

EE600

Differential Pressure Sensor

The EE600 is dedicated for reliable measurement of differential pressure in HVAC, building automation and filter monitoring applications. The multi-range device can be employed for air as well as all non-flammable and non-aggressive gases.

Measurement Performance

The EE600 is available with full scale (FS) 1,000 Pa (4 inch Water Column) and 10,000 Pa (40 inch WC) and offers an outstanding accuracy of $\pm 0.5\%$ FS. Several measuring ranges are selectable with DIP-switches. The piezo-resistive, no flow-through pressure sensing element stands for outstanding long-term stability

Outputs

The measured data is available as analogue voltage and current signals at the spring loaded terminals.

Functional and Robust

The IP65 / NEMA 4 enclosure minimizes installation costs. External mounting holes allow for installation with closed cover, the electronics are thus protected against construction site pollution.

Configurable and Adjustable

Using DIP-switches on the electronics board, the user can select the pressure range, the output signal, the time constant as well as the units and the backlight of the large graphic display. A zero and span point adjustment can be easily performed with push buttons on the electronics board.



Features

Multi-range

- » 0 ... 250 / 500 / 750 / 1000 Pa
- » 0 ... 2500 / 5000 / 7500 / 10000 Pa
- » $\pm 0.5\%$ FS accuracy

Knockout for 1/2" conduit fitting (US)

Graphic display with backlight

External mounting holes

- » Mounting with closed cover
- » Electronics protected against construction site pollution
- » Easy and fast mounting

Status LED
Spring terminals

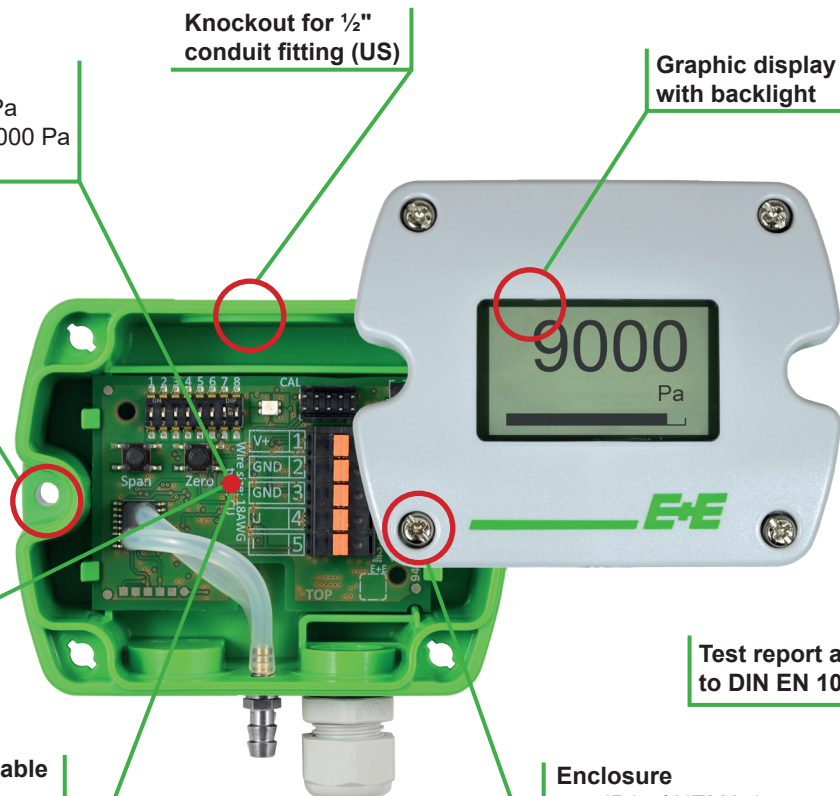
Test report according to DIN EN 10204 – 2.2

User configurable and adjustable

- » Pressure range
- » Output signal
- » Response time
- » Display units and backlight
- » Zero and span point adjustment

Enclosure

- » IP65 / NEMA 4 protection class
- » Bayonet screws - open/closed with a 1/4 rotation



Technical Data

Measured Value

Differential Pressure (Δp)

