

## AM-CL-Rog10k

The flexible AC current probe utilises the Rogowski principle. It can be used with suitable equipment to measure current from very low frequencies up to 20kHz. The flexible and lightweight measuring head allows quick and easy installation in hard to reach areas and with large conductors.



### Electrical Characteristics

Current Range (on ARTEMES instruments)	: 10, 100, 1.000, 10.000 A <sub>RMS</sub>
Typical Voltage Output V <sub>RMS</sub> (sinusoidal current)	: (2.052 x 10 <sup>-6</sup> ) x I <sub>RMS</sub> x Frequency
V <sub>RMS</sub> at 1000 A <sub>RMS</sub> x 60Hz	: 123.1mV
V <sub>RMS</sub> at 1000 A <sub>RMS</sub> x 50Hz	: 102.6mV

### Common Characteristics

Output Sensitivity Tolerance - Uncalibrated	: ± 7% max of reading
Linearity (10% to 100% of range)	: ± 0.2% of reading
Internal Resistance per Probe	: 132Ω ± 12Ω
Bandwidth (-1dB)	: 10Hz to 20kHz
Phase Error	: ± 1°
Temperature Coefficient	: ± 0.05% of reading / °C
Position Sensitivity	: ± 2% of reading
External Field (with cable > 100mm from the head)	: ± 0.25% of range
Working Voltage (see Safety Standards section)	: 1000V AC <sub>RMS</sub> or DC

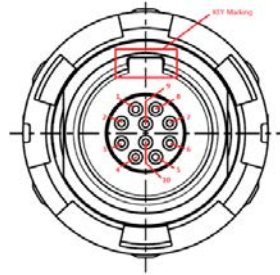
### General Characteristics

Probe Material	: Alcryn 2070 NC, LATENE 7H2W V0
Probe Cable Length	: 610mm (24")
Probe Cable Diameter	: 9.9mm (nominal)
Output Cable Length	: 2m
Output Connector	: LEMO PAG.M1.0GL.AC65V
Operating Temperature Range	: -20 to +65°C
Storage Temperature Range	: -40 to +75°C
Operating Humidity	: 15% to 85% (non condensing)
Degree of protection	: IP40
Colour	: Head Green, Output Black

## Output Connections

## LEMO Redel 1P Series 10 pin

Pin	Function
3	Output +
4	Output -
5	I/O on DS24B33+ (Pin 2)
6	Screen & GND Ref on DS24B33+ (Pin 1)



pin	channel
1	IN+
2	IN-
3	FGND
4	NC
5	TEDS
6	GND
7	+3,3V
8	+12V
9	+15V
10	-15V

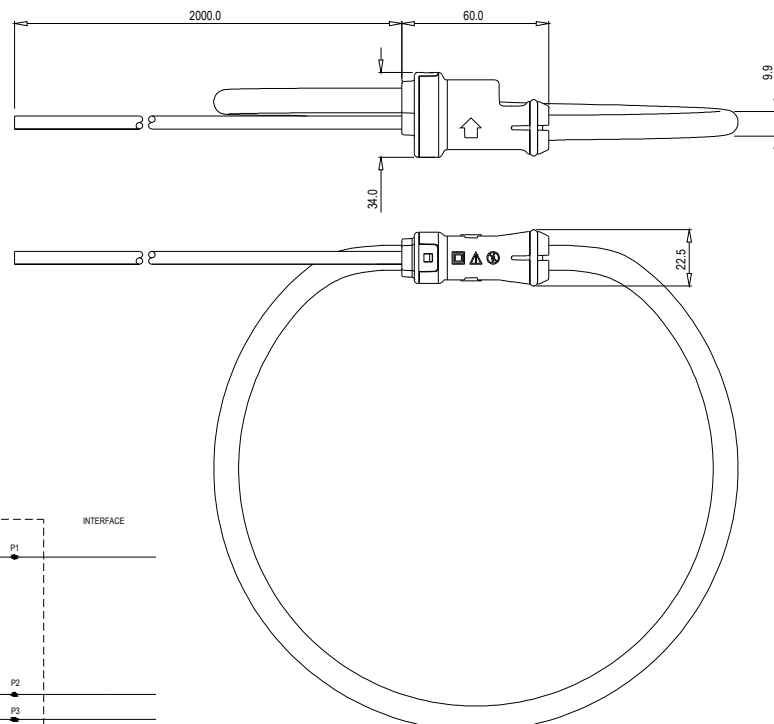
## Safety Standards

EN 61010-1:2010  
EN 61010-2-032:2012

1000 V<sub>RMS</sub>, Category III, 600 V<sub>RMS</sub>, Category IV, Pollution Degree 2  
Output limited to 30V to Earth

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

### DIMENSIONS (MM)



### SCHEMATIC

