



MFC-FLEX-80

MFC-FLEX-80, Flexible sensors for FLEX analysers

Code: M82111.

- > Sensor length: 250 mm
- > Inner diameter (mm): 80
- > Cable Length (m): 3
- > Measurement Range (A): 1000 A / 100 mV @ 50 Hz. (RMS values) | 1000 A / 120 mV @ 60 Hz. (RMS values)
- > Max. Current (A): 100000

Description

The flexible current sensor allows AC current measurements in any installation with complete rejection of DC components, very low power consumption, no saturation problem, low temperature dependence and very good linearity. The flexible sensor, based on the Rogowski coil principle, the position of the clamp can affect the accuracy of the measurement, so it is important to centre the conductor on the coil as much as possible so that it is not affected by external magnetic fields. It is also recommended not to place the conductor in the area of the coil closure because this is the area where the measurement has the greatest error. Thanks to the flexibility of the current sensor, it is possible to surround one or several conductors regardless of their shape, in order to perform current measurement actions.

Application

These flexible current sensors are specifically designed for FLEX model network analysers.



MFC-FLEX-80

Flexible Clamps

Code: M82111.

Specifications

Electrical characteristics

Cable: Connector type 3 x 22 AWG shielded

Environmental characteristics

Protection class IP 67
 Relative humidity (without condensation) 0 ... 95 %
 Installation, location, position. Inside
 Storage temperature -40 ... 80 °C
 Working temperature -30 ... 80 °C

Mechanical characteristics

Envelope Thermoplastic polyurethane UL94-V0
 Weight (kg) 0,123

Specific technical characteristics of current sensors

Accuracy $\leq \pm 1\%$
 Maximum current 100 kA
 Inner diameter \varnothing (mm) 80 mm
 Output voltage 100 mV/kA @ 50 Hz (RMS values)|120 mV/kA @ 60 Hz (RMS values)

Current measurement circuit

Nominal frequency 50/60 Hz.

Standards

Electrical safety, Maximum height (m) 2000
 Electrical safety, Installation category CAT III 1000 V, CAT IV 600 V
 Electrical safety, Contamination level/class 2
 Standards UL 61010-1 Ed3, UL 61010-2-032, CAN/CSA-22.2 No. 61010-1, IEC 60529

Measurement accuracy

Current measurement sensors Class 0,5-A1 according to IEC 61869-10

MFC-FLEX

Rogowski flexible sensors for FLEX devices

| CODE | TYPE | Inner diameter (mm) | Sensor length | Measurement Range (A) | Max. Current (A) |
|---------|-------------|---------------------|---------------|--|------------------|
| M82111. | MFC-FLEX-80 | 80 | 250 mm | 1000 A / 100 mV @ 50 Hz. (RMS values) 1000 A / 120 mV @ 60 Hz. (RMS values) | 100000 |



MFC-FLEX-80

Flexible Clamps

Code: M82111.

| CODE | TYPE | Inner diameter (mm) | Sensor length | Measurement Range (A) | Max. Current (A) |
|---------|--------------|---------------------|---------------|---|------------------|
| M82114. | MFC-FLEX-125 | 125 | 400 mm | 1000 A / 100 mV @ 50 Hz. (RMS values) 1000 A / 120 mV @ 60 Hz. (RMS values) | 100000 |

Compatible only with FLEX type devices. Only one sensor is supplied per code

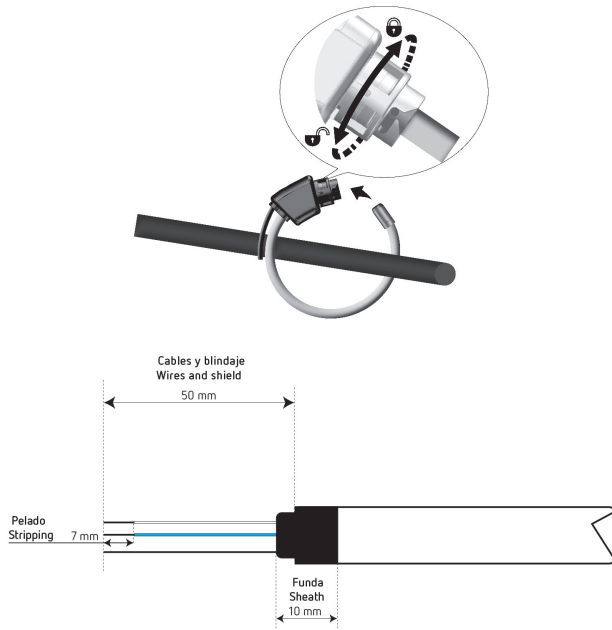


MFC-FLEX-80

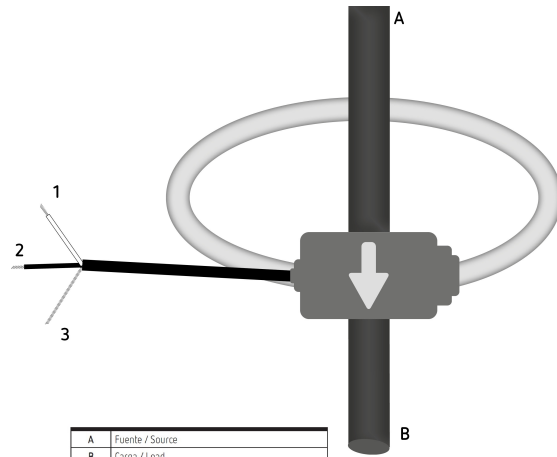
Flexible Clamps

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Dimensions



Connections



| | |
|---|--|
| A | Fuente / Source |
| B | Carga / Load |
| 1 | OUT+, Conductor Blanco / White wire |
| 2 | OUT-, Conductor Azul / Blue wire |
| 3 | Blindaje, conectarse a GND o OUT- / SHIELD, connect to GND or OUT- |

Nota: El sensor tiene una flecha que indica el lado de la carga.
Note: The coil has an arrow indicating the load side.