

# Fluke tools are designed to keep you safe in dangerous environments



Fluke's intrinsically safe tools can be used to help you perform maintenance and calibration tasks in potentially explosive and hazardous areas. Learn about the importance of intrinsic safety on the job and the industries that use intrinsically safe tools.

Fluke offers a wide range of reliable, accurate and intrinsically safe tools. Including the NEW 28II Ex True-rms Multimeter and the **NEW** Fluke 568 Ex Infrared Thermometer, which compliments the line of Fluke intrinsically safe field calibrators.



Fluke 725Ex Multifunction **Process Calibrator** 



Fluke 28II Ex True-rms Industrial Multimeter



Fluke 718Ex Pressure Calibrator



Fluke 707Ex **Loop Calibrator** 



Fluke 700PEx Pressure Modules





700G Series **Precision Pressure** 



Thermometers

# Fluke Intrinsically Safe products help to keep you safe on the job

"Intrinsically Safe" or I.S. is a protection method employed in potentially explosive atmospheres. Certified I.S. tools are designed to prevent the release of sufficient energy to cause ignition of flammable material. I.S. standards apply to all equipment that can create one or more of a range of defined potential explosion sources:

- Electrical sparks
- **Electrical arcs**
- **Flames**
- Hot surfaces
- Static electricity
- Electromagnetic radiation
- **Chemical reactions**
- Mechanical impact
- Mechanical friction
- Compression ignition
- **Acoustic energy**
- **lonizing radiation**

Industries that use or should use I.S. tools include:

- Petro-chemical
- Oil platforms and refineries
- **Pharmaceutical**
- **Pipelines**
- Any environment where explosive gases or vapors could be present

### Fluke 700PEx Pressure Modules

#### Best suited for:





• Use with the Fluke 725Ex Multifunctional Process Calibrator and Fluke 718Ex Pressure Calibrator to cover the most commonly used pressure calibration ranges from 0-25 mbar up to 0-200 bar

- I.S. Class I Div 1 Groups A-D T4, Ta = 0 °C to +50 °C
- ATEX II 1G Ex ia IIC T4 compliant
- Very high accuracy up to 0.025 %

## 1551/1552 "Stik" Thermometers

#### Best suited for:





- · Daily checks of working thermometers
- Custody transfer temperature determination, PET calibration, LIG calibration, temperature transmitter calibration and verification

#### Features:

- ATEX II 2 G Ex ib IIB T4 Gb, Ta -10 °C to 50 °C 1551A range: -50 °C to 160 °C (-58 °F to 320 °F) 1552A range: -80 °C to 300 °C (-112 °F to 572 °F)
- Accuracy (1 year): ± 0.05 °C (± 0.09 °F)
- Easy data logging available with 1552A

#### Legend

- Motor Control Center
- Flow Computer

Tank Farm

- **Process Measurements**
- **Process Controller**

- Pumping Station -IT--+C

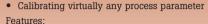


### Fluke 725Ex Multifunction Process Calibrator

#### Best suited for:







- Class I Div 1 Groups B-D 171 °C
- ATEX II IG Ex ia IIB 171 °C Compliant
- Measure, source or simulate volts dc, mA, RTDs, thermocouples, frequency and ohms
- 2-channel simultaneous source and measure capability for calibration of transmitters
- Internal loop supply to power transmitters
- Store frequently-used test setups for later use
- Pressure measurement to 200 bar and pressure switch test using any of the 8 Fluke 700PEx pressure modules



### Fluke 568 Ex Intrinsically Safe Infrared Thermometer

#### Best suited for:









 Taking spot, differential or scanning temperature measurements in any environment where flammable gases or vapors may be present

#### Features:

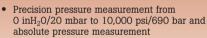
- Class I Div 1 and Div 2 or Zone 1 and 2 hazardous environments
- ATEX/IECEX, NEC-500/NEC-505, PCEC, INMETRO certified
- Enhanced 50:1 distance to spot ratio allows user to measure smaller objects from farther away
- Comfortable pistol grip makes target pointing an easy job
- · Backlit display for poorly lit areas
- Displays Min/Max/DIF/AVG measurements and saves in memory
- Adjustable emissivity setting for more accurate measurements
- Log up to 99 measurements
- Compatible with mini-connector K-type thermocouple (KTC) probe



#### 700G Series Precision Pressure Test Gauges

Best suited for:





#### Features:

- CSA; Class 1, Div 2, Groups A-D rating
- ATEX rating: II 3 G Ex nA IIB T6
- · Accuracy to 0.05 % of full scale
- Reference class gauge accuracies to 0.04 % of reading
- · Log up to 8,493 pressure measurements to memory

