

## **PAC Series**

## **AC/DC Hall-effect current clamps**



600 V Cat III

300 V Cat IV





## **PAC Series**

## **Effectiveness in your hand**

The **PAC 10 and PAC 20 Series** clamps offer an ergonomic design and high-performance technical specifications making them extraordinarily simple to use. The **PAC** models can be used to measure direct or alternating, sinusoidal or distorted currents with or without a DC component.

The result of considerable study in the field, the **PAC Series** is available with 2 specific jaw shapes. Hooked up to a multimeter, logger, oscilloscope, etc., the **PAC** clamp simplifies measurement of all currents, without any risk and without shutting down the installation.

- As soon as a PAC clamp is powered up, a LED indicates that it is in operation, that an external power pack is connected and that the standby mode is activated (green colour) or deactivated (orange colour).
- ➤ Before any current measurements, you must adjust the DC Zero which can be done instantaneously by simply pressing with your thumb.
- ➤ If the current measured is too high, a red LED flashes.
- ➤ If the clamp is no longer in use, it shuts down automatically. The automatic power-off function can be deactivated.
- ➤ For intensive use or to record measurements over a long period, the PAC clamp can be powered by an external 5 Vpc power pack via its µUSB connector. If the external power source cuts out temporarily, the battery takes over.

The PAC clamps are designed to optimize safety. They fulfil the most demanding criteria in the current norms, including IEC 61010-2-032 for industrial environments.

These models complete the wide range of Chauvin Arnoux current clamps made in France at the Group's ISO 9000-certified production plants.

### PAC 15, PAC 16, PAC 17 The essential accessories for multimeters

- The PAC 15 is the essential accessory for multimeters. Simple
  and effective with its single 1 mV/A sensitivity and "direct reading",
  the PAC 15 clamp measures currents up to 400 AAc and 600 ADc,
  directly on an installation in operation (no opening of circuit).
- The PAC 16, the flagship model in the PAC 10 Series, offers dual sensitivity alongside the functions present on all the models such as automatic Zero DC adjustment, deactivatable automatic power-off and possibility of using a standard external power supply.
- This clamp is also available in a version for oscilloscopes: PAC 17.

### Jaws designed for easy handling

The off-centre opening of these clamps means that their mobile jaws can be used to "scoop up" cables and wires as if it were a shovel.

This "wire" can then be hooked onto it thanks to the beak shape of the fixed jaw. This means you can pull slightly on a wire to disengage it a little.



## PAC 25, PAC 26, PAC 27 Measurement of AC/DC industrial currents

- The PAC 26 is designed for measuring relatively high currents, up to 1,000 AAC and 1,400 ADC.
  - Conductors carrying such high currents are usually large-diameter cables or busbars, in a protected and relatively well-ventilated environment. In particular, this is the case for transformer stations and electrical distribution in industry, etc. To optimize measurement, the clamp opening is centred to allow the jaws to open widely.
- 2 other versions of this clamp are available: the PAC 27, a bi-calibre isolated current sensor for oscilloscopes, and the PAC 25, a single-calibre clamp with "direct reading" for multimeters.

## AC/DC Hall-effect current clamps



# PAC 17 & PAC 27 Clamps for oscilloscopes

When you view a current, it reveals the parameters needed to interpret it: waveform, level of distortion, Peak values, etc.

They are particularly safe to use. The simple fact of clamping the cable with the clamp isolates the user from the circuit tested. These clamps are also called isolated current probes.

# PAC 26 Clamp for medium and high currents

In the rail sector, mining, chemicals and other industries, high current measurements may involve both AC and DC.

The PAC 26 covers the whole range of these requirements, from measuring a medium-level current on a battery network, to high-current measurements on large DC motors (starters, conveyors, etc.).



