

Fluke 718Ex Intrinsically Safe Pressure Calibrators

Pump Up the Pressure

The new Fluke 718Ex Intrinsically Safe Pressure Calibrator is a new, powerful intrinsically safe, self contained pressure calibrator for usage in Explosion endangered areas. The Fluke 718Ex offers:

- ATEX II 1G EEx ia IIC T4 Compliant
- Built-in pressure/vacuum hand pump, with vernier and bleed valve
- Pressure measurement to 0.05 % of full span, using an internal pressure sensor
- Pressure measurement to 200 bar using any of the 8 intrinsically safe Fluke 700PEx Pressure Modules
- Wide range of selectable measurement units for pressure
- Current measurement with 0.02 % accuracy and 0.001 mA resolution
- Pressure switch test function
- Min/Max hold functions
- Compact size and weight
- Simple, push-button user interface
- Rugged and reliable, for field use



ATEX Compliant

Specifications

Summary Specifications (18° to 28°C, one year)

Fluke 718Ex 30G and 100G

Measure pressure	Model	Range	Resolution	Accuracy	Over pressure	Media
Using internal pressure module	Fluke-718Ex-30G	-830 mbar to 2 bar	0.0001 bar	0.05% FS	3x FS	Non corrosive gases
	Fluke-718Ex-100G	-830 mbar to 7 bar	0.001 bar	0.05% FS	2x FS	Non corrosive gases
With external pressure modules	Fluke-718Ex 30G or 100G	Up to 200 bar	Depending pressure module (see detailed specification)			

Temp Coeff. -10 to 18 °C, 28 to 55 °C ± 0.01 % of range per °C

Supported pressure units PSI, in. H₂O (4 °C), in. H₂O (20 °C), kPa, cm H₂O (4 °C), cm H₂O (20 °C), bar, mbar, kg/cm², mmHg, in Hg

Source pressure	Model	Range
Using built in pump	Fluke-718Ex-30G	0 to 2 bar
	Fluke-718Ex-100G	0 to 7 bar

Measure current	model	Range	Resolution	Accuracy
	Fluke-718Ex-30G or 100G	0-24 mA	0.001mA	0.02% rdg ± 2 counts

Temp Coeff. -10 to 18 °C, 28 to 55 °C ± 0.005 % of range per °C

General Specifications



Power	One 9-volt alkaline battery ANSI/NEDA 1604A or IEC 6LR619V
Battery life	4 to 20 hours, depending on functions used
Pressure input	1/8 in. NPT pressure fitting
Pressure module input	LEMO connector
Current input	Shrouded banana jacks
Operating temperature	-10 °C to 55 °C
Non-operating temperature	-40 °C to 60 °C
Relative humidity	95 % (10 to 30 °C)
(%RH operating without condensation)	75 % (30 to 40 °C) 45 % (40 to 50 °C) 35 % (50 to 55 °C)
Size with holster (HxWxD)	216 mm x 94 mm x 66 mm
Weight with holster	992 g
Vibration	Random, 2g, 5-500 Hz
Shock	1 Meter Drop test
Safety	ATEX II 1G EEx ia IIC T4 Compliant CSA Certification I.S. Class I, Div 1 Groups A-D , T4
EMC	EN61326 2002-2, Class C
Warranty	1 year

Operating Modes

- Measure pressure (using internal sensor)
- Display pressure module reading (automatically selected when pressure module connected)
- Measure current

Zeroing Modes

Gage and differential	Pushing Zero button stores present pressure value as an offset and subtracts it from the displayed value.
Absolute	Pushing Zero button causes nominal barometric pressure to be displayed. User corrects to actual barometric pressure with up/down keys. Difference is used as zero offset calibration.

