



## Pressure Calibrator Kit (Hydraulic)

**Application:** Ideal for laboratory calibration of pressure, this solution integrates a high-precision digital pressure calibrator with a robust comparator pump to deliver a reliable, accurate, and cost-effective calibration setup.

### Features

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



\* Hydraulic comparator pump

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

### DESCRIPTION

The APCK Series offers high-accuracy pressure measurement with accuracy  $\pm 0.025\%$  FS, covering a wide range from -1 to 1000 bar. integrated into hydraulic comparator test kit with a priming knob (0 to 1000 bar). Key features include 14 selectable pressure units, zero, peak hold functions, and high/low peak pressure capture. The APCK also provides electrical measurement capabilities for mA and voltage, along with a built-in pressure switch test facility that captures both opening and closing pressures via display hold. Designed for calibrating pressure gauges, transducers, 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 and easy setup delivering a complete and versatile pressure calibration solution.

### Technical Specifications

Model	Range (bar)	Resolution (bar)	Units	Comparator range
APCK-CS-400	0 to 400	0.01	bar, psi, Kg/cm <sup>2</sup> , KPa, MPa, atm, mH <sub>2</sub> O, inHg, ftH <sub>2</sub> O	CP-400S (0 to 400)
APCK-CS-700	0 to 700	0.01	bar, psi, Kg/cm <sup>2</sup> , KPa, MPa, atm, mH <sub>2</sub> O, inHg, ftH <sub>2</sub> O	CP-700S (0 to 700)
APCK-CS-1000	0 to 1000	0.1	bar, psi, Kg/cm <sup>2</sup> , KPa, MPa, atm, mH <sub>2</sub> O, inHg, ftH <sub>2</sub> O	CP-1000S (0 to 1000)

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

### Measurements:

Facility	Range	Resolution	Accuracy
mA	0 to 50 mA	0.001 mA	$\pm 0.025\%$ of Reading + 10 $\mu$ 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 $\Omega$

### 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

The information given in this document is subject to change due to continuous improvement without notice. All Rights Reserved by R&D Instrument



# R&D Instrument Services

## Standard delivery

Each APCK-C is supplied with

1. APCK Digital Calibrator.
2. Comparator pump (Hydraulic).
3. Test Lead (2 wire): 2nos.
4. Charger: 1no.
5. 1/2", 1/4", 1/8", 3/8"-each 1nos BSP(F) end connection adapter.
6. Metal Washers: 3/8"1/4"1/8", -3nos.
7. 'O' Ring: 3/8"1/4"1/8"-5nos
8. Metal Washers: 1/2", -3nos.
9. 'O' Ring: 1/2"-5nos
10. User Manual: 1no.
11. Traceable Calibration Certificate.
12. Carrying Pouch-2nos for calibrator & comparator.

## 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.

## CONTACT



# R&D Instrument Services

5, Natesan Nagar, Alapakkam,  
Chennai 600116. Tamilnadu, INDIA.  
Tel.: +91-44-4283 9039 / 4284 1119  
Mobile Nos.: +91-7358393981 / 7358393984  
email: sales@rndinstruments.com  
quote@rndinstruments.com  
Website: www.rndinstruments.com  
For Calibration: www.calibrationlab.in

**Manufacturer of Test benches  
Calibration Instruments**



CC-2828

