

## Fluke 772 and 773 Milliamp Process Clamp Meters

### Technical Data

**mA measurements  
without breaking  
the loop.  
Save time.  
Save money.**



#### Use the Fluke 772 and 773 to:

- Measure 4 to 20 mA signals without “breaking the loop” just like the innovative and popular Fluke 771 Process Milliamp Clampmeter
- Source 4 to 20 mA signals for testing control system I/O or I/Ps
- Simulate 4 to 20 mA signals for testing control system I/O
- Measure 4 to 20 mA signals with in-circuit measurement
- Simultaneously measure mA in-circuit with 24 V loop power for powering and testing transmitters
- Source mA output signals in a linear ramp or 25 % step output
  - Automatically change the 4 to 20 mA output for remote testing
- Power saving features, auto-off, backlight timeout extend battery life

#### Fluke 773 features:

- DC voltage measurement to verify 24 V power supplies or voltage I/O signals
- Source dc voltage to test input devices that accept a 1 to 5 volt or 0 to 10 volt signal
- Scaled mA output provides a continuous mA signal that corresponds to the 4 to 20 mA signal measured by the mA clamp
  - Output mA signal enables a logging DMM (289) or other device to record the 4 to 20 mA signal without breaking the loop
- mA in/out: simultaneously measure the mA signal with the clamp and source a mA signal
  - Apply a mA input signal to a device and measure its 4 to 20 mA output on devices such as valves or mA isolators
- Voltage output linear ramp or 25 % step output
  - Automatically change the voltage output for remote testing

## Functions

|     | mA measure w/jaw | mA measure In circuit | mA source | mA sim | Loop power 24 V | DCV source 0-10 V | DCV measure 0-30 V | Scaled mA output to mA input | mA in/out |
|-----|------------------|-----------------------|-----------|--------|-----------------|-------------------|--------------------|------------------------------|-----------|
| 771 | •                |                       |           |        |                 |                   |                    |                              |           |
| 772 | •                | •                     | •         | •      | •               |                   |                    |                              |           |
| 773 | •                | •                     | •         | •      | •               | •                 | •                  | •                            | •         |

## Functional specifications

|               | Function        | Resolution and range | Accuracy         | Notes                                   |
|---------------|-----------------|----------------------|------------------|-----------------------------------------|
| 771, 772, 773 | mA measurement  | 0 to 20.99 mA        | 0.2 % + 5 counts | Measured by clamp                       |
|               |                 | 21.0 mA to 100.0 mA  | 1 % + 5 counts   |                                         |
| 772 and 773   | mA measurement  | 0 to 24.00 mA        | 0.2 % + 2 counts | Measured in series with test jacks      |
| 772 and 773   | mA source       | 0 to 24.00 mA        | 0.2 % + 2 counts | Maximum mA drive: 24 mA into 1,000 ohms |
| 772 and 773   | mA simulate     | 0 to 24.00 mA        | 0.2 % + 2 counts | Maximum voltage 50 V dc                 |
| 773           | Voltage source  | 0 to 10.00 V dc      | 0.2 % + 2 counts | 2 mA maximum drive current              |
| 773           | Voltage measure | 0 to 30.00 V dc      | 0.2 % + 2 counts |                                         |

## General specifications 772 and 773 (see [www.fluke.com/771](http://www.fluke.com/771) for more information on the Fluke 771 specifications)

|                            |                                                                                                                                                        |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| Influence of earth's field | < 0.12 mA                                                                                                                                              |
| Battery                    | (4) 1.5 V, Alkaline, IEC LR6                                                                                                                           |
| Working hours              | 12 hours @ 12 mA source into 500 ohms                                                                                                                  |
| Size (HxWxL)               | 772, 773: 41.3 mm x 76 mm x 248 mm (1.625 in x 3 in x 9.75 in)<br>771: 59 mm x 38 mm x 212 mm, (2.32 in x 1.5 in x 8.35 in)                            |
| Weight                     | 772, 773: 415 g (14 oz) 771: 260 g, (9.1 oz)                                                                                                           |
| Operating temperature      | -10 °C to 50 °C                                                                                                                                        |
| Storage temperature        | -25 °C to 60 °C                                                                                                                                        |
| Operating humidity         | < 90 % @ < 30 °C; < 75 % @ 30 ~ 55 °C                                                                                                                  |
| Operating altitude         | 0 ~ 2,000 m                                                                                                                                            |
| Storage altitude           | None                                                                                                                                                   |
| IP rating                  | IP 40                                                                                                                                                  |
| Vibration requirements     | Random 2 g, 5 Hz to 500 Hz                                                                                                                             |
| Drop test                  | Passes 1 meter drop test (except the jaw)                                                                                                              |
| EMI, RFI, EMC              | Meets applicable requirements in EN61326-1 Note: For current measurement w/jaw, add 1 mA to specification for EMC field strengths of 1 V/m up to 3 V/m |
| Temperature coefficients   | 0.1/°C x specified accuracy for temperature < 18 °C or > 28 °C)                                                                                        |
| Warranty                   | Three-years, one-year on mA clamp assembly and cable                                                                                                   |



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## Ordering information

**Fluke-772** Milliamp Process Clamp Meter  
**Fluke-773** Milliamp Process Clamp Meter

### Included accessories

Soft carrying case, test leads, alligator clips, hanging strap and user's manual.



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