FLUKE®

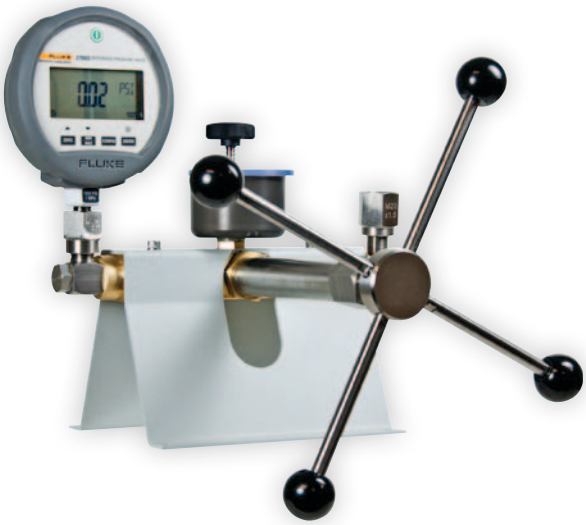
Calibration

2700G Series Reference Pressure Gauges

Technical Data

Features

- Precision pressure measurement from 100 kPa (15 psi) to 70 MPa (10 000 psi)
- Accuracy to 0.02% of full scale
- Easy-to-use, rugged construction for reliable performance
- Combine with the 700PTPK or 700HTPK pump kits for a complete portable pressure testing solution for up to 4 MPa (600 psi) with the PTP-1 pneumatic pump and up to 70 MPa (10 000 psi) with the HTP-2 hydraulic pump
- Combine with the P5510, P5513, P5514, or P5515 Comparison Test Pumps for a complete bench top pressure calibration solution
- Test port is 1/4 NPT Male. 1/4 BSP and M20 X 1.5 adaptors are included standard
- USB communications cable and universal power supply included standard



Combine the 2700G gauge with the P5510, P5513, P5514 (shown here) or P5515 Comparison Test Pumps for a complete bench top pressure calibration solution.

The 2700G Reference Pressure Gauges provide best-in-class measurement performance in a rugged, easy-to-use, economical package. Improved measurement accuracy allows it to be used for a wide variety of applications. It is ideal for calibrating pressure measurement devices such as pressure gauges, transmitters, transducers, and switches. In addition, it can be used as a check standard or to provide process measurements with data logging.

The 2700G has an easy-to-use interface that allows you to configure the sampling rate, tare value, damping, and auto-off time interval as well as reset the min/max pressure. You can also view the remaining battery life. Select from 21 different standard engineering units, including bar, in H_2O, kPa, MPa, and psi. In addition, the supervisor menu can be used to set one custom engineering unit. To ensure against incorrect measurements, each of the above functions can be locked from use through the supervisor menu.

The 2700G Reference Pressure Gauge can be combined with the Fluke Calibration P5500 series of comparison test pumps to make a complete pressure calibration system. The unique test port design of the P5500 series allows for hand tight connection of the 2700G without the use of PTFE tape.

P5510 Pneumatic Comparison Pump

- Pressure range: 0 to 2 MPa (300 psi)
- Vacuum range: 0 to 80 kPa (24 inHg)
- Built-in hand pump as pressure/vacuum source
- High-quality needle valve for fine control

P5513 Pneumatic Comparator

- Pressure range: 0 to 20 MPa (3000 psi)
- High pressure pneumatic operation
- Screw press for fine pressure adjustment
- High-quality needle valve for metering in supply pressure

P5514 Hydraulic Comparison Pump

- Pressure range: 0 to 70 MPa (10 000 psi)
- Bench mount design
- Screw pressure for pressure generation
- Operates with a wide range of fluids (Viton seals standard, EP seals available)

P5515 Hydraulic Comparison Pump

- Pressure range: 0 to 140 MPa (20 000 psi)
- Built-in priming pump for large volume applications and system priming
- High-quality screw press for pressure generation and fine control
- Clear acrylic reservoir for visibility of fluid level and quality
- Built-in drain plug for easy removal of fluid
- Sturdy carrying case with lid
- Operational with a wide range of fluids (Viton seals standard, EP seals available)

