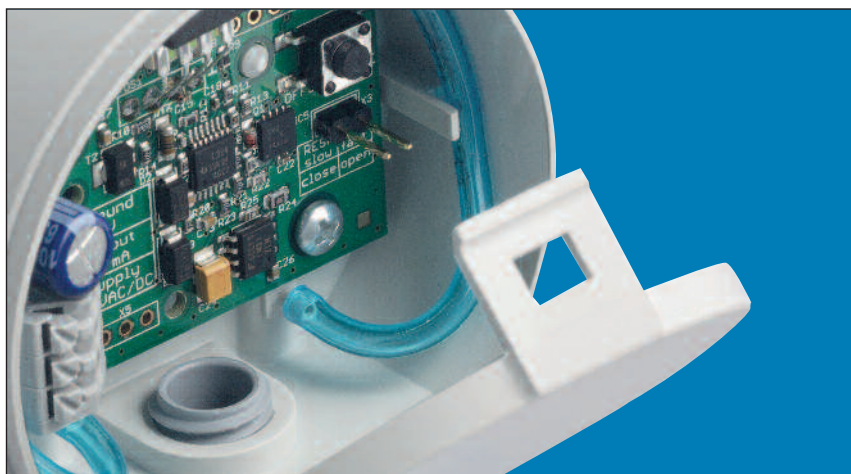


# Beck.

## 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 ... 10V or 4 ... 20mA. 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 10sec.

## Measuring method

Piezoresistive pressure transducer

## Mounting position

Can be mounted in any position. The self-compensating piezoresistive pressure transducer eliminates any possible mounting error.

## Technical data

Supply voltage	18 ... 30VAC/DC
Output signal	0 ... 10V or 4 ... 20mA
Load for 4 ... 20mA output	20 ... 500Ω
Max. current draw	< 40mA
Pressure medium	Air and non-aggressive gases
Linearity and hysteresis error	≤ ± 1 % of FS
Working temperature	0 ... 50°C
Storage temperature	- 10 ... 70°C
Typical long-term stability	≤ ± 0,5 % bis ± 2,5 % of FS/year, depending on pressure range
Repetition accuracy	≤ ± 0,2 % of FS
Position dependence	≤ ± 0,02 % of FS/g
Humidity	0 ... 95 % rel, non-condensing
Response time, selectable	0,1 - 1,0s
Process connection	6mm 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 material	ABS
Housing dimensions	ca. Ø 66 x 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: <a href="http://www.beck-sensors.com">www.beck-sensors.com</a>

## Pressure ranges

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

Other pressure ranges on request.

## Order matrix

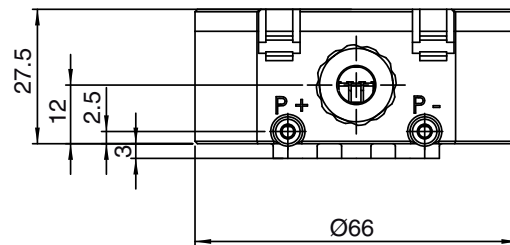
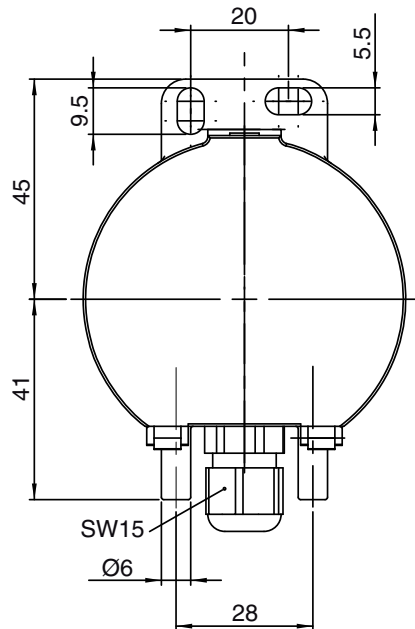
Configurable pressure ranges	0... 100 Pa	(0... 1,0 mbar)	<b>982R.6</b>	2				
	0... 250 Pa	(0... 2,5 mbar)		3				
	0... 500 Pa	(0... 5,0 mbar)		4				
	0... 1000 Pa	(0... 10 mbar)		5				
	0... 2,5 kPa	(0... 25 mbar)		6				
	0... 5,0 kPa	(0... 50 mbar)		7				
	0... 10,0 kPa	(0... 100 mbar)		8				
	0... 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		
Display	not available						0	
Electrical connection via	spring terminals							6

## Accessories

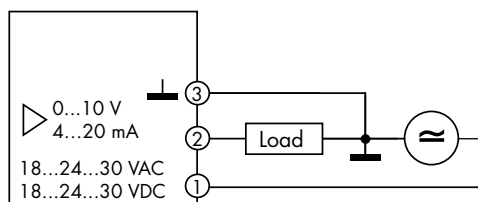
Climaset® consisting of 2 m PVC hose and 2 plastic pipes	Artikel-Nr. 6555
Climaset® consisting of 2 m Silicone hose and 2 plastic pipes	Artikel-Nr. 6557
Climaset® consisting of 2 m PVC hose and 2 angled metal pipes	Artikel-Nr. 6550
Climaset® consisting of 2 m Silicone and 2 angled metal pipes	Artikel-Nr. 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

# Differential pressure transmitter 982R

## 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



Beck GmbH  
Druckkontrolltechnik  
P.O. Box 11 31  
D-71140 Steinenbronn  
Telephone +49 (71 57) 52 87-0  
Telefax +49 (71 57) 52 87-83  
e-mail sales@beck-sensors.com  
<http://www.beck-sensors.com>