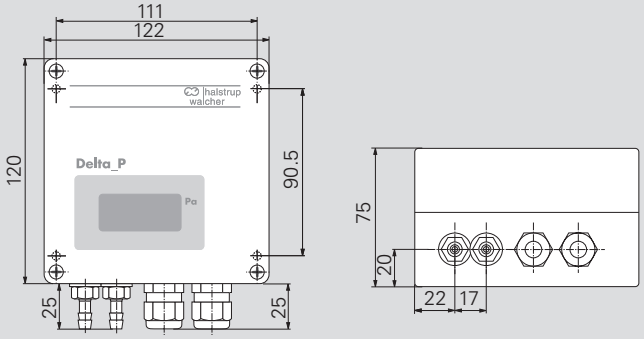
PU/PI/PIZ

Figure on the left: Version with 3 1/2 digit display

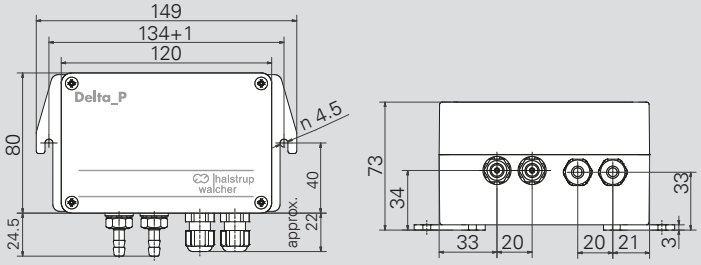
Features

- Differential pressure transmitter with linear curve for air-conditioning applications
- Also available as a two-wire system *("PIZ" model)*
- Also for ± measurement ranges and asymmetric measurement ranges
- With optional LCD

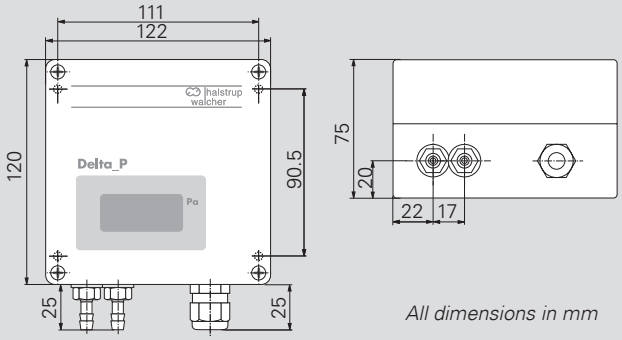
PU / PI with display



PU / PI without display



PIZ with display



All dimensions in mm

Measurement ranges (also ± measurement ranges) others available upon request	50/100/250/500 Pa 1/2.5/5/10/20/50/100 kPa
Measurement accuracy [1]	± 0.2 % FS [2] only for measurement ranges ≥ 250 Pa and ≤ 50 kPa or ± 0.5 % FS [2], or ± 1 % FS
Temperature coefficient span	0.04 %FS / K (10 .. 60 °C)
Temperature coefficient zero point	0.04 % FS/K (10 .. 60 °C)
Zero point stability	0.5 % FS/year
Overload capacity	10 x for measurement ranges ≤ 20 kPa 2 x for measurement ranges > 20 kPa
Medium	air, all non-aggressive gases
Max. system pressure	10 kPa for measurement ranges ≤ 10 kPa max. nominal pressure of the sensor for measurement ranges above 10 kPa
Step response time (T63) (Time constant)	20 ms (adjustable)
Rated temperature range	10 .. 60 °C
Storage temperature	-10 .. 70 °C
Power consumption	PU/PI: approx. 3 VA PIZ: max. 0.6 VA
Weight	approx. 0.8 kg
Cable glands others available upon request	PU/PI: 2 x PG 7 PIZ: 1 x PG 7
Pressure ports	for tubing NW 6 mm
Protection class	IP 65
Certificates	CE/UKCA

[1] Measurement accuracy for the reference 0.3 Pa, for measuring ranges ≤ ±1.5 kPa
[2] not for PIZ with ± measuring ranges

Model	Output	A
PU	0 .. 10 V ($R_L \geq 2$ kΩ)	U
PI	0 .. 20 mA ($R_L \leq 500$ Ω)	I0
PI	4 .. 20 mA ($R_L \leq 500$ Ω)	I4
PIZ	4 .. 20 mA two-wire ($R_L \leq 50$ [U_B (V) -10 (V)] Ω)	IZ

Measurement range	B
Measurement range e.g. 0 .. 100 Pa, 0 .. 60 mbar, ± 110 mmHg (etc.)	

Measurement accuracy	C
± 0.2 % FS [2] only for measurement ranges ≥ 250 Pa and ≤ 50 kPa	02
± 0.5 % FS [2]	05
± 1 % FS	1

[2] not for PIZ with ± measurement ranges

Supply voltage	D
24 V DC, +20 % / -15 % [3]	24D
24 V AC, ± 10 % [3] (with galvanic isolation)	24A
115 V AC, ± 10 % [3]	115
230 V AC, ± 10 % [3]	230
10 .. 32 V DC (two-wire system)	PIZ

[3] not for PIZ

Step response time	E
none	0
1 s	1
2 s	2
5 s	5

LCD	F
none	0
3 ½ digit (see foto)	3
4 ½ digit (only for PU / PI)	4

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

Order code	A	B	C	D	E	F	G
P		–	–	–	–	–	–

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	P 26	P 34	P 29	PU / PI / PIZ	PS 27	PS 17
						
Application	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	Differential pressure transmitter for basic applications
Housing installation	Mounted on a wall / top-hat rail					
Max. measurement range	± 100 kPa		0 .. 10 kPa	± 100 kPa	± 10 kPa	
Min. measurement range	± 10 Pa		0 .. 250 Pa	± 50 Pa		
Measurement accuracy [1]	± 0.2 % FS [2] (optional) ± 0.5 % FS (standard)			± 0.2 % FS [3] ± 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

[1] Measurement accuracy for the reference 0.3 Pa, for measuring ranges ≤ ±1.5 kPa

[2] for measurement ranges ≤ 50 kPa

[3] for measurement ranges ≥ 250 Pa and ≤ 50 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: P 26, P 34 and P 29.

You can download the file here:
www.halstrup-walcher.de/en/software