

## OFR SERIES ROGOWSKI COIL



### Features:

- ✓ High linearity from 1A to 100kA
- ✓ Wide dynamic range
- ✓ With a shield against the influence of external magnetic fields.
- ✓ No danger from open-circuited secondary.
- ✓ Not damaged by large overloads.
- ✓ Non-intrusive, no power drawn from the main.
- ✓ Measurement uniformity at any position of the conductor inside the coil.
- ✓ Ingress Protection Grade: IP65 or IP68

OFR is a current transformer fixed by cable ties based on Rogowski principle, particularly suitable for measurement in combination with portable devices.

OFR coils are available in different sizes and can be supplied according to customer's design. Therefore they can be used in all those applications, in which traditional transformers are not fitting due to its size and/or weight.

Due to its specific features, Rogowski coil is an extremely comfortable solution for current measurement and can be used in a number of cases where traditional current transformer is not the adequate solution.

### Position sensitivity:

Conductor Position	Typical Error(%)
● Adjacent To The Clip Together Mechanism	0.5%
● Adjacent To The Inside Coil Edge	<0.8%
● Adjacent To The Opposite Clip	<1%



**Applications:**

1. Electricity meters
2. Power Quality analyzer
3. Lightning current detection system
4. Industrial electric furnace current measurement
5. Arc fault current measurement
6. Transmission line distributed fault detection system
7. Transient filter type fault indicator

**Advantage:**

1. Calibrated to 0.5%
2. 8mm section easy to install
3. Easy to fixed on bus-bar and cable by cable ties
4. Lower zero drift down to 0.1mV

