

Measurement ranges others available upon request	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 % of max. value 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)
Overload capacity	100 kPa for measurement ranges ≥ 2.5 kPa 200 x for measurement ranges < 2.5 kPa
Medium	natural gas
Max. system pressure	100 kPa for all measurement ranges
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. 750 g
Cable glands	2 x M 16
Pressure ports	2 x laboratory nozzle DIN 12898
Protection class	IP 65
Certificates	CE, EN1127-1:2007

Output (linear/ root-extracted) ¹⁾	A
0..10 V (R _L ≥ 2 kΩ)	1
0..20mA (R _L ≤ 500 Ω)	0
4..20mA (R _L ≤ 500 Ω)	4
±5 V (R _L ≥ 2 kΩ)	5

Power supply	B
24 VDC ± 10 %	24 DC

¹⁾ output signals can be configured freely

Measurement range	C
Measurement range e.g. 0..250 Pa, -10..50 mbar, 0..100 mmHg (etc.)	

Margin of error	D
±0.2 % of max. value	2
±0.5 % of max. value	S

Display + keyboard	E
none	0
multi-coloured LCD and keyboard	LC

Tubing connections	F
standard for tubing NW 5..8 mm	0
cutting ring coupling 8 mm	S



Order code	A	B	C	D	E	F
P29						

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

TÜV-tested

As long as the customer observes the specified flushing process, special electronic encapsulation safely separates any ignition sources from flammable gas.

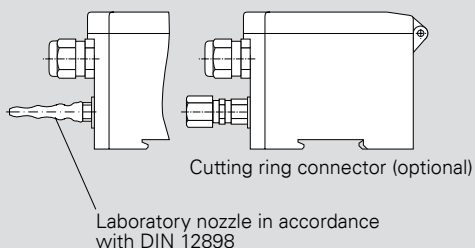
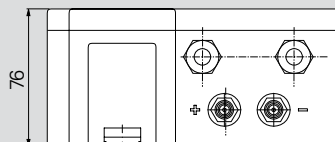
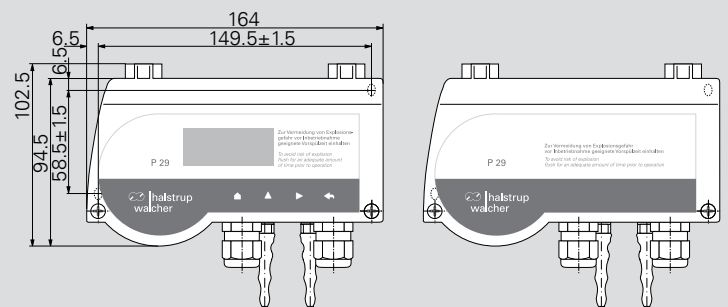


Features

- TÜV-tested differential pressure transmitter for natural gas
- Design changes and technical modifications keep ignition source and gas mixture safely separated (not suitable for Ex-applications)
- Also ± measurement ranges
- Scalable measurement range and display
- For pressure and volume flow measurement
- Zero-point correction prevents zero-point drift
- Built-in valve provides a high level of overload protection
- Also suitable for top-hat rail mounting
- Multilingual menu (English/French/German/Italian)

P29 with display









P29 without display



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.