



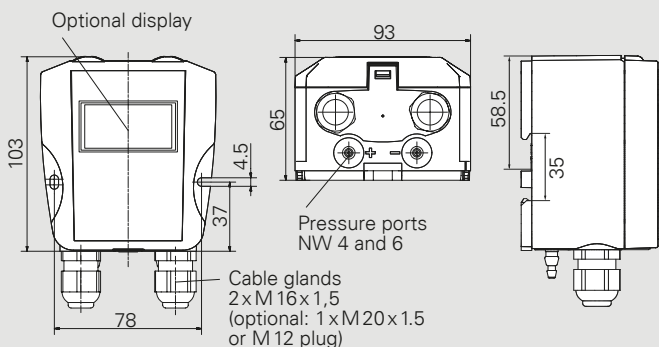
Picture: Version with display

## Features

- Compact differential pressure transmitter for basic applications in cleanrooms, machines, HVAC or filter monitoring
- Robust ABS housing with IP67 for top-hat rail or wall mounting
- $\pm$  and asymmetric measurement ranges
- Either with one fixed measurement range or toggling between 4 different measurement ranges
- Pressure units Pa, kPa (linear output signal)
- Square-root output signal in % of max. possible value
- Configurable via DIP switches
- Zero point correction and via internal pushbutton or digital input
- Fine adjustment via internal pushbutton

## Optional

- 3 1/2 digits display
- 2-wire system (ZWL) or relay (6 A)
- Plug for easy commissioning



Dimensions in mm

Measurement ranges (also $\pm$ ) others available upon request	50/100/200/500 Pa 1/2.5/5/10 kPa
Measurement accuracy (at 22°C) <sup>1)</sup>	$\pm 1\%$ of the set value plus $\pm 0.5$ Pa for measurement ranges $\leq 250$ Pa plus $\pm 1$ Pa
Temperature coefficient span	0.1 % of max. value/K
Temperature coefficient zero point	0.1 % of max. value/K
Max. system pressure / Overload capacity	$\pm 25$ kPa: measurement ranges $\leq 250$ Pa $\pm 50$ kPa: measurement ranges $> 250$ Pa
Medium	air, all non-aggressive and non-flammable gases
Sensor response time	25 ms
Ambient temperature	-10..70°C with display: 0..50°C
Storage temperature	-10..70°C with display: -5..55°C
Calibration temperature	22°C
Air humidity (medium)	0..80% RH
Power consumption	< 1 W (optional relay: < 4 W)
Pressure ports	for tubing NW 4 and 6 mm
Protection class	IP67
Weight	approx. 200 g
Certificates	CE

<sup>1)</sup> Uncertainty of the reference 0.3 Pa; precision of the reference 0.12 Pa relevant for measuring ranges  $\leq \pm 1.5$  kPa or 3 kPa

Output <sup>2)</sup>	A
0..10 V ( $R_L \geq 50$ k $\Omega$ )	1
2..10 V ( $R_L \geq 50$ k $\Omega$ )	2
0..20 mA ( $R_L \leq 500$ $\Omega$ )	0
4..20 mA ( $R_L \leq 500$ $\Omega$ )	4

Contact point <sup>4)</sup>	D
none	0
1 relay (exchange contacts) <sup>4)</sup> max. 230 VAC, 6 A (not for two-wire)	1

<sup>2)</sup> can be configured using DIP switches, conversion into square root signal adjustable (in % of max. possible value)

<sup>4)</sup> Relay parameters can be pre-set on request

Power supply	B
24 VAC/DC 50/60 Hz $\pm 10\%$ reverse pole protection	AC/DC
15..32 VDC two-wire (only for A=4)	ZWL
24 VDC with galvanic separation	VDC

Display	E
none	0
3 1/2 digits <sup>5)</sup>	1

<sup>5)</sup> Display up to  $\pm 1999$

Measurement range	C
Standard <sup>3)</sup> (e.g. 0..100 Pa)	
50 Pa/100 Pa/ 200 Pa/250 Pa	1
100 Pa/200 Pa/ 750 Pa/1.25 kPa	2
250 Pa/500 Pa/ 1 kPa/2.5 kPa	3
1 kPa/2.5 kPa/ 5 kPa/10 kPa	4
$\pm 50$ Pa/ $\pm 100$ Pa/ $\pm 200$ Pa/ $\pm 250$ Pa	1A
$\pm 100$ Pa/ $\pm 200$ Pa/ $\pm 750$ Pa/ $\pm 1.25$ kPa	2A
$\pm 250$ Pa/ $\pm 500$ Pa/ $\pm 1$ kPa/ $\pm 2.5$ kPa	3A
$\pm 1$ kPa/ $\pm 2.5$ kPa/ $\pm 5$ kPa/ $\pm 10$ kPa	4A

