

TECHNICAL DATA

Fluke 730G Smart Digital Pressure Calibrator

A compact, smart pressure solution for bench or field



The **Fluke 730G Smart Digital Pressure Calibrator** combines the performance of a precision test gauge with the power of a loop calibrator and also includes internal HART communication capabilities. When used with a pressure test pump the Fluke 730G becomes a high-efficiency, highly accurate calibrator that can test pressure gauges, pressure switches and pressure transmitters making it ideal for instrument shops, gauge labs and pressure laboratories.

- Pressure measurement from ± 10 in H₂O/2.5 kPa to 10000 psi/69 MPa
- Four absolute pressure measurement ranges: 15 PSIA (103 kPa), 30 PSIA (207 kPa), 100 PSIA (690 kPa), 300 PSIA (2 MPa)
- Pressure measurement accuracy 0.05% of full scale, 0.02 % optional
- Current measurement range: 0–24 mA
- Voltage measurement range: 0–30V DC
- 0.01 % current and voltage accuracy
- Powerful HART communication, supports HART 7
- 24V loop power, no external power supply needed
- Lithium battery life: 25 hours continuously (without 24 V loop power), or 8 hours continuously (24 V loop power)
- Storage up to 128 sets of calibration data
- Ingress protection: IP54
- 1-meter drop test
- Three-year warranty

BUILT-IN HART COMMUNICATION

The integrated HART communication functionality is easy-to-use and allows you to adjust HART directly, without requiring additional tools for adjustment.

PRECISION PRESSURE AND CURRENT MEASUREMENTS

The 730G series provides high-precision 0.02 % pressure measurement accuracy and 0.01 % current measurement accuracy to meet the requirements for establishing a pressure laboratory and achieving accurate pressure calibration results.

INTUITIVE OPERATION AND EASE OF USE

High-end LCD display, dual-jack design, bring a more convenient and efficient user experience.

PAPERLESS TESTING AND REPORTING

Optional 730G/PCSW management software enables paperless testing giving you the ability to automatically generate test reports and document results

Fluke 730G/PCSW Software

- **Paperless management of pressure calibrations:** Record calibration data, automate calibration tests and generate calibration reports.
- **Asset management:** Manage tested equipment and pressure standards with ease.
- **Supported pressure devices include:** analog pressure gauges, digital pressure gauge, pressure transmitter, pressure sensors and pressure switches.



Fluke-700PTPK Pneumatic Test Kit

- Combine with any Fluke-730G Series Gauge, 1000 psi (69 bar) or less, to make a complete pressure testing kit
- Generate pressure up to 600 psi (40 bar) with the 700PTP-1 test pump
- Connect the 730G Series gauge directly to the included PTP-1 hand pump
- Includes hoses and adapters for connecting to the pressure device to be tested
- Hard case protects pump and gauge and allows gauge to remain connected to the pump

Fluke-700HTPK Hydraulic Test Kit

- Combine with any Fluke-730G Series Gauge, 1000 psi (69 bar) or greater, to make a complete pressure testing kit
- Generate pressure up to 10000 psi (690 bar) with the 700HTP-2 test pump
- Connect the 730G Series gauge directly to the HTP-2 hand pump
- Includes 700HTH-1 hoses and adapters for connecting to the pressure device to be tested
- Hard case protects pump and gauge and allows gauge to remain connected to the pump

Specifications

Pressure specifications: 0.02 % of full scale (730RG), 0.05% of full scale (730G)

Current specifications: 0.01 % of reading

Model	Range	Resolution	Accuracy ¹	Pressure
730G01	-10 to +10 inH2O -20 to 20 mbar -2.49 to 2.49 kPa	0.001 inH2O 0.001 mbar 0.0001 kPa	Positive pressure, ± 0.2 % of range ² Vacuum, ± 0.2 % of range ²	3 psi, 210 mbar 20.6 kPa
730G02	-1 to +1 psi -70 to 70 mbar -6.89 to 6.89 kPa	0.0001 psi 0.001 mbar 0.0001 kPa		5 psi 350 mbar 34.4 kPa
730G04	-14 to 15 psi -0.97 to 1 bar -97 to 103 kPa	0.001 psi 0.0001 bar 0.01 kPa	Positive pressure, ±0.05% of range Vacuum, ±0.1% of range	60 psi 4 bar 413.6 kPa
730G05	-14 to 30 psi -0.97 to 2 bar -97 to 206 kPa	0.001 psi 0.0001 bar 0.01 kPa		120 psi 8 bar 827.3 kPa
730G06	-12 to 100 psi -0.83 to 6.9 bar -83 to 690 kPa	0.01 psi 0.0001 bar 0.01 kPa		400 psi 26 bar 2.757 MPa
730G27	-12 to 300 psi -0.83 to 20 bar -83 to 2 MPa	0.01 psi 0.001 bar 0.1 kPa		1200 psi 80 bar 8.273 MPa
730G07	-12 to 500 psi -0.83 to 34 bar -83 to 3.4 MPa	0.01 psi 0.001 bar 0.1 kPa		2000 psi 138 bar 13.789 MPa
730G08	-14 to 1000 psi -0.97 to 69 bar -97 to 6.9 MPa	0.1 psi 0.001 bar 0.1 kPa		4000 psi 266 bar 27.579 MPa

