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 H20/2.5 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 inH20 -20 to 20 mbar -2.49 to 2.49 kPa	0.001 inH20 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 µA
Voltage range	1 mV
Accuracy	0.01 % ± 2 LSD all ranges @ 23 °C±5 °C
Temperature compensation	From 20 % FS / °C @ -10 °C to +18 °C and 28 °C to 50 °C
Loop Compliance Voltage	24 V DC @ 20 mA
Temperature measurement accuracy inside the product	±0.5 °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 verifcation software

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

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