tel: +39 0472 830526  
via Julius-Durst-Str. 50 fax: +39 0472 831840  
VAT No. IT02748450216 www.industrietechnik.it

982R

## Technical data

Supply voltage	18...30 V AC/DC( 3-wire version) 18...30 V DC(2-wire version)
Output signal	0...10 V or 4...20 mA (3-wire version) 4...20 mA (2-wire version)
Maximum current draw	< 40 mA at 3-wire / 0...10 V < 60 mA at 3-wire / 4...20 mA < 21 mA at 2-wire / 4...20 mA
Load for output	20...500 $\Omega$ ( 4...20 mA) $\geq$ 1k $\Omega$ (0...10 V )
Medium	Air and non-combustible and non-aggressive gases
Working and storage temperature	-20...70°C
Linearity (incl. hysteresis and repeatability)	$\leq \pm 0.5$ % FS, min $\pm 1$ Pa
Uncertainty (Total Error band w/o long-term and temperature effects)	$\pm 1$ % FS, min. $\pm 1$ Pa
Long-term stability	$\leq \pm 1$ % FS
Humidity	0...95 % RH, non-condensing
Response time	Standard 1.0 and 0.2 s
Process connection P1 and P2	6 mm hose connection
Electrical connection	Spring terminals for wires and leads up to 1.5 mm <sup>2</sup>
Mounting	Screw mounting with serrated screws
Housing dimensions	approx. $\varnothing$ 66 x 28 mm
Weight	approx. 50 gr
Protection class	IP54
CE Conformance	EMC Directive RoHS Directive
Packaging	60 pcs. per carton

## Material

Material, housing	ABS
-------------------	-----

## Pressure ranges

Pressure range	Overload capacity	Bursting pressure	Additional uncertainty with temperature [% FS/ 10K]
0...100 Pa	60 kPa	100 kPa	± 1.0
0...250 Pa	60 kPa	100 kPa	± 0.7
0...500 Pa	75 kPa	125 kPa	±0.5
0...1 kPa	75 kPa	125 kPa	± 0.3
0...2.5 kPa	85 kPa	135 kPa	± 0.3
0...5 kPa	85 kPa	135 kPa	± 0.3
0...10 kPa	85 kPa	135 kPa	± 0.3
0...25 kPa	135 kPa	275 kPa	± 0.3
0...50 kPa	200 kPa	400 kPa	± 0.3
0...100 kPa	200 kPa	400 kPa	± 0.3

## Order matrix

	982R.6	Range (Pa)	Output signal
		0...100 Pa ( 1.0 mbar)	<b>23</b>
		0...250 Pa ( 2.5 mbar)	<b>33</b>
		0...500 Pa ( 5.0 mbar)	<b>43</b>
		0...1 kPa ( 10 mbar)	<b>53</b>
		0...2.5 kPa ( 25 mbar)	<b>63</b>
		0...5 kPa ( 50 mbar)	<b>73</b>
		0...10 kPa ( 100 mbar)	<b>83</b>
		0...25 kPa ( 250 mbar)	<b>93</b>
		0...50 kPa ( 500 mbar)	<b>A3</b>
		0...100 kPa ( 1000 mbar)	<b>B3</b>
		0...10V, 3-wire	<b>706</b>
		4...20 mA, 3-wire	<b>D06</b>
		4...20 mA, 2-wire	<b>206</b>

Example: 982R.623706: differential pressure transmitter with measuring range 0...100 Pa, output 0...10 V, 3-wire



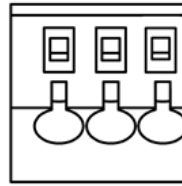
This product carries the CE-mark. More information is available at [www.industrietechnik.it](http://www.industrietechnik.it).

## Accessories

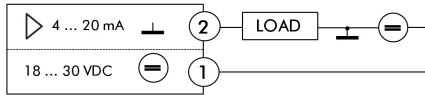
Article	Description
DBZ-06	consisting of 2m PVC hose and 2 plastic pipes

## Terminal assignments

### Spring terminals 2-or 3-pole

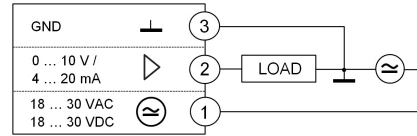


2 POLE



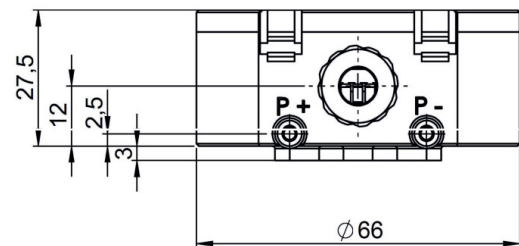
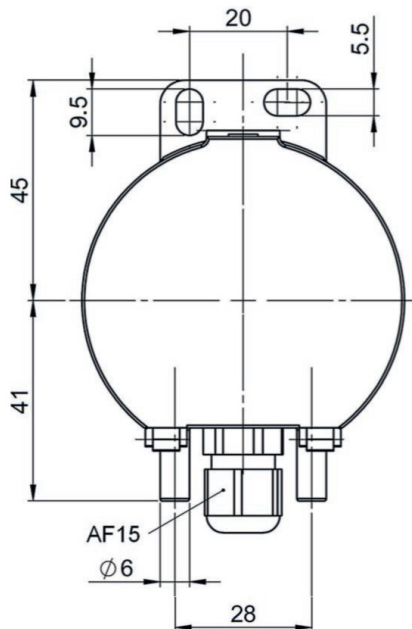
2	Output signal (4...20 mA)
1	Supply voltage (18...30 V DC)

3 POLE



3	Ground (GND)
2	Output signal (0...10 V / 4...20 mA)
2	Supply voltage (18...30 V AC/ DC)

## Dimensional Drawings



### MAIN OFFICE BRESSANONE

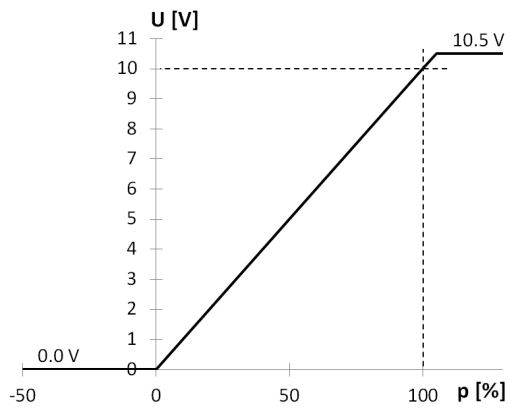
I-39042 Bressanone (BZ) tel: +39 0472 830626  
 via Julius-Durst-Str. 50 fax: +39 0472 831840  
 VAT No. IT02748450216 www.industrietechnik.it

982R

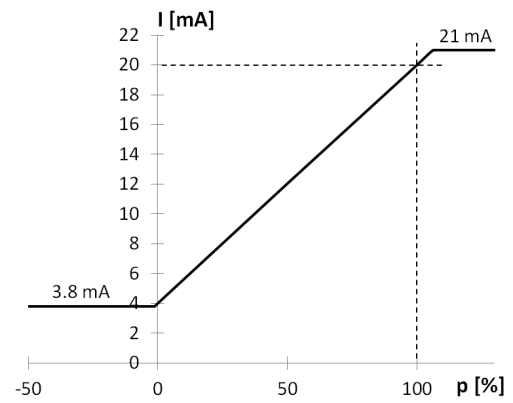
4 (5)

## Analog output signal

0...10 V



4...20 mA



## Documentation

All documentation can be downloaded from [www.industrietechnik.it](http://www.industrietechnik.it).