Specifications (continued)

730G10	-14 to 2000 psi -0.97 to 140 bar -97 to 14 MPa	0.1 psi 0.01 bar 1 kPa	Positive pressure, ± 0.05 % of range Vacuum, ± 0.1 % of range	8000 psi 550 bar 55.158 MPa
730G29	-14 to 3000 psi -0.97 to 200 bar -97 to 20 MPa	0.1 psi 0.01 bar 1 kPa		10000 psi 690 bar 68.947 MPa
730G30	-14 to 5000 psi -0.97 to 340 bar -97 to 34 MPa	0.1 psi 0.01 bar 1 kPa		10000 psi 690 bar 68.947 MPa
730G31	-14 to 10000 psi -0.97 to 690 bar -97 to 69 MPa	1 psi 0.01 bar 1 kPa		15000 psi 1035 bar 103.421 MPa
730GA4	0 to 15 psia 0 to 1 bar 0 to 100 kPa absolute	0.001 psi 0.0001 bar 0.01 kPa	± 0.05 % of range ⁴	60 psi 4 bar 413.6 kPa
730GA5	0 to 30 psia 0 to 2 bar 0 to 200 kPa absolute	0.001 psi 0.0001 bar 0.01 kPa		120 psi 8 bar 827.3 kPa
730GA6	0 to 100 psia 0 to 6.9 bar 0 to 690 kPa absolute	0.01 psi 0.0001 bar 0.01 kPa		400 psi 27 bar 2.757 MPa
730GA27	0 to 300 psia 0 to 20 bar 0 to 2 MPa absolute	0.01 psi 0.001 bar .01 kPa		1200 psi 80 bar 8.273 MPa
730RG04	-14 to 15 psi -0.97 to 1 bar -97 to 100 kPa	0.001 psi 0.0001 bar 0.0001 kPa	Positive pressure, ± 0.02 % of range ³ Vacuum, ± 0.05 % of range ³	45 psi 3 bar 310.2 kPa
730RG05	-14 to 30 psi -0.97 to 2 bar -97 to 200 kPa	0.001 psi 0.0001 bar 0.01 kPa		90 psi 6 bar 620.5 kPa
730RG06	-12 to 100 psi -0.83 to 6.9 bar -83 to 690 kPa	0.01 psi 0.0001 bar 0.01 kPa		1000 psi 69 bar 6.894 MPa
730RG27	-12 psi to 300 psi -0.83 to 20 bar -80 kPa to 2 MPa	0.01 psi 0.001 bar 0.1 kPa		2000 psi 138 bar 14 MPa
730RG07	-12 psi to 500 psi -0.83 to 34 bar -80 kPa to 3.5 MPa	0.01 psi 0.001 bar 0.1 kPa		2000 psi 138 bar 13.789 MPa
730RG08	-14 to 1000 psi -0.97 to 69 bar -97 to 6.9 MPa	0.1 psi 0.001 bar 0.1 kPa		10000 psi 690 bar 68.947 MPa
730RG29	-14 to 3000 psi -0.97 to 200 bar -97 to 20 MPa	0.1 psi 0.01 bar 1 kPa		10000 psi 690 bar 68.947 MPa
730RG30	-14 to 5000 psi -0.97 to 340 bar -97 to 34 MPa	0.1 psi 0.01 bar 1 kPa		10000 psi 690 bar 68.947 MPa
730RG31	-14 to 10000 psi -0.97 to 690 bar -97 to 69 MPa	0.1 psi 0.01 bar 1 kPa		15000 psi 1035 bar 103.421 MPa

¹ Accuracy specifications above have considered the effects of linearity, repeatability, resolution, reference accuracy, 1-year stability, and temperature effect.

² For 730G01/730G02, accuracy is ± 0.3 % of full scale @ 0 °C to 15 °C and 35 °C to 50 °C.

³ For all 730RG model, add 0.003 % FS/°C @ 0 °C to 18 °C and 28 °C to 50 °C.

