



PRODUCT DESCRIPTION

The EPC 2000 Electronic Pressure Calibrator combines the accuracy of a laboratory instrument with the functionality and portability of a field calibrator. The EPC 2000 Calibrator is used to calibrate pressure measuring instruments with an accuracy of $\pm 0.05\%$ of indicated reading for readings from 20-100% of full scale. The EPC 2000 Calibrator is accurate to $\pm 0.025\%$ of full scale at or below 20% of full scale.

The EPC 2000 Calibrator is ideal for difficult applications such as custody transfer stations, critical process control applications and virtually any application that requires near dead-weight accuracy.

The EPC 2000 Calibrator features a large, easy-to-read, multifunction LCD Display. The display indicates measurements in a 5-digit floating point format in any common English, Metric or S.I. units of measure. The unit automatically verifies transmitter accuracy without manual calculations. The EPC 2000 also displays mA converted to a pressure range and percent difference between the displayed value and the measured pressure. The unit makes calibration simple and straightforward with extensive prompts which guide the user through the calibration process. The unit can also display information in English, Spanish, French, German or Italian. The two-line alphanumeric display indicates pressure on the top line. Current, voltage or switch test is displayed on the bottom line. The display indicates overpressure conditions for the transducer selected.

The EPC 2000 Calibrator features modular and interchangeable pressure modules so that one unit satisfies the needs of many different pressure ranges. Transducer modules may have dual or single ranges. The transducers are available in ranges from 100 inH₂O up to 2000 psi.

AMETEK EPC 2000[®] Electronic Pressure Calibrator

- $\pm 0.05\%$ Accuracy of Reading Traceable to NIST
- UL and c-UL Division 1, Class 1, Group C,D and CENELEC EEx ib IIB T3 (179°C) Intrinsic Safety Approved, CE Mark Compliant
- Modular, Interchangeable Pressure Ranges up to 2,000 psi (135 bar)
- Current, Voltage & Pressure Switch Test Inputs
- 5-Digit Floating Point Readout
- Displays in English, Metric or S.I. Units
- Displays mA Converted to Pressure Range and Percent Difference
- Displays information in English, Spanish, French, German or Italian

In addition to handling pressure inputs, the instrument also measures voltage and current and can perform switch tests. The current input interfaces with current-output transmitters and will accept 0-50mA inputs. This can be displayed in mA, mA combined with a percentage of range such as 4-20mA, or mA converted to a pressure value in a user-defined range combined with a percent difference between this value and the measured pressure. This feature allows for verification of the accuracy of the transmitter without having to perform any manual calculations.

The voltage input interfaces with voltage-output transmitters. It also features a general purpose voltmeter capable of handling inputs from 0-50VDC. Readings are displayed in the same format as current. The voltage and current switch test input is useful when working with pressure switches. It freezes and displays the input pressure when the switch trips "open" and/or "closed".

The EPC 2000 Calibrator is battery operated using two 9V Alkaline or Lithium batteries. An optional NiCd rechargeable battery pack is available. The unit also features a nonvolatile memory and an automatic shutdown feature that helps extend battery life.

The EPC 2000 Calibrator is UL and c-UL Division 1, Class 1, Group C,D and CENELEC EEx ib IIB T3 (179°C) intrinsically safe.

FUNCTIONAL SPECIFICATIONS

Pressure

Ranges: 0 - 100 inH₂O
 0 - 280 inH₂O
 0 - 100 psi
 0 - 500 psi
 0 - 1000 psi
 0 - 2000 psi

Units of Measure psi, Torr, atm, kPa, mPa, mbar,
 bar, mmH₂O @ 4°C, mmH₂O
 @ 20°C, mH₂O @ 4°C, mH₂O
 @ 20°C, mmHg @ 0°C, kg/
 cm², inH₂O @ 4°C, inH₂O @
 20°C, inH₂O @ 60°F, ftH₂O @
 4°C, ftH₂O @ 20°C, ftH₂O @
 60°F, inHg @ 0°C

Media Compatibility Any media compatible with
 316L stainless steel and
 Hastelloy C276

Connections 0.25-inch female NPT

Current

Range: 0-50mA
 Format Options mA, mA to %, mA to pressure
 Connections Standard banana jack,
 0.75-inch centers

Voltage

Range: 0-50VDC
 Format Options V, V to %, V to pressure
 Connections Standard banana jack,
 0.75-inch centers

