

Margin of error	± 0.5 % of max. value
Overload capacity	10 x for measurement ranges ≤ 10 kPa 2 x for measurement ranges > 10 kPa 1.2 x in the 200 kPa measurement range
Calculation of air speed	$v = 1.291 \cdot \sqrt{\Delta p}$ with v in m/s and Δp = differential pressure at the pitot tube in Pa (pitot factor and density adjustable) with telescoping pitot tube, see p. 29
Zero-point correction	performed electronically by pressing zero-point key
Medium	air, all non-aggressive gases
Analog output	0..2 V ($R_L \geq 2 \text{ k}\Omega$) 0..1..2 V ($R_L \geq 2 \text{ k}\Omega$) for negative and positive measurement ranges
Display	3 1/2 digit LCD, character height = 10 mm
Time constants	1..10 s
Operating temperature	0..50 °C
Storage temperature	-10..70 °C
Power supply	9V battery (service life approx. 100 h) (display reads "low bat" when power falls below a certain minimum level) Switches off automatically after approx. 20 min.
Weight	approx. 0.4 kg
Pressure ports	for tubing NW 4..6 mm
Certificates	CE

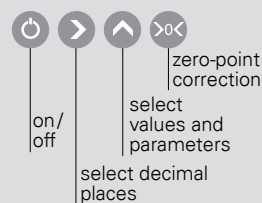
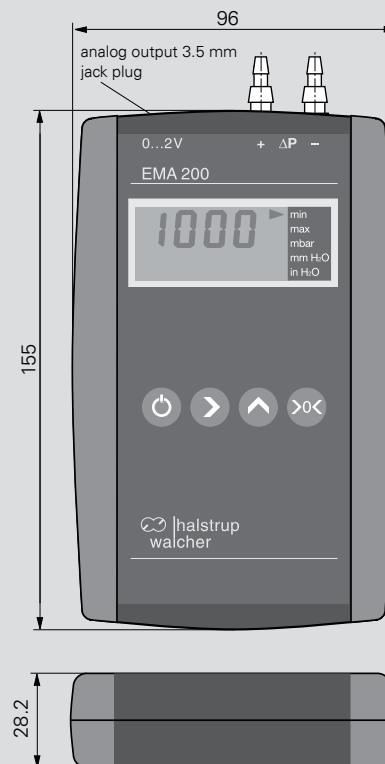
Measurement range			A
± 200 Pa	(± 2 mbar)	1.5..18 m/s	0
± 2 kPa	(± 20 mbar)	5..58 m/s	1
± 20 kPa	(± 200 mbar)	15..180 m/s	10
± 200 kPa	(± 2 000 mbar)		100

Order code	A
EMA 200	

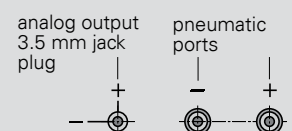


Features



- High-end pressure gauge for differential pressure and flow measurements
- Adjustable pitot factor and density
- Zero-point correction at the push of a button
- Min./max. value memory
- Temperature measurement



Connection diagram



OVERVIEW

	EMA 200	EMA 84
Details on	p. 30	p. 31
		
Features	Portable digital pressure gauge with min./max. value memory and free selection of units, also suitable for flow measurements	Rugged, portable digital pressure gauge
Measurement ranges	± 200 Pa (± 2 mbar) ± 2 kPa (± 20 mbar) ± 20 kPa (± 200 mbar) ± 200 kPa (± 2 000 mbar)	0.. 100 Pa (0.. 1 mbar) 0.. 1 kPa (0.. 10 mbar) 0.. 10 kPa (0.. 100 mbar) 0.. 100 kPa (0.. 1 000 mbar)
Margin of error	± 0.5 % of max. value	± 0.2 % of max. value, min. 0.3 Pa for measurement ranges 1.. 50 kPa or ± 0.5 % of max. value for measurement ranges 1.. 100 kPa or ± 1 % of max. value

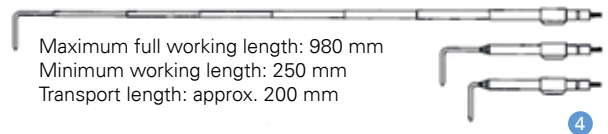
The EMA 200 is available with 4 measurement ranges. The units (Pa, kPa) are shown in the display or printed on the keyboard film (mbar, mmH₂O, inH₂O).

The EMA 84 is also available with 4 measurement ranges. The following units may be selected: Pa/mbar and mbar/kPa. The measurement range selected (incl. the units) is printed on the device.

ACCESSORIES

- Shoulder bag EMA 200
- Carrying bag EMA 84
- Shoulder bag EMA 84 (with LCD viewing window)
- DAkKS calibration certificate, German (p. 41)
- DAkKS calibration certificate, English (p. 41)
- ISO factory calibration certificate
- Connecting components (tubing etc.)
- Telescoping pitot tube (EMA200) for flow measurements

- Order no.**
- 9074.0001 ①
 - 9063.0001 ②
 - 9064.0001 ③
 - 9601.0003
 - 9601.0004
 - 9601.0002 see p. 15
 - 9061.0193 ④



APPLICATION

After start-up of an air-conditioning system and cleanroom, or during maintenance or validation work, it is necessary to monitor a large number of pressure values. It is therefore essential to measure and record the following values accurately:

- ventilator pressure
- pressure drop at power units and filters
- overpressure in the cleanroom
- flow in the air duct and rooms

The EMA range of handheld pressure gauges are simple to operate, have a rugged design and are optimised for long-term use in building services engineering and industrial applications.