⁴ For 730GA4, add 0.006 % FS/°C @ -10 °C to 15 °C and 35 °C to 55 °C; for all other 730GA model, add 0.003 % FS/°C @ -10 °C to 15 °C and 35 °C to 55 °C.

Media Compatibility

730G01, 730G02, 730G04, 730G05, 730RG04, 730RG05: any clean dry non-corrosive gas
Above 100 psi: any liquids or gases compatible with 316 stainless steel

Specifications (continued)

Electrical specifications (All specifications are valid to 110% of range)	
Range	
Current	0 mA to 24 mA
Voltage	0 V DC to 30 V DC
Resolution	
Current range	1 μ A
Voltage range	1 mV
Accuracy	0.01 % \pm 2 LSD all ranges @ 23 $^{\circ}$ C \pm 5 $^{\circ}$ C
Temperature compensation	From 20 % FS / $^{\circ}$ C @ -10 $^{\circ}$ C to +18 $^{\circ}$ C and 28 $^{\circ}$ C to 50 $^{\circ}$ C
Loop Compliance Voltage	24 V DC @ 20 mA
Temperature measurement accuracy inside the product	\pm 0.5 $^{\circ}$ C
Drive Capability	1200 Ω (without HART resistor), 950 Ω (with internal HART resistor)
Mechanical specifications	
Dimensions (H x W x L)	155 mm x 130 mm x 44 mm (6.1" x 5.1" x 1.7")
Weight	850g (1.87 lb)

Ordering information

FLUKE 730G Smart Digital Pressure Calibrator

Included

- Pressure calibrator
- Lithium-ion battery pack
- AC power supply/battery charger
- Universal power adapter (not available in all countries)
- Test lead set
- 1/4 in NPT-Female x M20-Male fitting
- 1/4 in NPT-Female x 1/4 in BSP-Male fitting
- Red alligator clip
- Black alligator clip
- USB cable
- Traceable calibrator report

Model	Description
FLUKE-730G01	FLUKE-730G01, Pressure calibrator, 10 INH2O
FLUKE-730G02	FLUKE-730G02, Pressure calibrator, 1 PSIG
FLUKE-730G04	FLUKE-730G04, Pressure calibrator, 15 PSIG
FLUKE-730G05	FLUKE-730G05, Pressure calibrator, 30 PSIG
FLUKE-730G06	FLUKE-730G06, Pressure calibrator, 100 PSIG
FLUKE-730G07	FLUKE-730G07, Pressure calibrator, 500 PSIG
FLUKE-730G08	FLUKE-730G08, Pressure calibrator, 1000 PSIG
FLUKE-730G10	FLUKE-730G10, Pressure calibrator, 2000 PSIG
FLUKE-730G27	FLUKE-730G27, Pressure calibrator, 300 PSIG

Model	Description
FLUKE-730G29	FLUKE-730G29, Pressure calibrator, 3000 PSIG
FLUKE-730G30	FLUKE-730G30, Pressure calibrator, 5000 PSIG
FLUKE-730G31	FLUKE-730G31, Pressure calibrator, 10000 PSIG
FLUKE-730GA4	FLUKE-730GA4, Pressure calibrator, absolute, 15 PSIA
FLUKE-730GA5	FLUKE-730GA5, Pressure calibrator, absolute, 30 PSIA
FLUKE-730GA6	FLUKE-730GA6, Pressure calibrator, absolute, 100 PSIA
FLUKE-730GA27	FLUKE-730GA27, Pressure calibrator, absolute, 300 PSIA
FLUKE-730RG04	FLUKE-730RG04, Pressure calibrator, reference, 15 PSIG
FLUKE-730RG05	FLUKE-730RG05, Pressure calibrator, reference, 30 PSIG
FLUKE-730RG06	FLUKE-730RG06, Pressure calibrator, reference, 100 PSIG
FLUKE-730RG07	FLUKE-730RG07, Pressure calibrator, reference, 500 PSIG
FLUKE-730RG08	FLUKE-730RG08, Pressure calibrator, reference, 1000 PSIG
FLUKE-730RG27	FLUKE-730RG27, Pressure calibrator, reference, 300 PSIG
FLUKE-730RG29	FLUKE-730RG29, Pressure calibrator, reference, 3000 PSIG
FLUKE-730RG30	FLUKE-730RG30, Pressure calibrator, reference, 5000 PSIG
FLUKE-730RG31	FLUKE-730RG31, Pressure calibrator, reference, 10000 PSIG
FLK-730PCSWCN	FLUKE-730PCSWCN, Pressure verification software

Visit www.fluke.com to get complete details on these products or ask your local Fluke sales representative.

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