

## Current Probe MX 20 A - 100 A / 1V

The MX 100A current probe has been designed for use with scopemeters, multimeters, recorders, power analysers and safety testers for accurate, non intrusive, measurement of AC and DC currents.

Using the latest technology, the MX 100A can measure currents from 100 mA to 100A over a frequency range from DC to 50kHz.



### Electrical Characteristics

Current Range $I_N$ .....	: 20 A <sub>peak</sub> and 100 A <sub>peak</sub>
.....	: with LED overload indicator
Measuring Range.....	: 0.1 A to 120 A <sub>peak</sub>
Output Sensitivity.....	: 10mV / A and 50mV/A
Precision Load Impedance .....	: 1 Mohm $\leq$ 50pF
Conductor Position Sensitivity.....	: < 1% @ 50/60Hz
Error due to adjacent conductor.....	: $\leq$ 15 mA / A @ 50Hz
Frequency Range .....	: DC to 50 kHz
Temperature Coefficient .....	: 0.1% / °C
Working Voltage (see Safety Standards section) .....	: 1000 V cat III

### Accuracy 100A range

Primary Current (@ 50 Hz)	500 mA to 3 A	3 to 10 A	10 to 100 A
Accuracy (of rdg)	$\pm 2\% \pm 0.5 \text{ mV}$	$\pm 2\%$	$\pm 2\%$
Phase Error (typical)	0.2°	0.2°	0.2°

### Accuracy 20A range

Primary Current (@ 50 Hz)	100 mA to 2 A	2 to 10 A	10 to 20 A
Accuracy (of rdg)	$\pm 2\% \pm 0.5 \text{ mV}$	$\pm 2\%$	$\pm 2\%$
Phase Error (typical)	0.5°	0.5°	0.5°

### General Characteristics

Maximum Conductor Size.....	: 8 mm diameter
Power supply .....	: 9V battery (with Led indicator for low batt)
Standard Output Connection .....	: BNC or safety socket 4mm
Operating Temperature Range.....	: 0 to +40 °C
Storage Temperature Range .....	: -20 to +70 °C
Operating Humidity .....	: 15% to 85% (non condensing)
Offset .....	: Autozero (press 'zero' button)
Weight.....	: 215 g (with battery)

**Reference conditions:** Temperature : +22°C, humidity: 20 to 75% RH, sinusoidal current: 48 to 65Hz, distortion factor: < 1%, DC magnetic field: 40 A/m earth's magnetic field, alternative magnetic field: none, proximity of external conductor: none, primary conductor: centred in the aperture, load impedance:  $\geq 1M\Omega$ , <100pF for voltage output.

## Safety Standards

IEC61010-1:2010  
IEC61010-2-032:2012  
IEC61010-2-031:2008

1000 V<sub>RMS</sub>, Category III, Pollution Degree 2

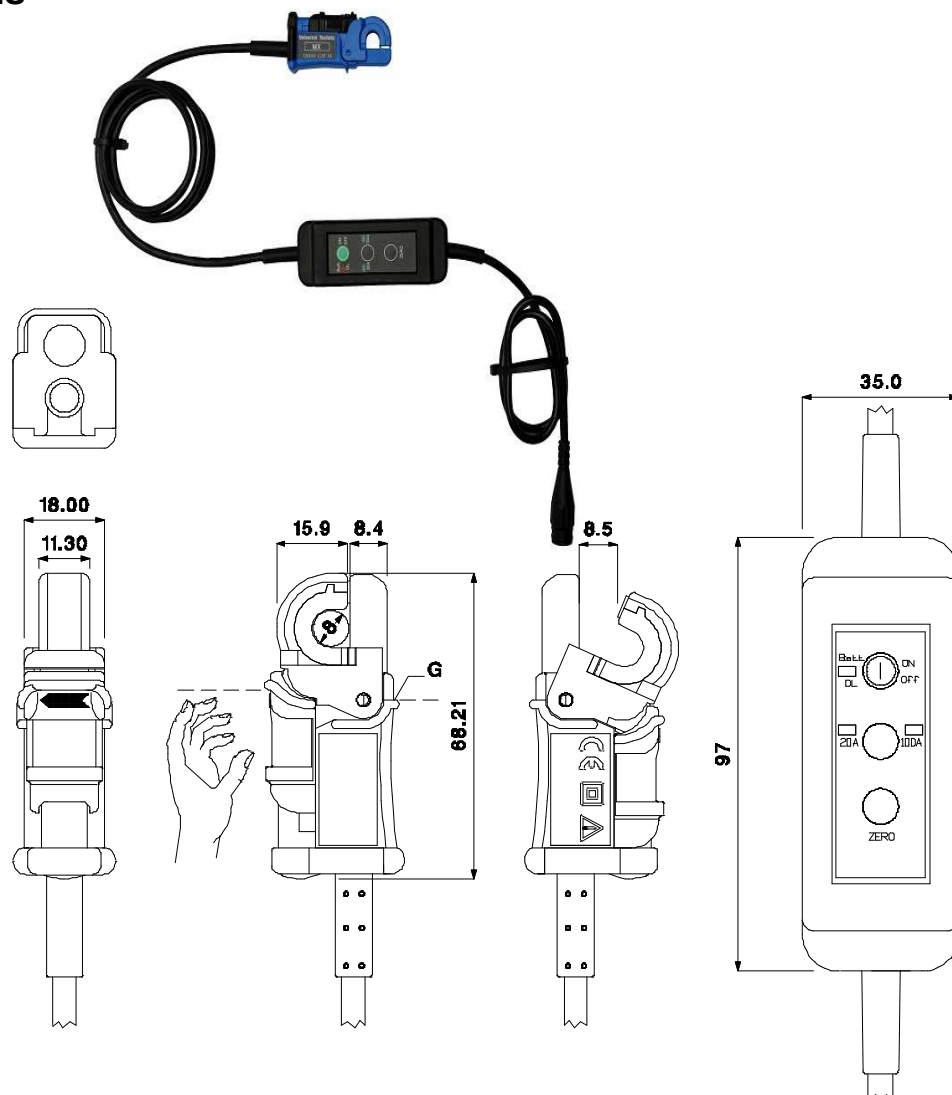
Use of the probe on **uninsulated conductors** is limited to 1000 V AC<sub>RMS</sub> or DC and frequencies below 1 kHz.

## EMC Standards

EN 61326 :1998

## Dimensions

in mm



Length of cable : 1m from probe to control box and 50 cm from box to BNC output