

# Fluke 707Ex Intrinsicly Safe mA Loop Calibrator



## Key features

- High performance intrinsically safe loop calibrator for use in potentially explosive environments
- Is certified in accordance with ATEX directive (Ex II 2 G Ex ia IIC T4) in Zones 1 and 2 and to operate in accordance with Factory Mutual N.I. Class 1, Division 2 areas Group A-D
- Features large display and simple, quick-click interface for easy one-handed operation

## Product overview: Fluke 707Ex Intrinsicly Safe mA Loop Calibrator

### Fluke 707Ex for fast one-handed mA loop checks in Ex zones

The Fluke 707Ex is an intrinsically safe loop calibrator for use in potential explosive environments. The Fluke 707Ex is certified in accordance with the ATEX directive in Zones 1 and 2. The Fluke 707Ex is certified in accordance with the ATEX directive (Ex II 2 G Ex ia IIC T4) in Zones 1 and 2. It is also certified to operate in accordance with Factory Mutual N.I. Class 1, Division 2 areas Group A-D.

Beyond that it combines the best features of a push-button and knob-base loop calibrator, for extremely fast and easy calibration. The large display and simple quick-click rotary button lets you make quick selections and adjustments with one hand. Plus, features such as mA sourcing, simulation and measurement; simultaneous display of mA and % of span, and selectable step or ramp outputs, helps you work more efficiently and accurately. And you can quickly change the 9V battery without breaking the calibration seal.

### Other useful features:

- Provides simultaneous mA and % readout for quick, easy interpretation of readings.

- Delivers superior mA accuracy of 0.015%
- Provides 1  $\mu$ A resolution for mA source, simulate, and measure
- Includes HART® compatible resistance connected in series with the loop supply for compatibility with HART communicators
- Features push button 25% steps for fast, easy linearity checks
- Includes 0-100% “span check” for fast confirmation of zero and span.
- Provides selectable slow ramp, fast ramp, and step ramp to provide smooth outputs for valve slewing and loop functional tests.
- Includes a 24 volt internal loop supply, so you can power and read a transmitter at the same time without a DMM.
- Measures V DC to 28 V
- Runs on a single 9 V battery that is easily changed without breaking the calibration seal
- Offers 0 - 20 mA or 4 - 20 mA default start up modes
- Features an innovative output adjustment dial
- Comes with a protective yellow holster with test lead storage and a three year warranty

## Specifications: Fluke 707Ex Intrinsically Safe mA Loop Calibrator

Specifications		
Current measurement	<b>Range</b>	0 to 24 mA
	Resolution	0.001 mA
	Accuracy	0.015% Rdg + 2 LSD
Current sourcing	<b>Range</b>	0 to 20 mA or 4 to 20 mA
	Accuracy	0.015% Rdg + 2 LSD
	Drive capability	700 $\Omega$ at 20 mA
Current simulation	<b>Range</b>	0 to 20 mA or 4 to 20 mA
	Accuracy	0.015% Rdg + 2 LSD
Loop power	While measuring mA, 24 V	
Voltage measurement	<b>Range</b>	0 to 28 V DC
	Resolution	1 mV
	Accuracy	0.015% Rdg + 2 LSD
Environmental Specifications		
Operating temperature	-10°C to 55°C	
Storage temperature	-40°C to 60°C	
Humidity (without condensation)	0 to 95% (0°C to 30°C);	
	0 to 75% (30°C to 40°C)	
	0 to 45% (40°C to 50°C)	
Temperature coefficient	-10°C to 18°C, 28°C to 55°C, $\pm$ .005% of range per °C	
Safety Specifications		
Safety	CSA C22.2 No. 1010.1:1992	
EMC	EN50082-1:1992 and EN55022:1994 Class B	
Maximum voltage	30 V	

ATEX certification	Ex II G Ex ia IIC T4 Zones 1 and 2, ZELM 02 ATEX 0120 X
CE certification	EN61010-1 and EN61326
<b>Mechanical and General Specifications</b>	
Size	152 x 70 x 41 mm
Weight	224 g (350 g including holster)
Batteries	One 9V battery Alkaline
Warranty	3 year
Shock & vibration	per MIL-T-28800 for a Class 2 Instrument
Display current and % of span	Yes
Auto step, auto ramp	Yes
Span check	Yes

## Ordering information



### **Fluke 707Ex**

Fluke 707Ex Intrinsic Safe Loop Calibrator

Includes:

- Alligator test clips
- Instruction manual (on CD-ROM)
- Protective holster with Flex-Stand™
- Safety designed test leads
- NIST- traceable calibration report and data

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