P29

#### Measurement ranges 250/500 Pa others available upon request 1/2.5/5/10 kPa freely scalable from 10..100 % within a measurement range Measurement accuracy 1) ±0.2 % FS or ±0.5 % FS 0.03 % FS/K (10..50°C) Temperature coefficient span 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 100 kPa for all measurement ranges Max. system pressure Step response time (T63) 25 ms..60 s (adjustable) (Time constant) Rated temperature range 10..50°C -10..70°C Storage temperature Power consumption approx. 6 VA Weight approx. 750 g Cable glands 2 x M 16 Protection class **IP65** Certificates CE/UKCA, EN1127-1:2007

#### $^{11}\,\text{Measurement}$ accuracy for the reference 0.3 Pa, for measuring ranges $\leq \pm 1.5~\text{kPa}$

Output <sup>2)</sup> (linear/root-extracted)	Α
010 V (R <sub>L</sub> ≥2 kΩ)	1
020 mA (R <sub>L</sub> $\leq$ 500 Ω)	0
$420$ mA (R <sub>L</sub> $\le 500$ Ω)	4
$\pm 5 \text{ V } (\text{R}_{\text{L}} \ge 2 \text{ k}\Omega)$	5

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<sup>2)</sup> output signals can be configured freely

Power supply	В
24 V DC ± 10 %	24 DC

Measurement range	С
Measurement range e.g. 0250 Pa, 0100 mmHg (etc.)	

Measurement accuracy	D
± 0.2 % FS <sup>3)</sup>	2
±0.5% FS	S

 $^{3)}$  for measurement ranges  $\leq 50$  kPa

Display + keyboard	Е
none	0
multi-coloured LCD and keyboard	LC
Pressure 5.56 Pressure 10.36 Pressure 16.20	Pressure 5.56 Pa

Tubing connections	F
standard for tubing ID 58 mm	0
cutting ring coupling 6 mm	S6
cutting ring coupling 8 mm	S8

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

### Can be pre-set on request:

Time constant, relay parameter, analogue output root-extracted/linear, deactivation of the cyclic zeroing

Order code	Α	В	С	D	E	F	G
P29	-	-	-	-		-	-

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



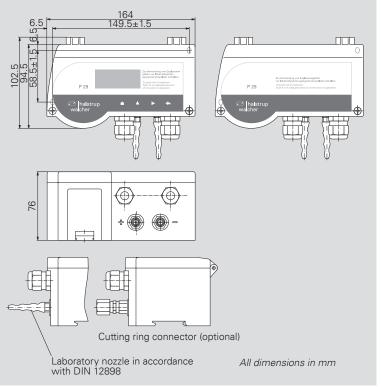


#### **Features**

- 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)
- 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)
- Extensive configuration options via: internal RS232 interfaces by means of free parameterization software or optional display and operating keys

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

Product	P26	P34	P29	PU/PI/PIZ	PS 27	PS 17
	21.9			No. 7	e sei	00 TG TG TG
Application	High precision, freely scalable pressure trans- mitter 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	Differential pressure transmitter for basic applications
Housing installation	Mounted on a wall/top-hat rail					
Max. measurement range	± 100 kPa 010 kPa ± 100 kPa ± 10 kPa				kPa	
Min. measurement range	± 10	) Pa	0 250 Pa	±50 Pa		
Measurement accuracy <sup>1)</sup>	± 0.2 % FS <sup>2</sup> ) (optional)  ± 0.5 % FS (standard)			± 0.2 % FS <sup>3)</sup> ± 0.5 % FS ± 1 % FS	± 3 % for measuring ranges < 100 Pa or ± 2 % for measuring ranges ≥ 100 Pa	± 1 % of the set final value plus ± 0,5 Pa for measuring ranges ≤ 250 Pa plus ± 1 Pa
Square-root (volume flow)	✓	✓ 2)	✓	-	-	✓
Display	optional	-	optional	optional	optional	optional

<sup>&</sup>lt;sup>1)</sup> Measurement accuracy for the reference 0.3 Pa, for measuring ranges  $\leq \pm 1.5$  kPa

# **ACCESSORIES**

#### **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 ID 4.8 mm, OD 8 mm, black (please state length required)	9061.0132
Y-piece for tubing NW 5mm	9601.0171

#### User software

You can set the parameters for our instruments or monitor and record measurements using a PC via a USB or RS 232 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: P26, P34 and P29.

You can download the file here:

www.halstrup-walcher.de/en/software

<sup>&</sup>lt;sup>2)</sup> for measurement ranges ≤ 50 kPa

 $<sup>^{3)}</sup>$  for measurement ranges  $\geq 250$  Pa and  $\leq 50$  kPa