

FLUKE®

Fluke 707Ex Intrinsically Safe Loop Calibrator

The fast, one-handed tool for loop checks in Ex zones

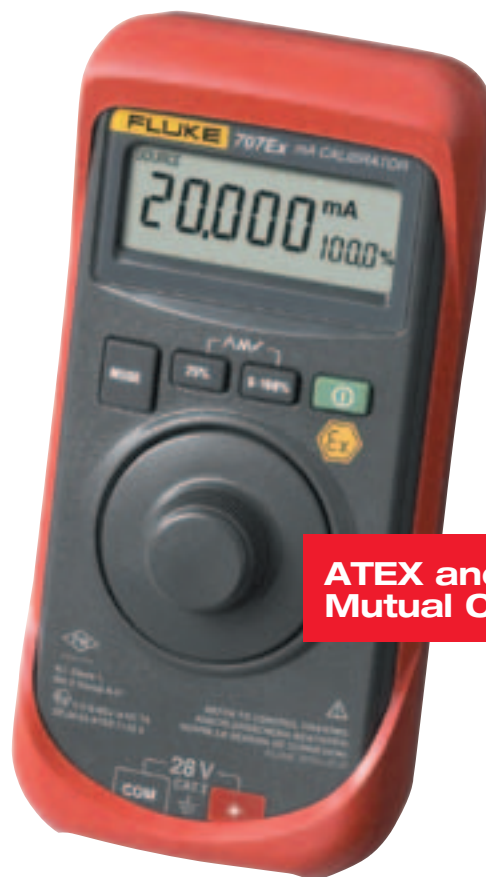
Cal Power

Via Acquanera, 29 22100 COMO
tel. 031.526.566 (r.a.) fax 031.507.984
info@calpower.it www.caltower.it

Technical Data

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

- 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.
- Push button with 25 % steps for fast, easy linearity checks.
- 0-100 % "span check" for fast confirmation of zero and span.
- Selectable slow ramp, fast ramp, and step ramp to provide smooth outputs for valve slewing and loop functional tests.
- Internal loop supply, so you can power and read a transmitter at the same time without carrying a DMM.
- Measures V dc to 28 V.
- Innovative output adjustment dial with .001 mA and 0.1 mA resolution.
- HART® compatible resistance is connected in series with the loop supply for compatibility with HART communicators.



**ATEX and Factory
Mutual Certified**

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

Function	Range	Resolution	Accuracy
Voltage measure	0 to 28 V	0.001 V	± (0.015 % Rdg + 2 counts)
mA measure	0 to 24 mA	0.001 mA	± (0.015 % Rdg + 2 LSD)
mA source	0 to 24 mA ¹	0.001 mA	± (0.015 % Rdg + 2 LSD)
mA simulate	0 to 24 mA ²	0.001 mA	± (0.015 % Rdg + 2 LSD)
Loop supply	24 V dc	n/a	24 V ± 1 V dc, no load

Temperature Coefficient, -10 to 18 °C, 28 to 55 °C, ± .005 % of range per °C;

¹Max load, 700 Ohms at 20 mA

²Max applied voltage for simulation, 28 V

General Specifications

Maximum voltage: 28 volts

Non-operating temperature: -30 to 60 °C

Operating temperature: -10 to 50 °C

Relative humidity: 0 to 95 % (0 to 30 °C); 0 to 75 % (30 to 40 °C); 45 % up to 50 °C

Operating altitude: 3,000 meters max.

Shock and vibration: Per MIL-T-28800 for a Class 2 Instrument

Safety: CSA C22.2 No. 1010.1: 1992

EMC: EN50082-1:1992 and EN55022:1994 Class B

ATEX certification: Ex II 2 G Ex ia

IIC T4 Zones 1 and 2, ZELM 02 ATEX 0120 X

FM certification: N.I. Class 1, Division 2, Groups A-D

CE certification: EN61010-1 and EN61326

Size, without holster: (H x W x D)

6.0 in x 2.8 in x 1.6 in
(152 mm x 70 mm x 41 mm)

Size, with holster: (H x W x D)

6.4 in x 2.9 in x 1.9 in
(164 mm x 75 mm x 47 mm)

Weight: 0.28 kg (0.6 lb), with holster and stand:
.92 lb (0.42 kg)

Battery: One 9 V alkaline

Battery life: 18 hours typical, at 12 mA into 500 ohms

Warranty: 1 year

Operating Modes

Measure current

Measure current/Loop power

Measure voltage

Simulate current; manual adjust; scroll up/down

Simulate current; 25% steps; 0 - 100% steps

Simulate current; Auto ramp (smooth/step)

Source current; manual adjust; scroll up/down

Source current; 25% steps; 0 - 100% steps

Source current; Auto ramp (smooth/step)

Ordering information

Model

Fluke-707Ex Intrinsically Safe Loop Calibrator

Each calibrator includes:

Safety designed test leads, alligator test clips, holster, instruction manual on CD (English, French, German, Spanish, Italian, Dutch, Norwegian, Danish, Swedish, Finnish, Portuguese, Korean, Chinese, Japanese), 707Ex CCD Content Control Drawing, CE, CSA, FM and ATEX markings.

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>

©2003-2010 Fluke Corporation.

Specifications subject to change without notice.
Printed in U.S.A. 7/2010 2072174B D-EN-N

Modification of this document is not permitted without written permission from Fluke Corporation.

Cal Power

Via Acquanera, 29 22100 COMO
tel. 031.526.566 (r.a.) fax 031.507.984
info@calpower.it www.caltower.it