705/707/707Ex/715 Loop Calibrators

FLUKE®



Fluke 705



Fluke 715



Fluke 707



Fluke 707Ex

4-20 mA, source, measure, simulate

705 Loop Calibrator

- Simultaneous mA and %
- mA accuracy of 0.02%
- Measure, source and simulate mA
- Push button 25% steps for fast, easy linearity checks
- "Span Check" for fast confirmation of zero and span
- Selectable slow ramp, fast ramp, and step function
- 24 volt internal loop supply
- 0 – 20 mA or 4 – 20 mA default start up modes

707 Loop Calibrator

- Features of the Fluke 705
- "Quick Click" detented rotary knob for one handed operation
- Higher accuracy: 0.015%
- Mains Voltage Input protection
- 250 Ohm loop resistance for with Hart instrumentation

715 Volt/mA Calibrator

- Measure loop current (0–20 mA, 4–20 mA) signals with 0.015% accuracy and 0.001 mA resolution
- Measure voltage output process signals from PLCs, transmitters
- Source or simulate 24 mA loop current
- Source voltage to 100 mV or 10V
- 24V loop supply with simultaneous current measurement

707Ex Intrinsically Safe Loop Calibrator

- Same features as Fluke 707
- For use in explosion endangered areas
- ATEX certified (Ex II 2 G Eex ia IIC T4)

Specifications

Functions Voltage measurement	705/707/707 Ex	715
Range	0–28 V DC	0–100 mV, 0–10 V
Resolution	1 mV	10 µV 1 mV
Accuracy	705: 0.025% Rdg + 1 LSD 707/707Ex: 0.015% Rdg + 2 LSD	0.02% Rdg + 2 LSD
Current measurement		
Range	0–24 mA	0–24 mA
Resolution	0.001 mA	0.001 mA
Accuracy	705: 0.025% Rdg + 2 LSD 707/707Ex: 0.015% Rdg + 2 LSD	0.015%
Current sourcing		
Range	0–20 mA or 4–20 mA[1]	0–20 mA or 4–20 mA[1]
Accuracy	705: 0.025% Rdg + 2 LSD 707/707Ex: 0.015% Rdg + 2 LSD	0.015% + 2 LSD
Drive capability	705: 1000 Ω @ 24 mA 707: 1200 Ω @ 24 mA 707Ex: 700 Ω @ 20 mA	1000 Ω @ 24 mA
Loop power while measuring mA	24 V	24 V
Voltage sourcing	N/A	0–100 mV or 0–10 V
Display current and % of span	Yes	mA or %
Auto step, auto ramp	Yes	No
Span Check	Yes	No

[1] will over-range to 24 mA

Fluke 705, 707, 707Ex

Maximum voltage: 30 V (28 V – 707Ex)
Non-operating temperature: -40 to 60°C
Operating temperature: -10 to 55°C
Relative humidity: 0 to 90% (0 to 35°C); 0 to 70% (35 to 55 °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
Size (HxWxD): 164 mm x 75 mm x 47 mm;
Weight: 0.35 kg
Battery: One 9 V alkaline
Battery life: 18 hours typical, at 12 mA
Warranty: Three years (one year, 707Ex)

715

For general specifications see page 56
Size (HxWxD): 201 mm x 98 mm x 52 mm
Weight: 0.6 kg
Battery: One 9V alkaline
Battery life: 4 to 20 hours
Warranty: Three years

Recommended Accessories



C12A (705/707)



C25 (715)



TL220



TL28A



TPAK (715)

Included Accessories

Fluke 705/707: C10 Yellow Holster, TL75 Test Leads, AC72 Alligator Clips, Single 9V alkaline battery, Instruction Sheet
Fluke 707Ex: Red Ex-holster, Fluke TL75 Test Leads, AC72 Alligator Clips, Single 9V alkaline battery, Instruction Sheet
Fluke 715: Yellow Holster (H80M excl. TPAK), TL75 Test Leads and AC72 Alligator Clips, Single 9V alkaline battery, Instruction Sheet

Ordering Information

Fluke 705	Loop Calibrator
Fluke 707	Loop Calibrator
Fluke 707Ex	Intrinsically Safe Loop Calibrator
Fluke 715	Volt/mA Calibrator

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