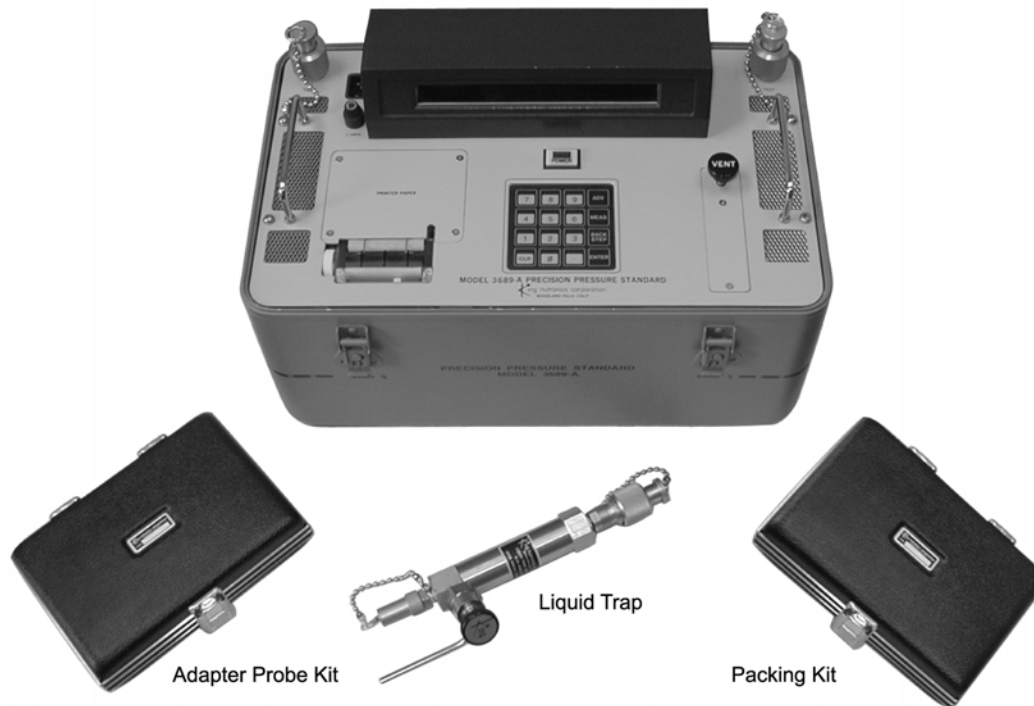


KNC Model 3689-A Precision Pressure Standard System



Product Description

The Model 3689-A Precision Pressure Standard System by King Nutronics Corporation is based on a digital pressure transfer standard that is unmatched in the industry for its accuracy: $\pm 0.025\%$ IV (read.) or 0.001 psi, whichever is greater. Auto-ranging circuitry incorporated in the Model 3689-A Precision Pressure Standard enables stepless readings from vacuum to 10,000 psi without input from the operator, preventing damage to the instrument due to the over-pressurization of the transducers. The Model 3689-A Precision Pressure Standard displays direct reading measurements using a wide range of units, including psi, in-Hg, kPa, bar, in-H₂O, and ft/seawater. Three measurement modes are available: absolute mode, gauge mode, and vacuum mode.

The Model 3689-A Precision Pressure Standard System is ideal for calibration of dial pressure gauges and digital pressure measurement devices. The system is also used to calibrate the KNC Model 3666 Automatic Pressure Calibration System. A microprocessor control and front panel display prompts the operator through the calibration and standardization process and performs the necessary calculations, saving time and effort. An integral IEEE-488/GPIB interface enables automated calibration and standardization of the KNC Model 3666 system and can be used to transmit data to a remote computer. A built-in printer conveniently generates permanent records of measurement data. The pressure standard system also includes a liquid trap, a kit containing 12 male and female quick-disconnect adapters from 1/8 to 1/2-inch diameter, a MIL-I-18997C adapter, and a packing kit containing back-up rings, seals and other supplies necessary for field maintenance of the pressure standard and liquid trap.



Specifications: Model 3689-A Precision Pressure Standard

Characteristics	Specifications
Accuracy, pressure: 0 to 4 psig 4 to 10,000 psig	±0.001 psi ±0.025% IV (indicated value or reading)
Accuracy, vacuum: 0 to 30 in-Hg	±0.025% IV (indicated value or reading) or ±0.002 in-Hg, whichever is greater
Accuracy, absolute: 0.5 to 35 in-Hg 35 to 200 in-Hg	±0.002 in-Hg ±0.025% IV (indicated value or reading)
Resolution: Below 100 psig 100 to 1,000 psig 1,000 to 10,000 psig	Display 0.001 psig 0.01 psig 0.1 psig Printer 0.0001 psig 0.001 psig 0.01 psig
Readout units	psig, psia, in-Hg, in-Hg absolute, mm-Hg, mm-Hg absolute, in-H ₂ O, ft-H ₂ O, ft-sea (seawater) kPa, kPa absolute, bar, bar absolute, kg-cm, kg-cm absolute
Fluid medium	Dry nitrogen or other inert gas
Port configuration	Two quick-disconnect couplings
Display	40-character alpha-numeric, vacuum fluorescent
Case type/construction	Heavy-duty drawn aluminum
Case color	Brown, Cardinal Paint No. 6402-65268
Case dimensions, inches	18 (W) x 12 (H) x 11 (D)
Operating range	30 in-Hg vacuum; 0 to 10,000 psig
Temperature range: Operating Storage	+10° to +40° C (+50° to +104° F) -55° to +75° C (-67° to +167° F)
Input power: Voltage Fuse type	115 VAC, 50 to 60 Hz 3 AG, 2 Amps, Slo-Blo
Weight	35 lbs.

Specifications: Liquid Trap (P/N 3666-197-1)

Characteristics	Specifications
Pressure: Operating Proof Burst (minimum)	10,000 psig 15,000 psig 40,000 psig
Volume	2.0 cubic inches
End configuration	High pressure quick-disconnect. Female-to-male termination.
Dimensions: Overall length Diameter	10.5 inches 1.25 inches

Specifications: Adapter Kit (P/N 3689-35-1)

Characteristics	Specifications
Pressure (probes): Operating Proof Burst	10,000 psig 15,000 psig 40,000 psig
Material	Stainless steel
End configurations	Male quick-disconnect on one end; various male and female threaded configurations on opposite end
Case dimensions, inches	6.0 (W) x 2.25 (H) x 8.5 (D)

