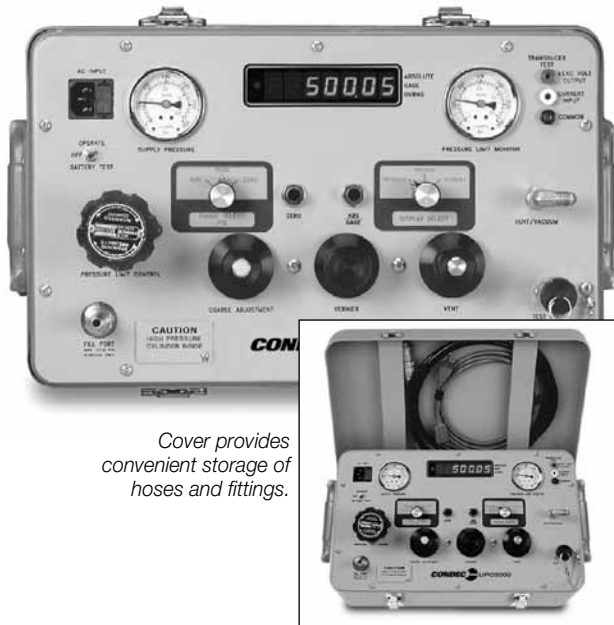


UPC5000 / UPC5010

Pressure Calibration Standard



Cover provides convenient storage of hoses and fittings.

Please refer to price schedule for part numbers and part numbering guide.

Combining heavy-duty construction and precision performance, the UPC5000 offers flexibility for a variety of pressure calibrating applications.

The compact UPC5000 includes a self-contained nitrogen cylinder, our patented Orion 2C valve and rechargeable battery, as well as all controls, hoses and connections required for rapid on-site calibration. A weight of less than 33 pounds makes this instrument truly portable. Whether your destination is a mountain-side wellhead transmitter or your own standards lab, this system provides industry-leading convenience for calibrating transmitters, transducers, gauges, and other pressure sensitive devices.

Each UPC5000 series model is equipped with an exclusive precision vernier that provides infinite control to secure the most accurate readings possible. Three independent selectable ranges provide accuracy within 0.05% up to 2000 psi. Readings appear on a large digital LED display, eliminating parallax, interpolation and operator error. Increased protection is provided by a self-relieving regulator that eliminates costly repairs due to inadvertent pressure overshooting. The UPC5000 is easy to operate and training can be accomplished in as little as 10 minutes. Different technicians can calibrate the same transmitter and get identical results...every time.

Whether working in aircraft manufacturing, electric power supply, or general industry, the UPC5000 performs beyond the standard for accurate, on-site calibration.

Applications

- Engine test
- Food processing
- Pneumatic system checks
- Aircraft manufacturing, government laboratories, oil industry, electric power plants (nuclear and fossil), and general industry

Standard Features

- Available in self-contained enclosure with carrying handles (UPC5000) or 19 inch rack-mount version (UPC5010)
- Six sets of ranges to choose from: 2000/1000/400 psi, 1000/500/200 psi, 500/250/100 psi, 100/50/20 psi, 50/25/10 psi, and 15/7.5/3 psi
- Three independent selectable ranges in each instrument
- $\pm 0.05\%$ F.S. accuracy of each independent selectable range
- Available with Light Emitting Diode (LED) or Liquid Crystal Display (LCD)
- Pressure display resolution 0.02% F.S. typical for each range
- State-of-the-art push button calibration - No analog potentiometers or adjustments required
- Lightweight, less than 33 pounds
- Adjustable overpressure protection
- Precision pressure vernier control
- Self-contained 2215 psi nitrogen cylinder
- Voltage/current display mode for transducer testing
- Supplies DC loop power
- Non-destructible, finger tip control micro-metering valves for pressure control
- Quick-disconnect fitting and hose included
- Traceable to the National Institute of Standards and Technology (NIST)
- Pneumatic only - no hydraulic fluid or distilled water messes

Options/Accessories

- 58483.....Pressure trap (UPC5000/UPC5010)
Literature sheet PN 58609
- 63256.....Additional operating and maintenance manual
- 55294.....Test port quick-disconnect with 1/4 NPT female (finger tighten to DUT, no tools required)
- 55279.....Additional test port (output) 5ft. long hose with quick-disconnect plug (SST) on one end and 1/4 inch 37° female AN swivel tube coupling on the other end.
- 55282.....Additional fill port (input) 5ft. long hose fitted with quick-disconnect plug (brass) on one end and 1/4 inch 37° female AN swivel coupling on the other end.

