

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	±0.2 % 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 ($R_L \geq 2 \text{ k}\Omega$)	1
0..20mA ($R_L \leq 500 \Omega$)	0
4..20mA ($R_L \leq 500 \Omega$)	4
±5 V ($R_L \geq 2 \text{ k}\Omega$)	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
P 29						

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

TÜV-tested

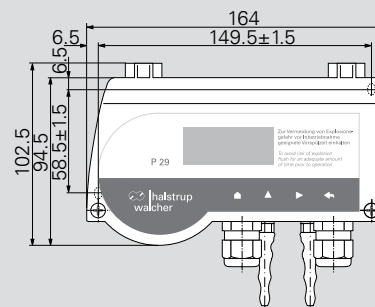
As long as a specified flushing process is observed, special electronic encapsulation safely separates any ignition sources from natural gas.



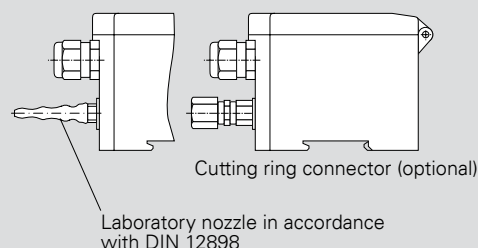
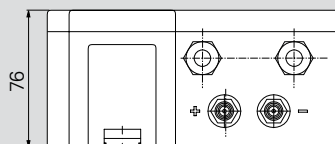
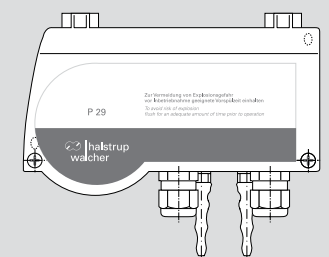
Features

- 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)

P 29 with display











P 29 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 pressure sensor technology on p. 6.

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

	PUC24	PUC28(K)	P26	P34	P29	PU/PI/PIZ	PS27	REG21
Details on	p. 18	p. 19	p. 20	p. 21	p. 22	p. 23	p. 24	p. 25
								
Application	Process monitoring for clean-rooms (Pa, °C, % rH), with stainless steel front	Process monitoring panel (optional: with calibration port) (Pa, °C, % rH), aluminium, anodised	High precision, scalable differential pressure transmitter	Measuring transmitter with very small dimensions – ideal for the control cabinet	Like P26, for natural gas	For standard applications. PIZ: PI 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	0.5 % ¹⁾ (standard)		0.2 % of the scaled range (40..100 % of max. value) ²⁾ (optional) 0.5 % of the scaled range (40..100 % of max. value) ²⁾ (standard)		0.2 % ¹⁾ (optional) 0.5 % ¹⁾ (standard)		0.2 % ^{1) 3)} 0.5 % ^{1) 2)} 1 % ¹⁾ 2 % (≥ 100 Pa) or 3 % (for 50 Pa) of the set value	
Square-root (volume flow)	-	-	✓	✓ ⁴⁾	✓	-	-	-
Display	✓	✓	optional	-	optional	optional	optional	✓

¹⁾ max. value of upper range value

²⁾ but not less than 0.3 Pa

³⁾ for measurement ranges ≥ 250 Pa only

⁴⁾ optionally with stat. pressure sensor and temperature analogue input for compensation

ACCESSORIES

Certificates (see p. 41)

DAkKS calibration certificate (German)	9601.0003
DAkKS calibration certificate (English)	9601.0004
ISO factory calibration certificate	9601.0002

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

Pressure ports

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