#### Fluke 718Ex Pressure Calibrator

#### Best suited for:







Pressure measurements and calibration with internal sensor at pressure ranges of 2, 7 and 20 bar

#### Features:

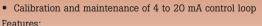
- Class I Div 1 Groups A-D T4 Compliant
- ATEX II IG Ex ia IIC T4 compliant
- Built-in pressure/vacuum hand pump, with vernier and bleed valve
- Pressure measurement to 200 bar using any of the 8 Fluke 700PEx Pressure Modules
- $\bullet$  Pressure measurement to 0.05 % of full span using internal pressure sensor
- Pressure switch test function



### Fluke 707Ex Loop Calibrator

#### Best suited for:





- F.M. Class I Div 2 Groups A-D T4
- ATEX II 2G Ex ia IIC T4 compliant
- Large display and simple, quick-click push/rotary button for easy one-handed operation
- Simultaneous mA and % readout for quick, easy interpretation of readings
- · mA accuracy of 0.015 %, superior to other loop calibrators
- Pushbutton with 25 % steps for fast, easy linearity checks
- 0 and 100 % 'span check' for fast confirmation of zero and span

#### Fluke 28II Ex True-rms Industrial Multimeter

#### Best suited for:



12.134 PEI.51





 Solving problems on motor drives, in plant automation, power distribution and electromechanical equipment

#### Features:

- Class I Div 1 Groups A-D
- ATEX II 2 G Ex ia IIC T4 Gb
- ATEX II 2 D Ex ia IIIC T130C Db
- ATEX I M1 Ex ia I Ma
- Low voltage troubleshooting in hazardous areas
- Built-in thermometer allows you to take temperature readings
- Large digit display with bright, two-level
- IP67 rated, waterproof and dustproof





### Making sense of the product rating systems

Each approved intrinsically safe device is rated to ATEX, NEC, FM or other country standards. The corresponding rating system allows you to understand which zones, type of protection, gas groups and temperature classes the instrument is approved for.

ATEX Example

Fluke 707Ex is ATEX Compliant II 2 G Ex ia IIC T4

(Ex)

The ATEX examination mark is required on all devices for use in European hazardous areas.

#### **ATEX Markings**

II 2 G	The classification of zones. "II" designates the tool is approved for all non-mining areas. "2" represents the category of the device, in this case the device is rated for the second most hazardous areas. "G" designates atmosphere, in this case gas, vapors and mist.
Ex	Explosion protection based on European Ex-regulations.
ia	The type of protection from explosion, in this case the energy in a device or connector has been reduced to a safe value.
IIC	Gas Group. "IIC" rating indicates compatibility with the most dangerous gas groups.
T4	Temperature class is the maximum temperature of a surface that may be.

### **FM Example**



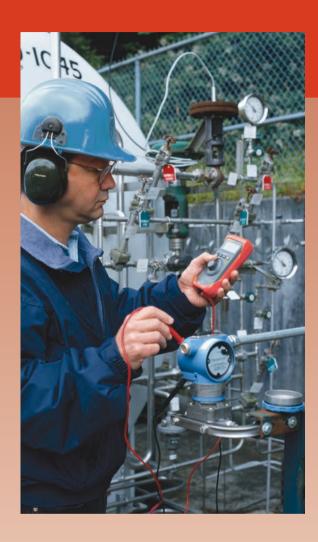
Fluke 707Ex is APPROVED FM-classified N.I. Class I, Div 2, Groups A-D, T4



The Factory Mutual Approved mark.

#### **Factory Mutual Markings**

N.I.	Non-incendive apparatus, internal energy is limited so a specified atmosphere cannot be ignited by its use.
Class I	For use with gases, vapors and liquids (not dust, fibers or filings).
Div 2	Certified for use in Zone 2, explosive atmospheres not normally present, may rarely exist for short duration.
Groups A-D	Rated for use with explosive gasses as defined by groups A-D, including acetylene, hydrogen, acetylene and propane.



Fluke. Keeping your world up and running.®

Fluke Corporation

PO Box 9090, Everett, WA 98206 U.S.A.

Fluke Europe B.V.

PO Box 1186, 5602 BD Eindhoven, The Netherlands

### For more information call:

In the U.S.A. (800) 443-5853 or
Fax (425) 446-5116
In Europe/M-East/Africa +31 (0) 40 2675 200 or
Fax +31 (0) 40 2675 222
In Canada (800)-36-FLUKE or
Fax (905) 890-6866
From other countries +1 (425) 446-5500 or
Fax +1 (425) 446-5116
Web access: http://www.fluke.com

©2005-2014 Fluke Corporation.

Specifications subject to change without notice.