AVAILABLE PRESSURE CALIBRATIONS:

Gauge, absolute or gauge and absolute

OVERALL ACCURACY:

±0.05% F.S. maximum. Accuracy statement includes all effects of linearity, hysteresis, repeatability and ambient temperature.

POWER:

115 or 230 VAC 50/60 Hz and 12 volt, 2.2 min., rechargeable internal, sealed lead acid battery, standard

TEMPERATURE RANGE:

Operating: 40°F to 140°F (4°C to 60°C)
Storage: 0°F to 185°F (-17°C to 85°C)
Relative humidity: 95%, non-condensing

PRESSURE MEDIA:

Clean dry gaseous nitrogen, standard

INTERNAL PRESSURE CYLINDER:

Capacity: 7.0 standard cubic feet
Volume: 80 cubic inches
Rating: 2215 psi

PRESSURE SUPPLY GAUGE:

Size: Two-inch diameter
Range: 0-3000 psig

OVERPRESSURE RUPTURE DISC:

Rating: 3000 psig, nominal
Material: Stainless steel outer case

PRESSURE MEDIA FILTER:

Rating: 7 microns, nominal
Type: Field replaceable filter cartridge

CONTROL VALVES:

Type: Micro-metering with positive shut off, adjustable stop and replaceable seat, non-destructible
Material: Aluminum/stainless steel

INTERNAL PIPING:

Tubing: 1/8 in. O.D., 0.028 in. wall thickness, copper, seamless
Couplings: Brass Swagelok®

FILL AND TEST PORTS:

Style: Quick-disconnect type
Fill Port Pressure Rating: 3000 psig connected, 2000 psig disconnected
Test Port Pressure Rating: 5000 psig

PRESSURE HOSES:

Quantity supplied: Two; one input and one output
Length: 5 feet, nominal

VERNIER CONTROL:

Volume: 0.25 cubic inches
Material: Aluminum/stainless steel

PRESSURE LIMIT MONITOR GAUGE:

Size: Two-inch diameter
Range: As appropriate for UPC5000/UPC5010 model range utilized

PRESSURE LIMIT CONTROL:

Pressure Rating: 3000 psig maximum (inlet)
Output Pressure Range: As appropriate for UPC5000/UPC5010 model range utilized
Construction: Self-relieving, single stage regulator

INTERNAL PRESSURE SENSOR:

Type: Bonded, metal foil strain gauge or equal
Sensitivity: 3 mV/V, nominal
Construction: Completely weld sealed stainless steel outer body and pressure cavity

UPC5000 EXTERNAL CARRYING CASE:

Type: Aluminum case with cover and carrying handle
Material thickness: 0.090 in. nominal
Finish: Grey polyurethane baked-enamel paint, textured finish

CURRENT DISPLAY:

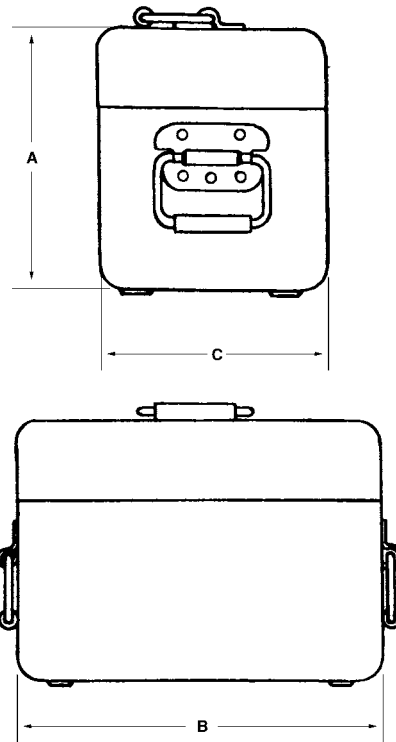
0-20.000 mA counting by 0.005 mA

WEIGHT:

UPC5000: Less than 33 lb (14.9 kg) including two hoses and one cable

UPC5000 OVERALL DIMENSIONS

A = 11.5 in. (292.10 mm) C = 10.0 in. (254.00 mm)
B = 16.0 in. (406.40 mm)



UPC5010 (not shown) dimensions—excluding front handles:
19 in. (482.6 mm) W x 8.1 in. (205.74 mm) D x 10.5 in. (266.7 mm) H
Rack-mount dimensions are for reference only. Consult factory for cutout dimensions.