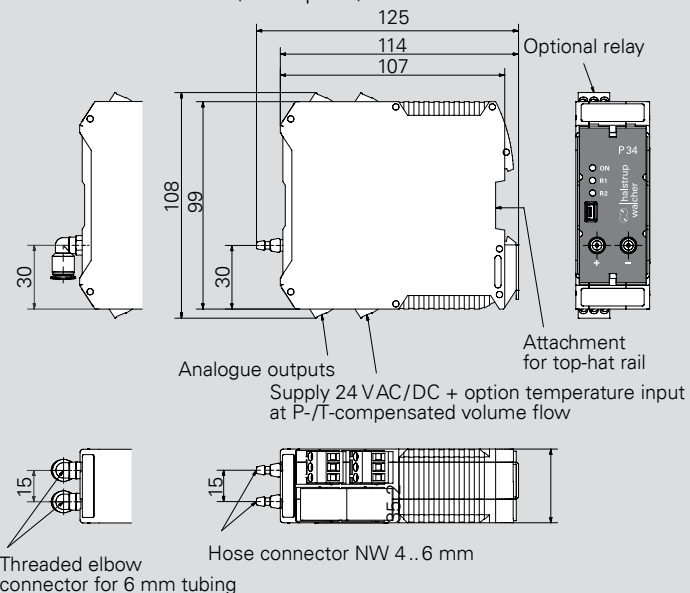




Features

- Differential pressure transmitter with very small dimensions – ideal for control cabinet installation
- Optional: P-/T-compensated volume flow (temperature analogue input and internal stat. pressure sensor)
- Optionally with relay
- Zero-point correction prevents zero-point drift
- Built-in valve provides a high level of overpressure protection
- Volume flow can be configured via k-factor, dP_{max}/V_{max} or 20 individual values
- USB interface²⁾: via PC-software scaling, characteristic line form and many other parameters can be set
- Free software available at www.halstrup-walcher.de/en/software
- Delivery possible already completely integrated into the control cabinet (on request)



Measured data differential pressure

Measurement ranges (also ± measurement ranges) others available upon request	10/50/100/250/500 Pa 1/2.5/5/10/20/50/100 kPa freely scalable from 10..100 % within a measurement range
Margin of error (0.3 Pa margin of error for the reference)	±0.2 % or ±0.5 % of max. value
Temperature coefficient span	0.03 % of max. value/K (10..50 °C)
Temperature coefficient zero point	±0 % (cyclical zero-point correction)
Max. system pressure/ Overload capacity	400 kPa measurement ranges ≥ 2.5 kPa 200 x measurement ranges < 2.5 kPa
Medium	air, all non-aggressive gases
Sensor response time	25 ms
Time constants	25 ms..60 s (adjustable)
Operating temperature	10..50 °C
Storage temperature	-10..70 °C
Power consumption	approx. 6 VA
Weight	approx. 450 g
Connections	Screw terminals (connection capacity 0.25..2.5 mm ²)
USB interface	USB 2.0 Full-Speed Slave (Mini USB)
Pressure ports	for tubing NW 4 or 6 mm
Protection class	IP20
Certificates	CE

Measured data for P-/T-compensated volume flow (optional)

Measured range absolute pressure	200 kPa
Accuracy absolute pressure	±2.0 % of max. value
Temperature input	4..20 mA, R _i = 130 Ω Temperature range freely scalable

Power supply

24 VAC/DC ± 10 %

Output (linear / root extracted) ¹⁾	A	Measurement range	B
0..10 V (R _L ≥ 2 kΩ)	1	Measurement range e.g. 0..10 Pa, -10..50 mbar, ±100 mmHg (etc.)	
0..20 mA (R _L ≤ 500 Ω)	0		
4..20 mA (R _L ≤ 500 Ω)	4		

¹⁾ output signals can be configured freely

Margin of error	C	Contact points	D
± 0.2 % of max. value	2	none	0
± 0.5 % of max. value	5	2 relays (changeover contacts) max. 230 VAC, 6 A	2

Application

Application	E
standard	A
P-/T-compensated volume flow	B

Tubing connectors

Tubing connectors	F
standard grommet for NW 4 or 6 mm tubing	0
threaded elbow connector for 6 mm tubing	W

Order code	A	B	C	D	E	F
P34	-	-	-	-	-	-









Can be pre-set on request:
Time constant, relay parameter, analogue output root-extracted / linear, deactivation of the cyclic zeroing

²⁾ Accessories: USB cable (Order no. 9601.0254)

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. You can find more information about our pressure sensor technology on p.6.

halstrup-walcher offers a wide range of products for stationary measurement of differential pressure:

Product	PUC24	PUC28(K)	P26	P34	P29	PU/PI/PIZ	PS27	REG21
Details on	p. 14	p. 15	p. 16	p. 17	p. 18	p. 19	p. 20	p. 21
								
Application	Process monitoring for clean-rooms (Pa, °C, % rH), with stainless steel front	Process monitoring panel aluminium, anodised (optional: with calibration port) (Pa, °C, % rH)	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
Housing installation	Installed in wall (panel)		Mounted on a wall/top-hat rail					Rack
Max. measurement range	± 250 Pa		± 100 kPa					
Min. measurement range	± 100 Pa		± 10 Pa		± 250 Pa		± 50 Pa	
Degree of measurement uncertainty (0.3 Pa margin of error for the reference)	± 0.5 % ¹⁾ (standard)		± 0.2 % ¹⁾ (optional) ± 0.5 % ¹⁾ (standard)		± 0.2 % ¹⁾ (optional) ± 0.5 % ¹⁾ (standard)		± 0.2 % ¹⁾²⁾ ± 0.5 % ¹⁾ ± 1 % ¹⁾ ± 2 % (≥ 100 Pa) or ± 3 % (for 50 Pa) of the set value	
Square-root (volume flow)	-	-	✓	✓ ³⁾	✓	-	-	-
Display	✓	✓	optional	-	optional	optional	optional	✓

¹⁾ of max. value ²⁾ for measurement ranges ≥ 250 Pa

³⁾ optionally with stat. pressure sensor and temperature analogue output for compensation

ACCESSORIES

Certificates (see p.42)

DAkkS calibration certificate (German)
DAkkS calibration certificate (English)
ISO factory calibration certificate

Order no.

9601.0003
9601.0004
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.

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

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
Norpren tubing (please state length required) 9061.0132
Y-piece for tubing 9601.0171

Pressure ports

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