

Patrol Flex

Rogowski Coil

Features

- High Accuracy: $\pm 0.5\%$ FS
- Lightweight: < 0.5 lb
- Best in Class Position Sensitivity
- Extend up to 150 ft With No Impact to Accuracy; Extend up to 300 ft with only 0.08% error
- Minimal Linearity Effect $\pm 0.2\%$
- Revenue Grade Accuracy $\pm 0.5\%$ FS
- Best In Class Linearity
- No External Power Required

Applications

- Measurement & Verification
- Demand Response
- Energy Cost Allocation
- Equipment Efficiency Tracking
- Preventative Maintenance
- Tenant Submetering
- Net Metering

Offered in 12", 24" and 36" lengths, the Patrol Flex is the most accurate Rogowski coil in submetering. Rogowski coils offer significant installation advantages over split-core CT's because of their light weight, wide current range (5-6,000 Amps), mechanical flexibility for mounting in tight quarters and easy placement around cable bundles or large busbars. The Patrol Flex leads can be extended up to 150 feet without degrading the accuracy of the unit and up to 300 feet with only 0.08% error using the same gauge/type of wire with proper splicing method.

$\pm 0.5\%$ FS Revenue grade accuracy

Setra partnered with Fluke to deliver the Patrol Flex CT; the highest performance Rogowski coil in submetering. The Patrol Flex Rogowski Coil is calibrated to better than $\pm 0.5\%$ FS accuracy for use in revenue grade (tenant billing) applications

Save money on installation

Installers can save significant time and labor using the Patrol Flex due to its flexibility and ease of surrounding conductors of all sizes. Selecting a Rogowski coil instead of a conventional split-core CT can save the installer over two hours per meter point in a challenging installation, which could be the difference between making and losing money on a job.

Wide current range = reduced shipping costs

A typical 100A CT weighs 2 lbs, however as the current range expands to 3,000A the average weight can increase from 2lbs to 20 lbs. Considering three CT's are required to monitor a 3-phase motor, certain applications could require up to 65lbs of shipping weight per meter point; a serious waste of shipping dollars. The Patrol Flex Rogowski Coil has a current range of 5-6,000 A, yet weighs less than 1/2 lb, drastically reducing freight costs.

Best in class linearity

Conventional CT's are wound over a magnetic iron core, which makes them more susceptible to saturation leading to linearity error. Engineers and contractors must adjust the phase shift of the meter to compensate in order to achieve an accurate reading. Rogowski coils are wound over a non-magnetic core, giving them perfect linearity and improved accuracy over wide current ranges.



Specifications

General Specifications

Probe and Cable Material	TPE rubber, reinforced insulation UL94 V-0, Color: RED Munsell 7.5 R 1/14
Couplings Material	Polypropylene, UL94 V-0
Probe Cable Length	610 mm
Probe Cable Diameter	12.4 mm
Probe Cable Bend Radius	40 mm
Output Cable Length	2 meters shielded 2-wire cable
Output Connector	Unterminated
Operating Range	-20° to +70° C
Storage Temperature	-40° to +80° C
Operating Humidity	15% to 85% (non condensing)
Degree of Protection (Probe)	IP40

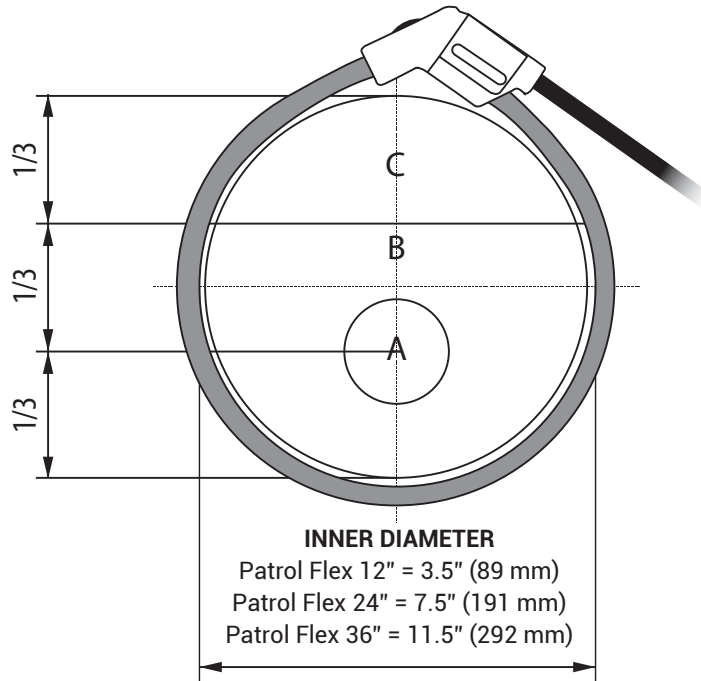
Specifications

Voltage Output ¹ (@1000 ARMS, 60 Hz)	108 mV
Current Range ¹	5-5,000 A AC RMS
Accuracy	± 0.5% of reading (@ 25°C, 60 Hz)
CT-PF-12	5-1,500 A AC RMS
CT-PF-24	5-3,000 A AC RMS
CT-PF-36	5-6,000 A AC RMS
Linearity (10% to 100% of range)	± 0.2% of reading
Working Voltage (see Safety Standards section)	1000 V AC RMS or DC (head) 30 V max. (output)

Safety specifications

Safety standards	UL File No. E468456
	600V CAT IV, 1000 CAT III, Pollution Degree 2
	- UL Std 61010-1
	- CSA Std C22.2 No 61010-1
	- IEC/EN 61010-1
	- IEC/EN 61010-2-31
	- IEC/EN 61010-2-32

¹When used with Setra Power Meters (Performance and range may vary when used with non-Setra Power Meter)



Patrol Flex 12", 24", 36"

Probe Window A	± (0.5% of reading + 0.02% of range)
Probe Window B	± (0.75% of reading + 0.02% of range)
Probe Window C	± (1.25% of reading + 0.02% of range)

Ordering information

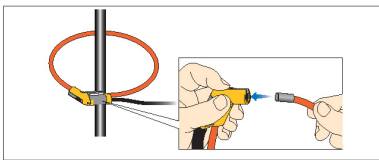
Example: Part No. CT-PF-12 = Model Patrol Flex, 12" Probe Length, measure up to 1,500 Amps.

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Model		Probe length	
PF	Patrol Flex	12	12" (≈3.5" inner diameter) / Range: 5-1,500A
		24	24" (≈ 7.5" inner diameter) / Range: 5-3,000A
		36	36" (≈ 11.5" inner diameter) / Range: 5-6,000A

Operating instructions

1. Connect the Probe to the product terminal block.
2. Wear proper personal protective equipment or de-energize the circuit and place the coil around the conductor under test.



Locking the Coil

3. Ensure coil window orientation is correct. Positive current output indicates that the current flow is in the direction shown by the arrow on the product label. (Arrow toward electrical load)
4. Secure cable wiring to power meter terminal block. Red wire to (+), Black wire to (-), and shielding wire to (S).
5. If circuit is de-energize, follow local electrical code and safety procedures, re-energize the circuit.



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