Ordering Information

- Fluke-718Ex-30G Intrinsically Safe Pressure Calibrator (30G/2 bar)
- Fluke-718Ex-100G Intrinsically Safe Pressure Calibrator (100G/7 bar)


Each calibrator includes:

Protective red holster, TL75 test leads, AC72 test clips, Media filter, CD users manuals (English, French, German, Spanish, Italian, Dutch, Norwegian, Danish, Swedish, Finnish, Portuguese, Korean, Chinese, Japanese), 718Ex CCD content control drawing

Fluke 700Ex Intrinsically Safe Pressure Modules



To measure a wide range of pressure in an explosive endangered area the range of pressure modules is extended with 8 ATEX compliant models. These models are compatible with the Fluke 718Ex intrinsically safe pressure calibrator.

- ATEX  II 1G EEx ia IIC T4 Compliant
- Ranges from 2.5 mbar to 200 bar
- Choice of gage, differential and absolute modules
- Very high accuracy up to 0.025%
- Compatible with Fluke 718Ex
- Rugged cases protect the modules in harsh environments

Pressure Module Specifications

ATEX Compliant


700Ex

Model	Range (approx)	Resolution	Reference Uncertainty (23 ± 3 °C)	High Side media	Low side media	Fitting material	Max overpressure ²⁾
Differential							
Fluke-700P01Ex	25 mbar	0.01 mbar	0.2%	Dry ¹⁾	Dry	316 SS	3x
Fluke-700P24Ex	1001 mbar	0.1 mbar	0.025%	316 SS	Dry	316 SS	3x
Gage							
Fluke-700P05Ex	2 bar	0.1 mbar	0.025%	316 SS	N/A	316 SS	3x
Fluke-700P06Ex	7 bar	0.7 mbar	0.025%	316 SS	N/A	316 SS	3x
Fluke-700P27Ex	20 bar	1 mbar	0.025%	316 SS	N/A	316 SS	3x
Fluke-700P09Ex	100 bar	10 mbar	0.025%	316 SS	N/A	316 SS	2x
Absolute							
Fluke-700PA4Ex	1000 mbar	0.1 mbar	0.05%	316 SS	N/A	316 SS	3x
High							
Fluke-700P29Ex	200 bar	0.01 bar	0.05%	C276	N/A	C276	2x

1) "Dry" indicates dry air or non-corrosive gas as compatible media. "316 SS" indicates media compatible with Type 316 Stainless Steel. "C276" indicates media compatible with Hastelloy C276.

2) Maximum overpressure specification includes common mode pressure.

General Specifications

Pressure module output	LEMO connector
Operating temperature	-10 °C to 55 °C
Non-operating temperature	-40 °C to 60 °C
Relative humidity	95 % (10 to 30 °C)
(%RH operating without condensation)	75 % (30 to 40 °C)
	45 % (40 to 50 °C)
	35 % (50 to 55 °C)
Vibration	Random, 2g, 5-500 Hz
Shock	1 Meter Drop test
Safety	ATEX  II 1G EEx ia IIC T4 Compliant
	CSA Certification I.S. Class I, Div 1 Groups A-D, T4
Warranty	1 year

Ordering Information

Fluke-700P01Ex Pressure Module (25 mbar)
 Fluke-700P24Ex Pressure Module (1001 mbar)
 Fluke-700P05Ex Pressure Module (2 bar)
 Fluke-700P06Ex Pressure Module (7 bar)
 Fluke-700P27Ex Pressure Module (20 bar)

Fluke-700P09Ex Pressure Module (100 bar)
 Fluke-700PA4Ex Pressure Module (1000 mbar)
 Fluke-700P29Ex Pressure Module (200 bar)

FLUKE®

Process Tools Family

The Fluke range of process tools give you all the choice you need to maintain and calibrate virtually all types of sensors and transmitters.

Whether you want all the required functionality in just one tool, or a dedicated tool for temperature or pressure only, the choice is yours. Whatever the environment, these tools have the ruggedness and reliability that has made Fluke the brand of choice for maintenance professionals around the world.

Only Fluke covers your troubleshooting and calibration needs with such a complete line of handheld test tools. Check the range for yourself, and see how they will help to keep your world up and running.



Fluke. *Keeping your world up and running.*

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