Switch Test

Display shows closing and opening
 pressures simultaneously
 Connections Standard banana jack,
 0.75-inch centers



**EPC 2000 Electronic Pressure Calibrator Showing
 Removeable Transducer Modules**

PHYSICAL SPECIFICATIONS

Operating Temperature

32°F to 122°F (0°C to 50°C)

Storage Temperature

-4°F to 158°F (-20°C to 70°C)

Battery Types

Two 9V UL-approved Lithium Batteries (standard)
 9V NiCd Battery Pack (optional)

Battery Life

Standard 9V Lithium 4 hours at 25°C typical
 Optional 9V NiCd 3.5 hours minimum
 @ 32°F to 122°F (0°C to 50°C)

Battery Charging Times (Approximate)

120VAC Wall Charger 12 hours
 230VAC Wall (Euro Two Prong) Charger 6 hours
 12VDC Automotive Charger 1.5 hours
 120VAC Wall Adapter/12VDC Auto Charger 1.5 hours

Weight

2.34 lbs (1.06 kg)

Shipping Weights (approx.)

EPC 2000 3-1/2 lbs.
 Kit A 14 lbs.
 Kit B 15 lbs.
 Kit C 13 lbs.
 Kit D 11-1/2 lbs.

Warranty

1-year Factory Warranty



**EPC 2000 Pressure Calibrator Kit complete with
 Hand Pumps and Accessories**

ORDERING INFORMATION

EPC 2000 ELECTRONIC PRESSURE CALIBRATOR

Order Number Description

Base Number - 1st thru 6th characters
 EPC-1- EPC 2000 Electronic Calibrator complete (Transducer and Display Modules) and Flexible Case
 EPC-2- EPC 2000 Transducer Module Only
 EPC-3- EPC 2000 Display Module Only

Base Number when ordering Kits - 1st thru 6th characters
 EPC-A- EPC 2000 Calibrator complete with Model T-622 (T-620 with 0-2000 psi Gauge) and Model T-810 Hand Pumps, two (2) 0.25-inch NPTF "T" fittings, two (2) 0.25-inch Quick Disconnect fittings, 0.25 x 0.125-inch Union fitting, test leads, 9VDC Lithium batteries, NIST Traceable Certificate, carrying case and instruction manual.

EPC-B- EPC 2000 Calibrator complete with Model T-622 (T-620 with 0-2000 psi Gauge) and Model T-731 (T-730 with 0-300 inH₂O Gauge) Hand Pumps, two (2) 0.25-inch NPTF "T" fittings, two (2) 0.25-inch Quick Disconnect fittings, test leads, 9VDC Lithium batteries, NIST Traceable Certificate, carrying case and instruction manual.

EPC-C- EPC 2000 Calibrator complete with Model T-730 Hand Pump, two (2) 0.25-inch NPTF "T" fittings, two (2) 0.25-inch Quick Disconnect fittings, test leads, 9VDC Lithium batteries, NIST Traceable Certificate, carrying case and instruction manual.

EPC-D- EPC 2000 Calibrator complete, test leads, 9VDC Lithium batteries, NIST Traceable Certificate, carrying case and instruction manual. Note: Carrying Case can accommodate up to 2 AMETEK Hand Pumps.

Transducer Module Ranges - 7th and 8th characters
 No Transducer Range (Specify when ordering only EPC-3-)
 00 0 - 100 inH₂O Single Range
 10 0 - 100 inH₂O and 0 - 280 inH₂O Dual Range
 12 0 - 280 inH₂O Single Range
 20 0 - 280 inH₂O and 0 - 100 psi Dual Range
 23 0 - 280 inH₂O and 0 - 1000 psi Dual Range
 25 0 - 280 inH₂O and 0 - 2000 psi Dual Range
 26 0 - 100 psi Single Range
 30 0 - 100 psi and 0-500 psi Dual Range
 34 0 - 500 psi Single Range
 40 0 - 500 psi and 0 - 2000 psi Dual Range
 46 0 - 1000 psi Single Range
 50 0 - 2000 psi Single Range
 60