	PAC15	PAC16	PAC17	PAC25	PAC26	PAC27
	600 A DC and 400 A AC (600 A peak)			1,400 A DC and 1,000 A AC (1400 A peak)		
Single-calibre	•			•		
Bi-calibre		•	•		•	•
Automatic DC Zero	•	•	•	•	•	•
Power LED	•	•	•	•	•	•
Overload LED	•	•	•	•	•	•
Deactivatable automatic power-off	•	•	•	•	•	•
Connection	Ø 4 mm m	nale plugs	BNC	Ø 4 mm n	nale plugs	BNC





## PAC Series - AC/DC Hall-effect current clamps

### **Technical specifications**

	<b>PAC 15</b>	PAC 16	PAC 17	PAC 25	PAC 26	PAC 27	
	For multimete	ultimeters, loggers, etc. For oscilloscopes		For multimeters, loggers, etc.		For oscilloscopes	
Measurement range(s)	0.5 400 A AC RMS 0.5 600 A DC	0.5 40 A AC RMS 0.5 60 A DC 0.5 400 A AC RMS 0.5 600 A DC	0.5 40 A AC RMS 0.5 60 A DC or peak 0.5 400 A AC RMS 0.5 600 A DC or peak	0.5 1000 A AC RMS 0.5 1400 A DC	0.5 100 A AC RMS 0.5 150 A DC 0.5 1000 A AC RMS 0.5 1400 A DC	0.5 100 A AC RMS 0.5 150 A DC or peak 0.5 1000 A AC RMS 0.5 1400 A DC or peak	
Bandwidth (1)		DC 30 kHz (-3 dB)	olo ii odo A Do or pouk		DC 30 kHz (-3 dB)	0.0 % 1400 N D0 01 pcuk	
Sensitivity	1 mV/A	10 mV/A		1 mV/A	10 mV/A		
Best accuracy (2)	1.5 % + 1 mV	1 mV/A 1.5 %		1.5 % + 1 mV	1 mV/A 1.5 %		
Output connector	Ø 4 mm isolated elbo	wed male safety plugs Isolated male BNC		Ø 4 mm isolated elbowed male safety plugs		Isolated male BNC	
Length of built-in cable Admissible load of measuring instrument	1.	1.5 m 2 m ≥ 1 MΩ / ≤ 100 pF		1.5 m 2 m ≥ 1 MΩ / ≤ 100 pF			
Power supply	9 V	9 V battery / 5 V DC μUSB type B		9 V battery / 5 V DC μUSB type B			
Battery life (3)		50 hours typical		50 hours typical			
Specific functions							
Standby function		automatic deactivatable			automatic deactivatable		
DC Zero		Automatic		Automatic			
LED indications	External power supply / Battery status Standby status Measurement capacity overrun DC Zero acknowledgement		External power supply / Battery status Standby status Measurement capacity overrun DC Zero acknowledgement				
Maximum conductor diameter	Cables: Ø 30 mm / Busbars: 50 x 10 mm		Cables: Ø 39 mm / Busbars: 50 x 12.5 mm				
Dimensions	224 x 97 x 44 mm		236 x 97 x 44 mm				
Weight	440 g with battery		520 g with battery				
Climatic conditions							
Operation	-:	-10 °C to +55 °C / < 85 % RH		-10 °C to +55 °C / < 85 % RH			
Storage	-40 °C to +80 °C / < 85 % RH		-40 °C to +80 °C / < 85 % RH				
Compliance with standards							
Electrical safety	IEC 61010-1 & IE	IEC 61010-1 & IEC 61010-2-032 600 V CAT III / 300 V CAT IV		IEC 61010-1 & IEC 61010-2-032 600 V CAT III / 300 V CAT IV			
Electromagnetic compatibility		IEC 61326-1		IEC 61326-1			
Self-extinguishing capability		Jaws and casing: UL94 V	1	Jaws and casing: UL94 V1			

<sup>(1)</sup> depending on current value - (2) Best uncertainty in % of output signal - (3) on battery

### To order

PAC 15 clamp	P01120115		
PAC 16 clamp	P01120116		
PAC 17 oscillo clamp	P01120117		
PAC 25 clamp	P01120125		
PAC 26 clamp	P01120126		
PAC 27 oscillo clamp	P01120127		

Accessories /	' Kep	lacement	parts

110/230 V 50/60 Hz adapter USB 5 VDC and USB/µUSB cable	P01651023		
9 V alkaline battery	P01100620		
MF bag 120 X 245 X 60 CA	P01298075		

### State at delivery

Delivered in a cardboard box containing: 1 PAC clamp, 1 9 V battery, 1 user's manual in 5 languages (F, GB, D, I, E), 1 safety datasheet (20 languages), 1 verification certificate.

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