



Pressure Calibrator Kit (Pneumatic & Hydraulic)

Application: Ideal for on-site calibration of vacuum and pressure. Combines a precision digital pressure calibrator with a robust calibration hand pump to create a compact, reliable, and cost-effective field calibration solution.

Features

- Integrated Pressure Calibrator + Hand Pump
- Accuracy: $\pm 0.025\%$ of Full Scale
- Pressure Range: -1 to 1000 bar (Gauge & Absolute)
- 14 Selectable Pressure Units
- Wide Pneumatic & Hydraulic Option
- Electrotechnical Measurements: mA & V
- Loop-Powered Supply with mA Measurement for Transmitter Calibration
- Pressure Switch Test Facility (Opening & Closing Points)
- Auto-OFF Function for Enhanced Battery Life



*pneumatic hand pump

* Hydraulic hand pump

*Vacuum: Applicable only with pneumatic hand pumps

*This image is for marketing purposes; the actual instrument may vary slightly

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DESCRIPTION

The APCK Series delivers high-accuracy pressure measurement with selectable accuracy up to $\pm 0.025\%$ FS, covering ranges from -1 to 1000 bar. It is available as a standalone gauge or integrated into pneumatic (-0.95 to 60 bar) and hydraulic (0 to 700 bar) test kits. Key features include 14 selectable pressure units, zero, and peak hold functions, and high/low peak pressure capture. Electrical measurement capabilities include mA and voltage readings, along with a built-in pressure switch test facility that captures both opening and closing pressures via display hold, Loop-Powered Supply with mA Measurement for Transmitter Calibration. Designed for calibrating pressure gauges, transducers, transmitters and switches, the APCK features a large backlit graphical display, auto-off function for extended battery life, and a feather-touch keypad with a dedicated ZERO key for quick setup offering a complete and versatile pressure calibration solution.

Technical Specifications

Model	Indicator Range (bar)	Resolution (bar)	Units	Hand pump range
APCK-H-1	-1 to 1	0.0001	bar, kg/cm ² , MPa, mH ₂ O, atm, psi, inHg, ftH ₂ O, kPa, inH ₂ O, mmHg, mbar, cmH ₂ O, mmH ₂ O	HP-1 (-0.95 to 1 bar)
APCK-H-2	-1 to 2	0.0001	bar, psi, Kg/cm ² , KPa, MPa, mmHg, atm, mH ₂ O, inHg, inH ₂ O, ftH ₂ O, cmH ₂ O, mbar, mmH ₂ O	HP-2 (-0.95 to 2 bar)
APCK-H-20	-1 to 20	0.001	bar, psi, Kg/cm ² , KPa, MPa, mmHg, atm, mH ₂ O, inHg, inH ₂ O, ftH ₂ O, cmH ₂ O, mbar	HP-20 (-0.95 to 20 bar)
APCK-H-40	-1 to 40	0.001	bar, psi, Kg/cm ² , KPa, MPa, mmHg, atm, mH ₂ O, inHg, inH ₂ O, ftH ₂ O, cmH ₂ O, mbar	HP-40 (-0.95 to 40 bar)
APCK-H-60	-1 to 60	0.001	bar, psi, Kg/cm ² , KPa, MPa, mmHg, atm, mH ₂ O, inHg, inH ₂ O, ftH ₂ O, cmH ₂ O, mbar	HP-60 (-0.95 to 60 bar)
APCK-H-200	0 to 200	0.01	bar, psi, Kg/cm ² , KPa, MPa, atm, mH ₂ O, inHg, ftH ₂ O	HP-P-200 (0 to 200)
APCK-H-400	0 to 400	0.01	bar, psi, Kg/cm ² , KPa, MPa, atm, mH ₂ O, inHg, ftH ₂ O	HP-P-400 (0 to 400)
APCK-H-700	0 to 700	0.01	bar, psi, Kg/cm ² , KPa, MPa, atm, mH ₂ O, inHg, ftH ₂ O	HP-P-700 (0 to 700)

* - Accuracy specifications include effect of non-linearity, hysteresis and repeatability at 23 \pm 5°C



R&D Instrument Services

Measurements:

Facility	Range	Resolution	Accuracy
mA	0 to 50 mA	0.001 mA	$\pm 0.025\%$ of Reading + 10 μ A
Volts	0 to 30 V	0.001 V	$\pm 0.025\%$ of Reading + 3 mV

Note 1: Accuracy specifications include effect of non-linearity, hysteresis and repeatability at 23 \pm 5°C.

Note 2: Active loop - Load @ 800 Ω

Standard delivery

Each APCK-H is supplied with

1. APCK Digital Calibrator.
2. Hand Pump (Pneumatic or Hydraulic).
3. Test Lead (2 wire): 2nos.
4. Charger: 1no.
5. 1m 4mm nylon hose with 1/4" BSP(F) adapter for pneumatic hand pump.
6. 5.23 x 2.62, 4.47 x 1.78 'O'ring-each 3nos for pneumatic hand pump.
7. 0.5m Hydraulic Hose for hydraulic hand pump.
8. 5.28 X 1.78 'O'ring-3nos for hydraulic hand pump.
9. Bonded Seals 1/4", 1/8"-each 5nos for hydraulic hand pump.
10. Hydraulic Oil: 100cc for hydraulic hand pump.
11. User Manual: 1no.
12. Traceable Calibration Certificate.
13. Warranty Certificate.
14. Carrying Pouch – 2 nos for calibrator & Pump

Optional

1. Quick coupling & connectors.
2. RS232 with R&D Soft Cal-Software.
3. Accredited (NABL) Calibration Certificate as per ISO/IEC 17025 Standard.
4. Adapters (each 1 no.): 1/4" BSP (M) x 1/8" BSP (F), 1/8" NPT (F), 1/4" NPT (F), 3/8" BSP (F), 3/8" NPT (F), 1/2" BSP (F), 1/2" NPT(F), 1/4" BSP (M)
5. Nylon Seals: 1/8", 1/2", 1/4" & 3/8" - 5 nos. each
6. Carrying Case.

product specification:

- Over Pressure Alarm: 20% of Full Scale (up to 40 bar), 5% of Full Scale (for other ranges)
- Pressure Media: Compatible with 316 Stainless Steel Current Terminal
- Input Protection: Fuse 100mA / 250V
- Display: Graphical display with LED backlight Power Supply: Li-ion rechargeable battery
- Transmitter Supply: 24V DC $\pm 10\%$ (Loop Powered)
- Battery Backup: Up to 19 hours
- Low Battery Indicator: Yes
- Auto Power Off: After 15 minutes of inactivity Pressure
- Connection: 1/4" BSP Female Operating Temperature: 10 to 50°C
- Instrument Casing: ABS Plastic
- Dimensions: 250 mm x 145 mm x 45 mm (L x W x D)
- Weight: 650 grams

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