FLUKE®
Calibration

Model	Range	Resolution	Uncertainty (k=2)	Burst pressure	Media compatibility
2700G-BG100K	-15 psi to 15 psi -100 kPa to 100 kPa	0.001 psi 0.0001 bar	Positive pressure ± 0.02 % FS Vacuum ± 0.05 % FS	45 psi 0.3 MPa	Note 1
2700G-BG200K	-15 to 30 psi -100 kPa to 200 kPa	0.001 psi 0.0001 bar		90 psi 0.6 MPa	Note 1
2700G-BG700K	-12 psi to 100 psi -80 kPa to 700 kPa	0.01 psi 0.0001 bar		1000 psi 7 MPa	Note 2
2700G-BG2M	-12 psi to 300 psi -80 kPa to 2 MPa	0.01 psi 0.001 bar		2000 psi 14 MPa	Note 2
2700G-BG3.5M	-12 psi to 500 psi -80 kPa to 3.5 MPa	0.01 psi 0.001 bar		2000 psi 14 MPa	Note 2
2700G-BG7M	-12 to 1000 psi -80 kPa to 7 MPa	0.1 psi 0.001 bar		10 000 psi 70 MPa	Note 2
2700G-G20M	0 to 3000 psi 0 to 20 MPa	0.1 psi 0.01 bar		10 000 psi 70 MPa	Note 3
2700G-G35M	0 to 5000 psi 0 to 35 MPa	0.1 psi 0.01 bar		10 000 psi 70 MPa	Note 3
2700G-G70M	0 to 10 000 psi 0 to 70 MPa	1 psi 0.01 bar		15 000 psi 100 MPa	Note 3
Uncertainty includes linearity, hysteresis, repeatability, resolution, reference uncertainty, 1 year long term stability, and temperature effects from 18 to 28 °C. For temperatures from 0 °C to 18 °C and 28 °C to 50 °C, add 0.003% FS/°C					
Media compatibility: Note 1: Any clean, dry non-corrosive gas Note 2: Any liquids or gases compatible with 316 stainless steel Note 3: Any non-flammable, non-toxic, non-explosive, non-oxidizing liquid or gas compatible with 316 stainless steel					

Mechanical specifications	
Dimensions (HxWxD)	12.7 cm x 11.4 cm x 3.7 cm (5 in x 4.5 in x 1.5 in)
Pressure connection	¼ in NPT Male
Housing/weight	Cast ZNAL/0.56 kg (1.22 lb)
Display	5-1/2 digits, 16.53 mm (0.65 in) high 20-segment bar graph, 0 to 100 %
Power	Three AA alkaline batteries
Battery life	75 hours

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Calibration

Order information

Model	Description
2700G-BG100K	Reference Pressure Gauge, –15 to 15 psi (–100 to 100 kPa)
2700G-BG200K	Reference Pressure Gauge, –15 to 30 psi (–100 to 200 kPa)
2700G-BG700K	Reference Pressure Gauge, –12 to 100 psi (–80 to 700 kPa)
2700G-BG2M	Reference Pressure Gauge, –12 to 300 psi (–80 kPa to 2 MPa)
2700G-BG3.5M	Reference Pressure Gauge, –12 to 500 psi (–80 kPa to 3.5 MPa)
2700G-BG7M	Reference Pressure Gauge, –12 to 1000 psi (–80 kPa to 7 MPa)
2700G-G20M	Reference Pressure Gauge, 0 to 3000 psi (0 to 20 MPa)
2700G-G35M	Reference Pressure Gauge, 0 to 5000 psi (0 to 35 MPa)
2700G-G70M	Reference Pressure Gauge, 0 to 10 000 psi (0 to 70 MPa)
P5510-2M	Pneumatic Comparison Test Pump, vacuum to 300 psi (2 MPa)
P5513-20M	Pneumatic Comparator, 0 to 3000 psi (20 MPa)
P5514-70M	Hydraulic Comparison Pump with Viton Seals, 0 to 10 000 psi (70 MPa)
P5514-70M-EP	Hydraulic Comparison Pump with EP Seals, 0 to 10 000 psi (70 MPa)
P5515-140M	Hydraulic Comparison Pump with Viton Seals, 0 to 20 000 psi (140 MPa)
P5515-140M-EP	Hydraulic Comparison Pump with EP Seals, 0 to 20 000 psi (140 MPa)

Items included with gauge:

- Manual on CD-ROM in 14 languages
- Calibration certificate showing traceability
- 1/4 NPT female to 1/4 BSP male adapter
- 1/4 NPT female to M20X1.5 adapter
- Universal ac power supply
- USB communication cable

Optional:

ISO 17025 accredited calibration available (add "/C" to the model number)

Fluke Calibration.
Precision, performance, confidence.™

- Electrical
- RF
- Temperature
- Pressure
- Flow
- Software

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