UPC5200/UPC5210 High Pressure Calibration Standard



UPC5200



UPC5210 - Discontinued, Consult Factory for Repair/Calibration Service





UPC5210 (not shown) dimensions-excluding front handles: 19 W x 8.1 D x 10.5 in. H (482.6 W x 205.74 D x 266.7 mm) Rack-mount dimensions are for reference only. Consult factory for cutout dimensions.

UPC5200 OVERALL DIMENSIONS

A	11.0 in. (279.40 mm)
В	18.0 in. (457.20 mm)
С	11.5 in. (292.10 mm)

STANDARD FEATURES

- Available in enclosure with carrying handles (UPC5200)
- · Two sets of ranges to choose from: 10.000/5.000/2.000 psi and 5,000/2,500/1000 psi
- · Three independent selectable ranges in each instrument
- ±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
- Different technicians can calibrate the same Device-Under-Test and get identical results
- · Electronically controlled 10:1 intensifier system
- · Easy to operate, training can be accomplished in 10 minutes

APPLICATIONS

- · Any high-pressure, pneumatic-only application
- · Initial test of high-pressure hydraulic systems

SPECIFICATIONS

Available Calibration Modes:

Gauge

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

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

Regulated Pressure Gauge:

Size: Two and one half-inch diameter Range: 0-1500

Pressure Media Filter:

Rating: 7 microns, nominal Type: Field replaceable filter cartridge contained within a stainless steel outer case

Control Valves:

Type: Micro-metering with positive shut off, adjustable stop and replaceable seat, non-destructible Material: 300 series stainless steel outer body

Internal Piping:

Tubing: 1/4 in. 0.D. and 1/8 in. 0.D., 300 series stainless steel, seamless Couplings: 300 series stainless steel Swagelok®

Output Test Port:

Style: Quick-disconnect type Pressure Rating: 10,000 psig minimum, connected or disconnected

Pressure Hoses:

Quantity supplied: Two; one input and one output Length: 4 feet, nominal

- · Easy to carry; approximately 51 lb
- · Adjustable overpressure protection above input pressure
- Precision pressure vernier control
- · Voltage/current display mode for transducer testing
- 32 VDC excitation output
- Non-destructible, finger tip control micrometering valves for pressure control
- Automatic pushbutton calibration, microprocessor controlled and maintained
- Quick-disconnect fitting and hose included
- · Pneumatic only; no hydraulics or distilled water messes
- · Calibration certificate included; traceable to the National Institute of Standards and Technology (NIST)
- · Boiler feed pressure for power plants

Vernier Control:

Vernier Volume: 0.4 cubic inch, nominal Vernier Mechanical Rotation: 15 turns, nominal Adjustable Sensitivity: 0.005 psi, minimum

Booster Pump Solenoid Valve:

Type: Three-way, normally closed, electronically controlled Pressure Rating: 1500 psig Power Requirements: 115 or 230 VAC, 50/60 Hz, 10 watts

Accumulator Gauge:

Size: Two and one half-inch diameter Range: 0-15,000 psi

Input Pressure Regulator:

Pressure Rating: 3000 psig maximum Output Pressure Range: 0-1000 psi Construction: Self-relieving, single stage regulator

UPC5200 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

External Carrying Case:

Type: Deep-drawn aluminum case with cover and carrying handles 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:

UPC5200: 51 lb (23.1 kg) including all hoses and cables



UPC5200/UPC5210 High Pressure Calibration Standard

MODEL/PRICE

MODEL	DESCRIPTION	EST. SHIP WEIGHT	PRICE
UPC5200 †	Portable High Pressure Calibrator (NIST Traceable)	58 lb	Consult
UPC5210 #	19 in Rack-Mount High Pressure Calibrator (NIST Traceable)	58 lb	Consult

† Consult Factory for Availability

†† Discontinued, Consult Factory for Repair/Calibration Service

UPC5200/UPC5210 Model Numbering Guide UPC5200/UPC5210 ()()()
A = 10,000/5000/2000 psi, 115 VAC 50/60 Hz
B = 5000/2500/1000 psi, 115 VAC 50/60 Hz
C = 10,000/5000/2000 psi, 230 VAC 50/60 Hz
D = 5000/2500/1000 psi, 230 VAC 50/60 Hz
CALIBRATION MODE
A = Gauge only
DISPLAY
A = Standard, Light Emitting Diode (LED)
B = Liguid Crystal Display (LCD)
Determine model configuration before ordering
Example: UPC5200AAA = UPC5200 (A)10,000/2000 psi,
115 VAC 50/60 Hz, (A) gauge only, (A) LED
TTS VAC 50/60 Hz, (A) gauge only, (A) LED



58478

OPTIONS/ACCESSORIES

PART #	DESCRIPTION	PRICE
58478	Pressure trap (UPC5200/UPC5210) Literature sheet PN 58596	Consult
63259	Additional operating and maintenance manual	Consult
55542	Standard quick-disconnect test port (output) fitting male plug on one end and 7/16-20 37 DEG (AN-4) JIC male on opposite end w/ internal 40 micron filter, 11000 PSI working pressure (Requires one Cheat Seal 54854)	Consult
151017	Test port (output) quick-disconnect adapter male coupling body, other end 1/4-18 NPT female SST with 40 micron filter, 11000 PSI working pressure	Consult
55280	Additional test port (output) 4-1/2 ft. long hose with quick-disconnect (SST) plug on one end and 1/4 in. 37° female AN swivel pressure fitting on opposite end	Consult
131096 †	Additional test port (output) 10 ft. long hose with quick-disconnect (SST) plug on one end and 1/4 in. 37° female AN swivel pressure fitting on opposite end	Consult
78939	Additional fill port (input) 5 ft. long hose with CGA-580 male nipple on one end and 1/4 in. 37° female AN swivel pressure fitting on opposite end	Consult
55366 †	Additional fill port (input) 10 ft. long hose with CGA-580 male nipple on one end and 1/4 in. 37° female AN swivel pressure fitting on opposite end	Consult
55369 †	Additional fill port (input) 15 ft. long hose with CGA-580 male nipple on one end and 1/4 in. 37° female AN swivel pressure fitting on opposite end	Consult
162561 †	Additional fill port (input) 20 ft. long hose with CGA-580 male nipple on one end and 1/4 in. 37° female AN swivel pressure fitting on opposite end	Consult
150613 †	External Cylinder Fill 5 ft. long hose with CGA-580 Type Male Nipple Both Ends 0-3000 PSI Working Pressure (Used For Filling External Pressure Cylinder PN 59533)	Consult
60109	Calibration Module	Consult

[†] Consult Factory for Availability



