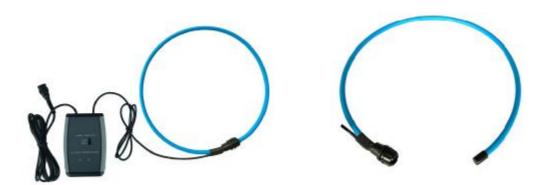
FR100RD series Rogowski coil current sensor (with integrator)



I. Product Introduction

FR100RD series Rogowski coil current sensor is a toroidal coil that is wound evenly over non-ferromagnetic material. It has no hysteresis effect, almost zero phase error, no magnetic saturation, and good linearity. The output signal is the differential of current vs. time. By integrating the output voltage signal, the input current can be truly restored, and its measurement current range can range from milliamperes to millions of amperes. Mainly used for AC leakage current, high current, high harmonic current, complex waveform current, transient inrush current, phase, electric power, power factor and other detection. With integrator, easy to integrate into other equipment, such as: electric energy meter field calibrator, multi-function energy meter, oscilloscope, digital multimeter, cable identification instrument, cable fault detector, double clamp grounding resistance tester, double clamp phase voltmeters, digital current recorders, etc., can measure and compare a variety of electrical parameters in an uninterrupted state.

FR100RD flexible coil current sensor coil part without any exposed metal conductor, non-contact measurement, safe and reliable; it's small size, light weight, exquisite appearance, soft and flexible, suitable for narrow environments and cable intensive places; wide measurement range, high precision, reliability, wide response frequency bandwidth, users can customize coil length according to demand. Widely used in electricity, communications, meteorology, railways, oil fields, construction, measurement, research and teaching units, industrial and mining enterprises and other fields. Particularly suitable for industrial environments such as relay protection, thyristor rectification, frequency control, semiconductor switches, power electronics conversion equipment, arc welding and other serious signal distortion.

II. Model specification

Model Number	FR100RD	FR200RD	FR300RD
Coil Length	315mm	630mm	950mm
Coil Inside Dia.	φ100mm	φ200mm	φ300mm
Weight	80g	100g	120g

III. Technical Specification

Function Test AC leakage current, high current, high harmonic current, complex waveform current, transient inrush current, phase, power, power, power factor, etc.

	Elevible CT: The output signal is the current to time differential. By integrating the output		
Test mode	Flexible CT: The output signal is the current-to-time differential. By integrating the output voltage signal, the input current can be truly restored.		
	φ8mm		
	0A~10kA		
8	0.1A		
	0.3mV/A 3mV/A 30mV/A third gear (can be customized for 0-5V, 4-20mA, etc.)		
	9V 6F22 battery		
	Have		
indication			
	6 mA at voltage output, an alkaline dry battery is expected to be powered continuously for		
	80 hours		
-	$\pm 1.0\%$ FS (50Hz/60Hz); 23°C ± 2 °C, below 70%RH, the wire is at the center of the coil)		
	$\leq 1^{\circ}(50Hz/60Hz; 23^{\circ}C\pm 2^{\circ}C)$		
	90°		
	BNC connector (optional audio plug, banana plug, bare wire)		
-	2m		
length	2111		
Electric field			
interference	No hysteresis effect, no external electric field interference		
	The tested wire is at the center of the coil, and the position error affects $\leq \pm 0.3\%$ FS		
Response	The tested when's at the center of the cont, and the position error ancets <u>_</u> ±0.57015		
frequency	0.1Hz~10MHz		
	Tested below AC 1000V		
Working	Tested below AC 1000V		
0	-20°C \sim 50°C; below 80%rh		
humidity			
Storage			
U U	$-10^{\circ}C^{\sim}60^{\circ}C;$ below 70% rh		
humidity			
Insulation			
strength	AC 2000V/rms(Both ends of the coil)		
Suitable for			
	IEC1010-1、IEC1010-2-032、pollution level 2、CAT IV 1000V		
regulations			
Random			
attachment	Sensor: 1 piece		
	1		



GuangZhou ZhengNeng Electronics Technology Co. Address: 2F, No.15 Baoshu Road, Taihe, Baiyun District, Guangzhou, Guangdong, China Toll-free call: 4000-1515-38 Tel: 86-20-36544172 Fax: 86-20-37319075 Post: 510540 WebSite: www.znele.com