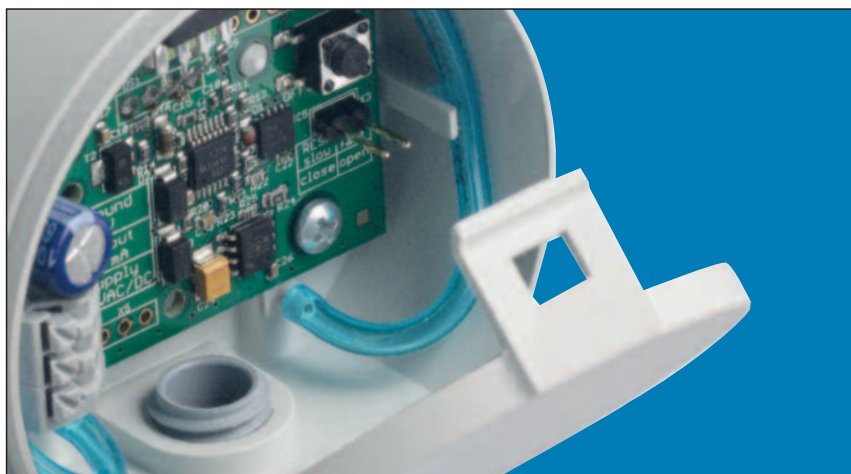


Beck.

Differential pressure transmitter 982R



Differential pressure transmitter 982R



General description

The differential pressure transmitters of the 982M series are used to measure differential pressure, overpressure and vacuum. They provide one adjustable pressure range and one output signal.

Applications

Monitoring of gaseous, non-aggressive media. Possible usage areas are:

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

Adjustable pressure range

The end of the pressure range can be reduced to 50% of its factory set full scale value simply by the use of a push-button.

Output signal

0 ... 10 V or 4 ... 20 mA. Other signals on request.

Configurable response time

The response time of the output signal can be configured using a jumper. 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.

Easy offset calibration

The output signal can be calibrated to zero by pressing the push-button (pressure transmitter must be depressurised).

Volume flow measurement (optional)

The shape of the output signal can be switched from linear to square root using a jumper in order to measure the volume flow via a differential pressure.

Reset

The transmitter can be reset to its factory setting, just by pressing the push-button for 10 sec.

Measuring method

Piezoresistive pressure transducer

Mounting position

Can be mounted in any position. The zero offset calibration eliminates any possible position error.

Technical data

Supply voltage	18 ... 30 VAC/DC
Output signal	0 ... 10 V or 4 ... 20 mA
Load for output	20 ... 500 Ω
4 ... 20 mA	$\geq 1\text{k}\Omega$ (≤ 10 mA)
0 ... 10 V	
Max. current draw	< 40 mA
Pressure medium	Air and non-aggressive gases
Linearity and hysteresis error	$\leq \pm 1\%$ of FS
Working temperature	0 ... 50°C
Storage temperature	- 10 ... 70°C
Typical long-term stability	$\leq \pm 0,5\%$ to $\pm 2,5\%$ of FS/year, depending on pressure range
Repetition accuracy	$\leq \pm 0,2\%$ of FS
Position dependence	$\leq \pm 0,2\%$ of FS/g
Humidity	0 ... 95 % rel, non-condensing
Response time, selectable	0,1 - 1,0 s
Process connection	6 mm hose connection
Electrical connection	Spring terminals for wires and leads up to 1,5 mm ²
Mounting	Screw mounting with serrated screws
Housing material	ABS
Housing dimensions	ca. $\varnothing 66 \times 28$ mm
Weight	50 g
Cable conduit for protection cap	M12x1,5 threaded connection, made of polyamide
Protection class EN 60529	IP 54
Conformity	EN 60770, EN 61326, 2011/65/EU (RoHS II)

Download the declaration of conformity at:
www.beck-sensors.com

Pressure ranges

Model	Range	Overload capacity	Bursting pressure	Temperature error
982R.623	0... 100 Pa	60 kPa	100 kPa	≤ ± 2,5 % of full scale
982R.633	0... 250 Pa	60 kPa	100 kPa	≤ ± 2,5 % of full scale
982R.643	0... 500 Pa	60 kPa	100 kPa	≤ ± 2,5 % of full scale
982R.653	0... 1000 Pa	75 kPa	125 kPa	≤ ± 1,0 % of full scale
982R.663	0... 2,5 kPa	85 kPa	135 kPa	≤ ± 1,0 % of full scale
982R.673	0... 5,0 kPa	85 kPa	135 kPa	≤ ± 1,0 % of full scale
982R.683	0... 10 kPa	85 kPa	135 kPa	≤ ± 1,0 % of full scale
982R.693	0... 25 kPa	135 kPa	275 kPa	≤ ± 1,0 % of full scale
982R.6A3	0... 50 kPa	200 kPa	400 kPa	≤ ± 1,0 % of full scale
982R.6B3	0... 100 kPa	200 kPa	400 kPa	≤ ± 1,0 % of full scale
982R.6F3	0... 250 kPa	400 kPa	800 kPa	≤ ± 1,0 % of full scale

Other pressure ranges on request.