Time constant <sup>6)</sup>	F
25 msec	025
1 sec	1
4 sec	4
10 sec	10

<sup>6)</sup> Factory preset, configurable via button

Electrical connection	G
spring-type terminal, 2 x M 16 cable glands	16
spring-type terminal, M20 cable gland <sup>7)</sup>	20
M 12 plug <sup>7)</sup>	12

<sup>7)</sup> not for changeover contacts / relay (D)









Calibration certificate	H
none	0
Factory calibration	I
Calibration according to DKD-R 6-1	D

<sup>3)</sup> also  $\pm$  measuring ranges

Order code	A	B	C	D	E	F	G	H
PS17	-	-	-	-	-	-	-	-

# MEASUREMENT OF DIFFERENTIAL PRESSURE

Measurement of differential pressure is useful in a broad range of applications. It is used in ventilation and air-conditioning technology but also in many areas of air handling process technology. The next pages show a number of these. halstrup-walcher offers a wide range of products for stationary measurement of differential pressure:

Product	P26	P34	P29	PU/PI/PIZ	PS27	REG21	PUC24	PUC28(K)
								
<b>Application</b>	High precision, freely scalable pressure transmitter for critical applications	Measuring transmitter with very small dimensions – ideal for the control cabinet	High precision, freely scalable pressure transmitter for natural gas	For standard applications. PIZ: in two wire technology	A basic sensor for simple applications	Measurement and regulation of pressure	Process monitoring for clean-rooms (Pa, °C, % rH), with stainless steel front	Process monitoring panel aluminium, anodised (optional: with calibration port) (Pa, °C, % rH)
<b>Housing installation</b>	Mounted on a wall/top-hat rail					Rack	Installed in wall (panel)	
<b>Max. measurement range</b>	± 100 kPa		0.. 10 kPa	± 100 kPa			± 250 Pa	
<b>Min. measurement range</b>	± 10 Pa		0.. 250 Pa	± 50 Pa			± 100 Pa	
<b>Measurement accuracy</b> (0.3 Pa margin of error for the reference)	± 0.2 % FS <sup>1)</sup> (optional) ± 0.5 % FS (standard)		± 0.2 % FS <sup>1)</sup> (optional) ± 0.5 % FS (standard)	± 0.2 % FS <sup>2)</sup> ± 0.5 % FS ± 1 % FS	± 2 % (≥ 100 Pa) or ± 3 % (for 50 Pa) of the set value	± 0.5 % FS ± 1 % FS	± 0.5 % FS <sup>1)</sup> (standard)	
<b>Square-root (volume flow)</b>	✓	✓ <sup>3)</sup>	✓	-	-	-	-	-
<b>Display</b>	optional	-	optional	optional	optional	✓	✓	✓

<sup>1)</sup> for measurement ranges ≤ 50 kPa

<sup>2)</sup> for measurement ranges ≥ 250 Pa and ≤ 50 kPa

<sup>3)</sup> optionally with stat. pressure sensor and temperature analogue output for compensation

## ACCESSORIES

### Certificates

DAkkS calibration certificate  
ISO factory calibration certificate

### Order no.

9601.0003  
9601.0002

### User software

You can set the parameters for our instruments or monitor and record measurements using a PC via a USB or RS232 interface. These features are supported by our free user software. This also allows you to transfer your settings to other devices by saving and reusing them.

### Connecting components

Silicone tubing ID 5 mm, OD 9 mm, red (please state length required) 9601.0160  
Silicone tubing ID 5 mm, OD 9 mm, blue (please state length required) 9601.0161  
Norprene tubing (please state length required) 9061.0132  
Y-piece for tubing 9601.0171

Our user software is compatible with the following pressure transmitters: PUC24, PUC28(K), P26, P34 and P29.

You can download the file here:

[www.halstrup-walcher.de/en/software](http://www.halstrup-walcher.de/en/software)

### Pressure ports

We can supply a wide range of customer-specific pressure ports, e.g. various cutting ring couplings or hose connectors.