Measurement principle	Piezoresistive, no flow-through	
Measurement range	I: 0...250 / 500 / 750 / 1000 Pa	(0...1 / 2 / 3 / 4 inch WC)
selectable with DIP switches	II: 0...2500 / 5000 / 7500 / 10000 Pa	(0...10 / 20 / 30 / 40 inch WC)
Accuracy at 20 °C (68 °F)	± 0.5 % FS	
(incl. hysteresis, non-linearity and repeatability)	FS = full scale (1000 Pa or 10000 Pa)	
Response time t_{90}	50 ms / 500 ms / 2 s / 4 s selectable with DIP switches ¹⁾	
Temperature dependency	typ. < 0.03 % from FS/K	
Long-term stability	< 0.5 % from FS/year	
Overload limits		
0...1000 Pa (4 inch WC)	± 10000 Pa (± 40 inch WC)	
0...10000 Pa (40 inch WC)	± 80000 Pa (± 320 inch WC)	

Outputs

Analogue outputs	0-5 V or 0-10 V	-1 mA < I_L < 1 mA
selectable with	and ²⁾	
DIP switches ¹⁾	0-20 mA or 4-20 mA (3-wire)	$R_L \leq 500$ Ohm

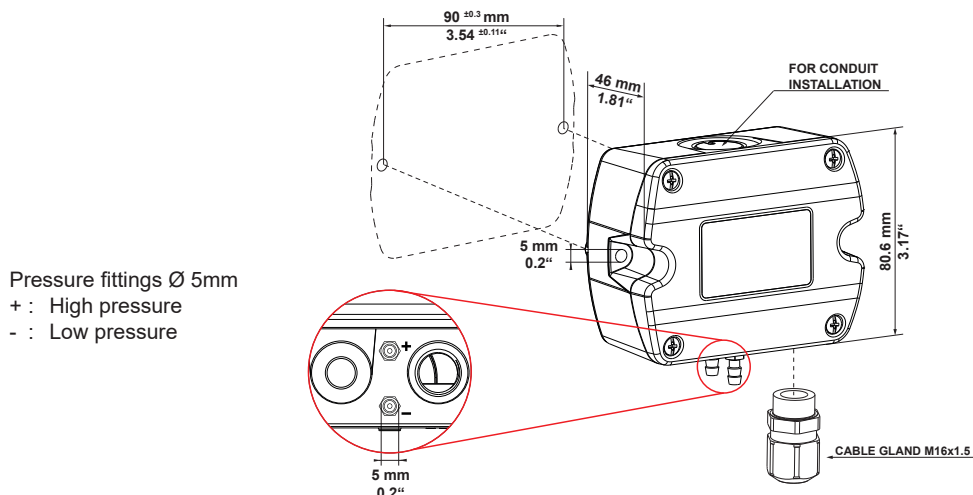
General

Power supply	15-35 V DC or 24 V AC ± 20 %
Current consumption	typ. 18 mA (without display)
at 0 Pa / 24 V DC	typ. 43 mA (with display and backlight)
Display	Graphic, with backlight
Display units	Pa, mbar, inch WC, kPa selectable with DIP switches ¹⁾
Connection	Spring terminals, max. 1.5 mm ²
Housing material	Polycarbonate, UL94V-0 (with display UL94HB) approved
Protection class	IP65 / NEMA 4
Cable gland	M16 x 1.5
Electromagnetic compatibility	EN61326-1 EN61326-2-3
Humidity range	0...95 % RH (non condensing)
Temperature ranges	Operation: -20...60 °C (-4...140 °F) Storage: -40...70 °C (-40...158 °F)



1) Factory setup: Measurement range 0...100%; Response time t_{90} : 50 ms; Display unit: Pa; Display backlight: on; Analogue outputs: 0-10 V and 4-20 mA
2) Voltage and current output signals available simultaneously at the spring loaded terminals.

Dimensions (mm/inch)



Accessories (included in the scope of supply)

Pressure connection set:

2 m (6.6 ft) PVC hose with two ABS pressure connection nipples.
 For details see operation manual and data sheet "Accessories".



Ordering Guide

		EE600
Measuring range	0...1000 Pa (0...4 inch WC, 0-10 mbar, 0-1 kPa)	HV52
	0...10000 Pa (0...40 inch WC, 0-100 mbar, 0-10 kPa)	HV53
Display	without display	no code
	with display	D2

Order Examples

EE600-HV52

Measuring range: 0...1000 Pa (0...4 inch WC, 0-10 mbar, 0-1 kPa)
 Display: without display

EE600-HV53D2

Measuring range: 0...10000 Pa (0...40 inch WC, 0-100 mbar, 0-10 kPa)
 Display: with display