

# Fluke 709, 709H and 710 Precision Loop Calibrators



Fluke 710



Fluke 709H



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The Fluke 709 and 709H mA Loop Calibrators and 710 Valve Tester are designed to save time and produce high-quality results. These calibrators are built around a user-friendly interface with a Quick-Set rotary encoder knob. This tool reduces the time it takes to measure or source current, and power up a loop. The protective holster easily fits into a technician's hand and the large backlit display is easy to read, even in dark, cramped worked areas.

- Best-in-class accuracy at 0.01% reading
- HART™ Communications (709H, 710) to communicate with and test HART smart instruments
- Compact rugged design
- Intuitive user interface with quick-set knob for fast setup, easy to use
- 24 V DC loop power with mA measure mode
- Resolution of 1 µA on mA ranges
- Built in selectable 250 Ω resistor for HART communications
- Simple two wire connection for all measurements
- Valve test (source and simulate defined mA values with % keys for valve testing)
- Upload logged mA measurements and HART device data using the 709H with optional 709H/TRACK software
- Three-year warranty

### HART™ Communication

The Fluke 709H offers a built-in HART modem to provide the communication capability to perform the following commands:

- Read message, tag, descriptor and calibration date
- Read sensor PV information and PV output information
- Read long tag
- Write PV ranges (upper and lower)
- Enter/exit fixed current mode and set zero offset
- Trim DAC zero (mA output 4 mA) and trim DAC gain (mA output 20 mA)

### Valve Testing

The Fluke 710 has powerful valve-testing functions including preconfigured valve signature test, speed test, step test, manual test and bump/partial stroke test. The instrument comes with ValveTrack™ desktop software where you can upload valve test results, logged measurements and HART device configurations captured in the field.

Key Features	709	709H	710
mA measure (range and accuracy)	0-24 mA @ 0.01%	0-24 mA @ 0.01%	0-24 mA @ 0.01%
mA source/simulate	0-24 mA @ 0.01%	0-24 mA @ 0.01%	0-24 mA @ 0.01%
DC volts measure	0-30 V @ 0.01%	0-30 V @ 0.01%	0-30 V @ 0.01%
DC volts source			
24 V loop power	•	•	•
Auto step/ramp	•	•	•
Documenting and log data		Option	•
HART communication		•	•
Valve testing	Analog	Analog	Analog/HART

### Recommended Accessories



**709H TRACK**  
Software/Cable  
HART™  
Communication



**C195**  
Case



**TP220**  
Industrial Test Probes



**AC285**  
SureGrip™  
Alligator Clips



**TL80A**  
Basic Electronic  
Test Lead Set  
See page 152



**TL220**  
SureGrip™ Industrial  
Test Lead Set  
See page 152

### Included Accessories

**709:** AC175 Alligator Clip Set, TL75 Test Leads, Soft Case, Six AAA Batteries (installed), Product Manual (CD), Quick Reference Guide, Safety Information.

**709H:** 754-8016 Alligator Clip Set, 75X-8014 Stackable Lead Set, TP220-4201 Test Probes, AC280-5001 SureGrip Hook Clips, Soft Case, Six AAA Batteries (installed), Product Manual (CD), Quick Reference Guide, Safety Information.

**710:** Stackable Test Lead Set, Extended Tooth Alligator Clip Set, TP220 Test Probes, AC280 SureGrip™ Hook Clips, Lemo to USB Cable ValveTrack™ Software (free download), Softcase, Six AAA batteries (installed).

**Note:** All models include Traceable Calibration Certificate.

### Ordering Information

- FLUKE-709** Precision Loop Calibrator
- FLUKE-709H** Precision Loop Calibrator with HART™
- FLUKE-709H/TRACK** HART™ Data-Logging Communications Software
- FLUKE-710** Valve Tester

Process Calibration Tools — Loop Calibration

Contact your local distributor for price and availability.  
fluke.com/wtb