Order matrix

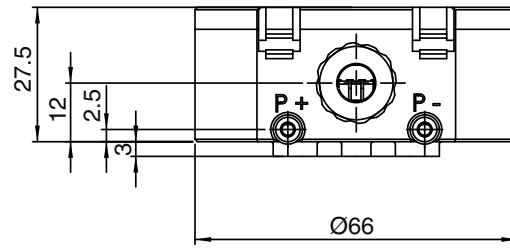
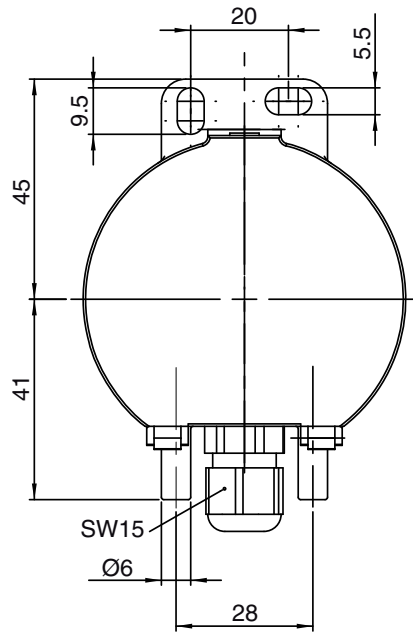
Configurable pressure ranges	0... 100 Pa	(0... 1,0 mbar)	982R.6	2				
	0... 250 Pa	(0... 2,5 mbar)		3				
	0... 500 Pa	(0... 5,0 mbar)		4				
	0... 1000 Pa	(0... 10 mbar)		5				
	0... 2,5 kPa	(0... 25 mbar)		6				
	0... 5,0 kPa	(0... 50 mbar)		7				
	0... 10,0 kPa	(0... 100 mbar)		8				
	0... 25,0 kPa	(0... 250 mbar)		9				
	0... 50,0 kPa	(0... 500 mbar)		A				
	0... 100 kPa	(0... 1,0 bar)		B				
0... 250 kPa	(0... 2,5 bar)	F						
Pressure unit	Pascal			3				
	mbar			1				
Output signal and supply voltage	0 ... 10 V, 3-wire, linear, 24 VAC/VDC				7			
	4 ... 20 mA, 3-wire, linear, 24 VAC/VDC				D			
	0 ... 10 V, 3-wire, square rooted, 24 VAC/VDC				L			
	4 ... 20 mA, 3-wire, square rooted, 24 VAC/VDC				P			
	4 ... 20 mA, 2-wire, linear, 24 VDC				2			
4 ... 20 mA, 2-wire, square rooted, 24 VDC				U				
Display	not available						0	
Electrical connection via	spring terminals							6

Accessories

Climaset® consisting of 2 m PVC hose and 2 plastic pipes	Artikel-Nr. 6555
Climaset® consisting of 2 m Silicone hose and 2 plastic pipes	Artikel-Nr. 6557
Climaset® consisting of 2 m PVC hose and 2 angled metal pipes	Artikel-Nr. 6550
Climaset® consisting of 2 m Silicone and 2 angled metal pipes	Artikel-Nr. 6556
Duct connecting pipe for Climaset® 6555	Artikel-Nr. 6551
Angled metal pipe for Climaset® 6550	Artikel-Nr. 6552
Rubber grommet for Climaset® 6550	Artikel-Nr. 6553
Roll with 100 m PVC hose	Artikel-Nr. 6424
Roll with 100 m Silicone hose	Artikel-Nr. 6425

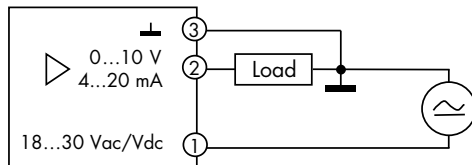
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Dimensions



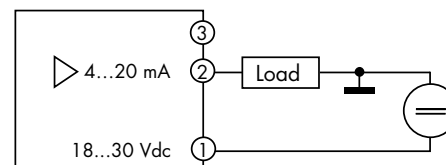
Terminal assignments

3-wire version



3	Ground GND
2	Output signal 0 ... 10 V/4...20 mA
1	Supply voltage 18 ... 30 VAC/VDC

2-wire version



3	Ground GND
2	Output signal 4 ... 20 mA
1	Supply voltage 18 ... 30 VDC



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