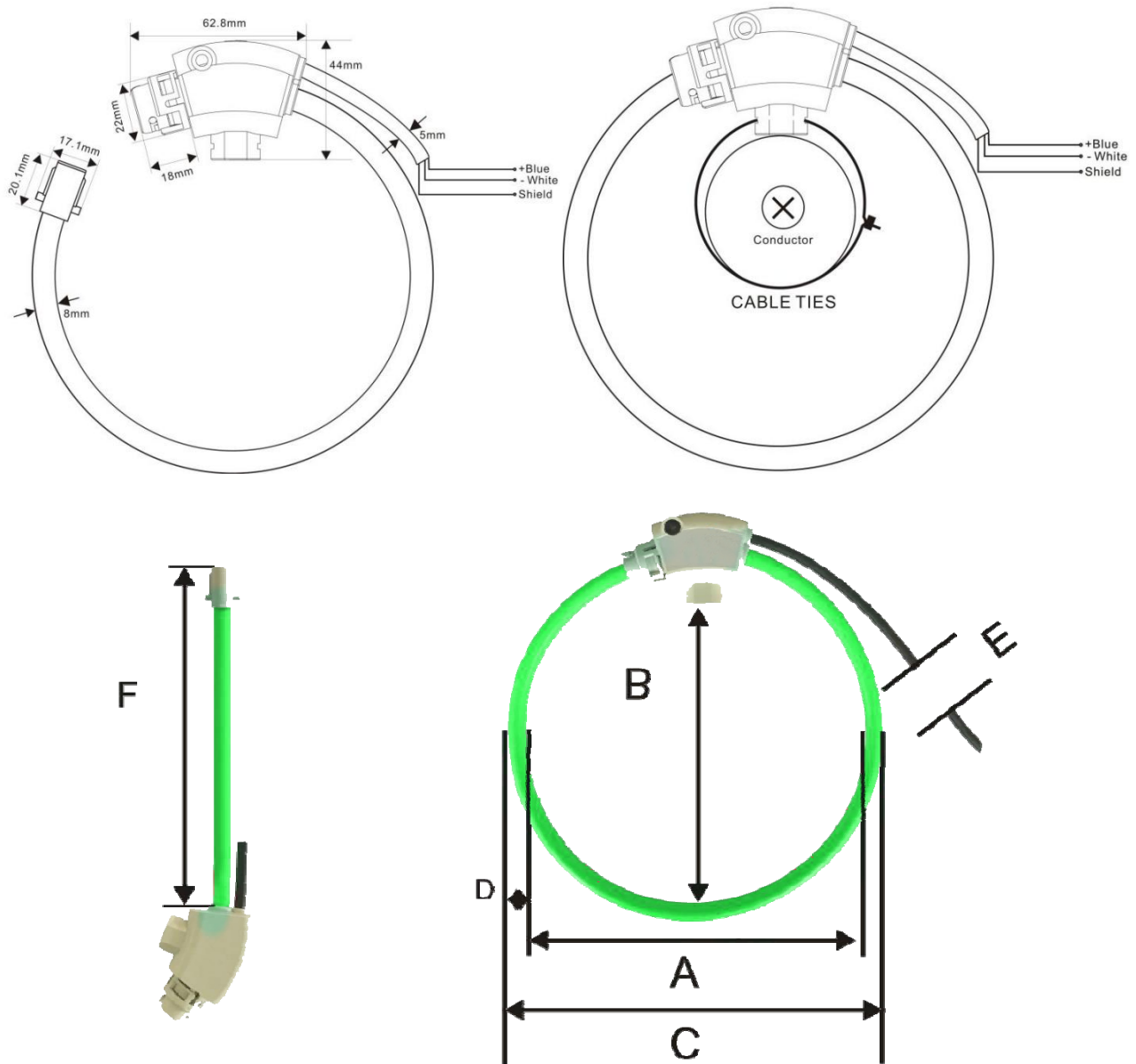
**Material:**

Coil & cable: Thermoplastic rubber  
 Flame retardant UL 94 V-0 rated  
 Coupling: PA6 UL 94 V-0 rated  
 Color (coil): Green  
 Shielded: 100% coil, 100% output cable

**Characteristics:**

MODEL		OFR-100	OFR-150	OFR-200
Reference Rated Current		1000A	3000A	6000A
Ratio	Calibrated	85mV/kA@50Hz		50mV/kA @50Hz
	Uncalibrated	105mV/kA@50Hz		
Read Accuracy		Calibrated <0.5% (central position, 25°C) Uncalibrated < 5% tolerance (central position, 25°C)		
Maximum Current Measurable		100kA		
Coil Resistance		from 100 to 250 Ω		
Coil Section		8mm		
Lead Length		2meter		
Temperature		Uncalibrated 200ppm/C Calibrated 400ppm/C		
Position Error		±1% maximum		
Output On 0A (Zero Drift)		≤0.1mV		
Phase Error		≤0.5°		
Linearity		±0.2% of reading		
Bandwidth		1Hz to 100kHz(-3dB)		
Operating Temperature		-30°C to 80°C		
Storage Temperature		-40°C to 90°C		

**Dimensions tolerance: (A,B,C,F: ±5mm, D: ±0.2mm, E: ±10mm)**



Dimensions(mm)	OFR-100	OFR-150	OFR-200
A. Windows Size A	135	165	210
B. Windows Size B	100	150	200
C. Coil O.D.	151	181	226
D. Cable Diameter	φ 8		
E. Cable Length (on request)	2000		
F. Coil Length	395	525	665
Net Weight (g)	Approx 100-120g		

## The Order Specification Confirmation

- Rated Current : \_\_\_\_\_ A
- Inner Window Size : \_\_\_\_\_ mm
- Secondary Lead Length : \_\_\_\_\_ m
- Ingress Protection Grade: IP65 (Suitable for Calibrated & Uncalibrated Type)
- IP68 (Suitable for Uncalibrated Type)

### Product Type

1. Rogowski Coil ----- 【 】
  - ◆ Calibrated (IP65) ----- 【 】  
(The product has the same output signal, but it will increase coil resistance)
  - ◆ Uncalibrated (IP65 & IP68)----- 【 】  
(The product has different output signal)

IP65 ----- 【 】      IP68 ----- 【 】
2. Rogowski Coil with Integrator ----- 【 】  
 Rated Output: Rated Current / \_\_\_\_\_mV AC (ex. 3000A / 333mV AC)