

Margin of error KAL 100	± 0.2 % of max. value + 0.3 Pa Measurement ranges > 0..200 Pa / ±200 Pa ± 0.5 % of max. value + 0.3 Pa Measurement ranges ≤ 0..200 Pa / ±200 Pa
Margin of error KAL 200	± 0.1 % of max. value + 0.3 Pa Measurement ranges > 0..200 Pa / ±200 Pa ± 0.2 % of max. value + 0.3 Pa Measurement ranges 0..200 Pa / ±200 Pa ± 0.3 % of max. value + 0.3 Pa Measurement ranges 0..100 Pa / ±100 Pa
Hysteresis	0.1 % of max. value
Overload capacity	600 kPa for measurement ranges > 3 kPa 200 x for measurement ranges ≤ 3 kPa
Temperature coefficient zero point	± 0 % (cyclical zero-point correction)
Temperature coefficient span	KAL 100: 0.04 % of max. value / K (10..40 °C) KAL 200: 0.03 % of max. value / K (10..40 °C)
Calibration temperature	22 °C
Medium	air, all non-aggressive gases
Measurement input/ power supply (test object)	0..10 V, 0/4..20 mA Accuracy: 0.2 % of max. value 24 VDC/100 mA
Display	Alphanumeric display with 2 x 20 characters, backlighting
Operating temperature	10..40 °C
Storage temperature	-10..70 °C
Weight	approx. 4.5 kg
Pressure ports	Ø 6 mm, for tubing NW 5 mm
Certificates	CE

Model	A
KAL 100	100
KAL 200	200

Power supply	C
115 VAC, 6 % / -15 % (50/60 Hz)	1
230 VAC, 6 % / -15 % (50/60 Hz)	2
115 VAC, 6 % / -15 % (50/60 Hz) and rechargeable lithium ion battery	1A
230 VAC, 6 % / -15 % (50/60 Hz) and rechargeable lithium ion battery	2A

Data interface	D
none	0
USB + measurement input for test object (standard for KAL 200)	1

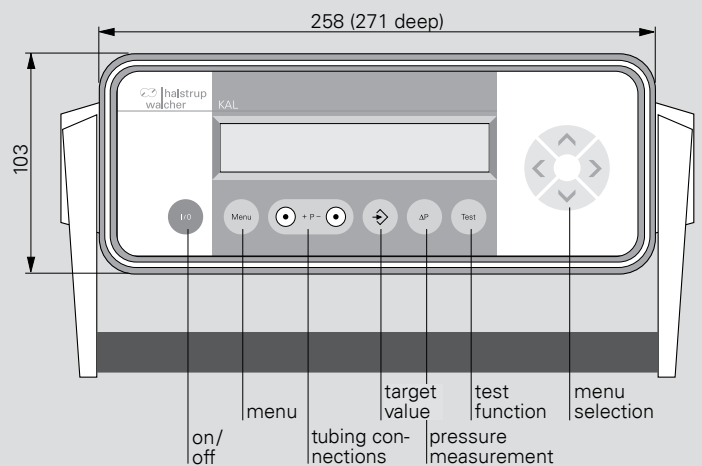
Measurement ranges	B
0..100 Pa	0
0..200 Pa	02
0..500 Pa	05
0..1 kPa	1
0..2 kPa	2
0..5 kPa	5
0..10 kPa	10
0..20 kPa	20
0..50 kPa	50
0..100 kPa	100
± 100 Pa	0A
± 200 Pa	02A
± 500 Pa	05A
± 1 kPa	1A
± 2 kPa	2A
± 5 kPa	5A
± 10 kPa	10A
± 20 kPa	20A
± 50 kPa	50A
-80..100 kPa	100A

Order code	A	B	C	D
KAL	-	-	-	-



Features

- High precision measurement and calibration device in one
- Runs on mains supply or battery, highly flexible (optional)
- Battery life approx. 8 hours, ideal for mobile applications
- Automatic zero-point correction provides high zero-point stability
- Internal pump quickly and accurately generates negative or positive differential pressures of up to 100 kPa
- Optional USB interface available (Standard for KAL 200)
- Factory calibration certificate supplied as standard (KAL 200)
- Unit conversion (e.g. mmHg, mmH₂O, psi, etc.)
- Multilingual menu (English/French/German/Italian/Spanish)
- With power supply and measurement input for the external test object (transmitter being calibrated)



User software





HIGH PRECISION ON-SITE MEASUREMENT AND CALIBRATION

The KAL range from halstrup-walcher comprises three pressure calibration devices that offer outstanding value for money and can be used either for stationary (e.g. in a customer's own laboratory) or mobile applications. They combine the following features:

- integrated pressure generation (for setting the calibration point)
- high precision pressure measurement (for recording the calibration value)

In the KAL 84, the pressure is generated using a manual pump and integrated pressure bellows. In the KAL 100/200, the calibration point (target pressure) is entered via a keyboard/display and automatically generated using a high precision pump. With these devices, the user can select not only the display language but also the unit of pressure. In addition, the KAL 200 has a USB interface so that pressure sequences can be programmed using supplied PC software. This makes it possible to produce time-optimised calibration sequences.

	KAL 200	KAL 100	KAL 84
Details on	p. 38	p. 38	p. 39
			
Pressure generation	automatic		manual
Applications	mobile or stationary (laboratory)		
Measurement ranges	0..100 Pa/0..200 Pa/0..500 Pa/0..1 kPa/0..2 kPa/ 0..5 kPa/0..10 kPa/0..20 kPa/0..50 kPa/0..100 kPa/ ±100 Pa/±200 Pa/±500 Pa/±1 kPa/±2 kPa/±5 kPa/ ±10 kPa/±20 kPa/±50 kPa/-80..100 kPa		0..100 Pa (0..1 mbar) 0..1 kPa (0..10 mbar) 0..10 kPa (0..100 mbar) 0..100 kPa (0..1000 mbar) 0..300 mmHg (0..400 mbar)
Margin of error	± 0.1 % of max. value + 0.3 Pa Measurement ranges > 0.200 Pa/±200 Pa ± 0.2 % of max. value + 0.3 Pa Measurement ranges 0..200 Pa/±200 Pa ± 0.3 % of max. value + 0.3 Pa Measurement ranges 0..100 Pa/±100 Pa	± 0.2 % of max. value + 0.3 Pa Measurement ranges > 0.200 Pa/±200 Pa ± 0.5 % of max. value + 0.3 Pa Measurement ranges ≤ 0.200 Pa/±200 Pa	± 0.2 % of max. value ± 1 digit Measurement ranges 0..50 kPa ± 0.5 % of max. value ± 1 digit
Interface	USB (standard)	USB (optional)	-
Analog measurement input for test object	✓	optional	-
Battery life (rechargeable)	8 h	8 h	2 h
Factory calibration certificate	✓	Accessory	Accessory

ACCESSORIES

Carrying bag KAL 84
 Hand pump KAL 84
 Transport case KAL 100/200
 Carrying bag KAL 100/200
 DAkkS calibration certificate, German
 DAkkS calibration certificate, English
 ISO factory calibration certificate

Order no.
 9062.0001 ①
 9601.0036 ②
 9220.0002 ③
 supplied as standard
 9601.0003 (see p. 41)
 9601.0004 (see p. 41)
 9601.0002 (included for KAL 200)



Hand pump KAL 84
 Order no. 9601.0036



Carrying bag KAL 84
 Order no. 9062.0001



Transport case KAL 100/200
 Order no. 9220.0002



Carrying bag KAL 100/200
 supplied as standard