

HSE-Harvard* Electronic Pressure Calibrators



The calibrator KAL 84 is used for calibrating pressure sensors. It represents a combination of a pressure generator (hand pump) and a pressure meter with digital display. The instrument provides a simple means for testing and calibrating both pressure sensors and complete pressure measuring equipment. High accuracy and excellent reproducibility, together with a specially rugged construction, provide the unit with all the properties required for laboratory applications.

After the unit has been switched on and connected to the pressure sensor to be calibrated

(test object), the required pressure is set with the small hand-wheel. The built-in pressure meter measures the set pressure accurately and indicates it in digital form. Since the generated pressure is identical at the built-in pressure meter and at the test object, the pressure measured by the test object corresponds exactly to the pressure indicated by the KAL 84.

Models with different pressure ranges are available. Each model has an application-specific range (range 1) and can be switched to a corresponding SI range (range 2) in Pascal (Pa) or Kilopascal (kPa).

- No mercury or water column
- Maintenance free
- 4 units:
 - 0 to 200 mmHg
 - 0 to 300 mmHg
 - 0 to 20 mmH₂O
 - 0 to 200 mmH₂O
- Test certificate available

Specifications

Range	Measurement and calibration range for appropriate model (see table below)
Linearity	±0.5% FS ±1 digit for mercury models, ±1% FS ±1 digit for water models
Hysteresis	0.1% FS
Overpressure Limit	200% F.S. for mercury models 500% F.S. for water models
Response Time	T _E = 20 ms, time constant can be switched to 0.1 sec or 1 sec
Analog Output	0 to 1 V for 100% nominal range, load resistance at least 2 kΩ
Temperature Range:	
Nominal	+10°C to +50°C
Operating	0°C to +60°C

Pressure Calibrators

115 VAC, 60 Hz	230 VAC, 50 Hz	Model	Liquid	Range 1	Range 2	Used for Calibration of:
CGS-8153.72 Descontinuado	CGS-81.729	KAL 84 H	Mercury	0 to 199.9 mmHg	0 to 26.66 kPa	Blood Pressure Transducer like ISOTEC, P23Db XL or Others
CGS-8154.72 Descontinuado	CGS-817229	KAL 84 SH	Mercury	0 to 300.0 mmHg	0 to 39.99 kPa	Blood Pressure Transducer like ISOTEC, P23Db XL or Others
CGS-8155.72	CGS-817229	KAL 84 L	Water	0 to 19.99 mmH ₂ O	0 to 196.0 Pa	Low-Range Differential Pressure Transducer like DP45-14 at 10 mmH ₂ O as Nominal Value for PTM (Pneumotachometer)
CGS-8156.72	CGS-8172.29	KAL 84 M	Water	0 to 199.9 mmH ₂ O	0 to 1960 Pa	Low-Range Differential Pressure Transducer like DP45-24 or MPX, Type 399