Fluke 719Pro Electric Pressure Calibrator

Technical Data

Integrated electric pump—now to 300 PSI/20 bar

The 719Pro Electric Pressure Calibrator is the ideal test tool for calibrating high accuracy transmitters, pressure switches and pressure gauges.

The 719Pro includes a full functioning loop calibrator that sources, simulates and measures mA signals and more.

The large backlit screen displays three parameters at once:
- Pressure measurement from internal or external sensor
- Sourced/simulated or measured mA values
- Temperature measured by optional RTD probe

• Unique integrated electric pump for one handed pressure calibration
• Test pressure switches easily with easy-to-use switch test function
• Precision pressure adjust vernier for easy and accurate pressure calibration
• Ideal accuracy and performance (0.025 %) for reference class transmitter calibration
• 30 PSI, 150 PSI and the new 300 PSI pressure ranges
• Programmable pressure calibrator pump limit:
  - eliminates over-pressurization
  - allows the user to program target pressures for pumping
• Extended pressure measurement range with any of 29 700Pxx Pressure Modules
• Pump cleanout ports reduce pump failures from moisture and fluid damage
• Fluid trap included with the unit to mitigate chance of fluid damage in at-risk applications
• Precision temperature measurement with optional RTD probe
### Specifications

<table>
<thead>
<tr>
<th>Pressure measurement</th>
<th>Range</th>
<th>Resolution</th>
<th>Accuracy</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluke-719Pro-30G</td>
<td>-12 to 30 PSI / -0.8 to 2 bar</td>
<td>0.001 PSI, 0.0001 bar</td>
<td>± 0.025 % of full scale, 6 months ± 0.035 % of full scale, 1 year</td>
<td>Dry Air and non-corrosive gas only</td>
</tr>
<tr>
<td>Fluke-719Pro-150G</td>
<td>-12 to 150 PSI / -0.8 to 10 bar</td>
<td>0.01 PSI, 0.001 bar</td>
<td>± 0.025 % of full scale, 6 months ± 0.035 % of full scale, 1 year</td>
<td></td>
</tr>
<tr>
<td>Fluke-719Pro-300G</td>
<td>-12 to 300 PSI / -0.8 to 20 bar</td>
<td>0.01 PSI, 0.001 bar</td>
<td>± 0.025 % of full scale, 6 months ± 0.035 % of full scale, 1 year</td>
<td></td>
</tr>
</tbody>
</table>

**Temperature effect (all ranges)**

Add ± 0.002 % F.S./°C for temps outside of 15 °C to 35 °C

No effect on accuracy on all functions from 15 °C to 35 °C

<table>
<thead>
<tr>
<th>Function</th>
<th>Range</th>
<th>Resolution</th>
<th>Accuracy (1 year)</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>mA dc (simulation and measurement)</td>
<td>0-24 mA dc</td>
<td>0.001 mA</td>
<td>± 0.015 % of reading ± 2 counts</td>
<td>1000 ohm maximum load in mA source, 26 V dc maximum voltage in mA simulate</td>
</tr>
<tr>
<td>Volts dc (measurement only)</td>
<td>30 V dc</td>
<td>0.001 V</td>
<td>± 0.015 % of reading ± 2 counts</td>
<td>No AC voltage measurement, do not exceed 30 V dc</td>
</tr>
<tr>
<td>Temperature (measurement only, Pt100 RTD)</td>
<td>-50 to 150 °C (-50 °F to 302 °F)</td>
<td>0.01 °C 0.01 °F</td>
<td>Temperature ± 0.1 °C (0.2 °F) ± 0.25 °C (± 0.45 °F) combined uncertainty when using 720 RTD probe (optional accessory)</td>
<td></td>
</tr>
<tr>
<td>Loop power supply</td>
<td>24 V dc</td>
<td>N/A</td>
<td>24 mA at 24 V</td>
<td></td>
</tr>
<tr>
<td>Temperature effect (all functions)</td>
<td></td>
<td></td>
<td>Add ± 0.002 % F.S./°C for temps outside of 15 °C to 35 °C</td>
<td>No effect on accuracy on all functions from 15 °C to 35 °C</td>
</tr>
</tbody>
</table>

**Environmental**

- Operating temperature: -10 °C to +50 °C
- Storage with batteries per battery manufacturer's specification within storage specification below
- Storage temperature (without batteries): -20 °C to +60 °C

**Power requirements**

- Battery: Eight (8) standard Alkaline AA batteries
- Battery life: 300 pump cycles to 150 PSI minimum; 1000 pump cycles to 30 PSI; 100 pump cycles to 300 PSI minimum

**Physical**

- Dimensions (HxWxD): 24.13 cm x 11.18 cm x 7 cm (9.5 in x 4.4 in x 2.8 in)
- Weight: With holster 1.2 kg (2.5 lb)

**Connections**

- Pressure: 1/8 inch female NPT
- Electrical: Standard banana jacks
- RTD: 4 pin miniature circular
- External module: 6 pin miniature circular

**Engineering units (configurable)**

- psi, bar, mbar, kPa, kgcm², cmH₂O@4 °C, cmH₂O@20 °C, mH₂O@4 °C, mH₂O@20 °C, inH₂O@4 °C, inH₂O@20 °C, mH₂O@60 °F, mmHg@0 °C, mmHg@0 °C, ftH₂O@4 °C, ftH₂O@20 °C, ftH₂O@60 °F

**Ordering information**

- Fluke-719Pro-30G Electric Pressure Calibrator, 30 PSIG
- Fluke-719Pro-150G Electric Pressure Calibrator, 150 PSIG
- Fluke-719Pro-300G Electric Pressure Calibrator, 300 PSIG
- Fluke-720RTD RTD Probe for 721 and 719Pro
- Fluke-720URTDA Universal RTD adapter for Fluke-721 and 719Pro
- Fluke-71XTrap Liquid and dirt trap for 718 and 719Pro

**Included with all models**

Test leads with alligator clips, printed users manual and users manual on CD-ROM in 14 languages, fluid trap, carrying case, ¼ inch NPT to ¼ inch ISO adapter, accessory hose kit with 2 ¼ inch quick fit adapters and 1 meter of hose, Traceable Certificate of Calibration.