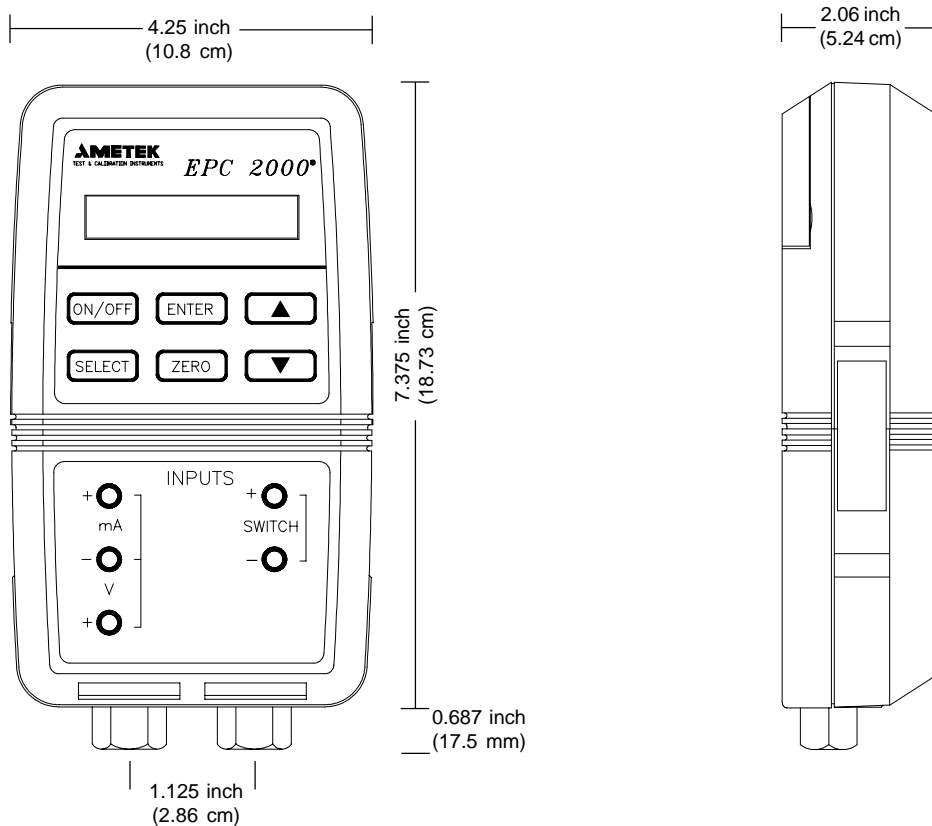
NIST Certification Data-9th and 10th characters
 NIST Traceable Certificate of Calibration, standard with all EPC Units
 For optional NIST Traceable Calibration Data Supplied add "/C"

Sample Order Number
 EPC-B- 46 EPC 2000 Calibrator with 0-500 PSI and 0-2000 PSI transducers complete with T-622 and T-731 Hand Pumps, 9VDC Lithium carrying case instruction manual. two (2) 0.25-inch NPTF "T" fittings, two (2) 0.25-inch Quick Disconnect fittings, test leads, batteries, NIST traceable certificate,

BATTERY OPTIONS (Ordered Separately)

Order Number Description
 E80-686 Rechargeable NiCd Battery Pack (Used to replace two standard 9V batteries)
 E09-701 9VDC Lithium Battery (Two required for operation)
 E80-687 120VAC Wall Charger
 E80-688 12VDC Automotive Charger
 E80-696 12VDC Automotive Charger with 120VAC Wall Adapter
 E80-689 230VAC Wall (Euro Two Prong) Charger

DIMENSIONAL DRAWINGS



HAND PUMP DESCRIPTIONS

(See AMETEK catalog for additional details and models.)

Model	Description	Model	Description
T-620	Hydraulic pressure tester with transparent, 1-pint reservoir for easy viewing. Includes a vernier adjustment for fine pressure control and needle valve for positive shut-off.	T-730	Pneumatic pressure tester includes extended range vernier adjustment for fine pressure control. Range 0-30 psi.
T-621	Same as T-620 Tester. Includes 0-1000 psi Gauge.	T-731	Same as Model T-730 with 0-300 inH ₂ O test gauge.
T-622	Same as T-620 Tester. Includes 0-2000 psi Gauge.	T-810	Pneumatic pressure tester generates pressure up to 200 psi. Includes vernier adjustment and thumb-screw bleed valve for rapid or gradual venting.



TEST AND CALIBRATION INSTRUMENTS

AMETEK is a leading global manufacturer of electrical and electromechanical products for niche markets. Listed on the New York Stock Exchange (AME) since 1930, AMETEK's annual sales are approaching \$1 billion. Operations are in North America, Europe and Asia, with about one-third of sales to markets outside the United States.

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