



FLEX1Vxxx.1V.AC xx .xMS



FLEXII1Vxxx.1V.ACxx.xMS

### 1 INTRODUCTION

FLEX1V400.1V.ACxx.xMS coil have been designed for accurate non-intrusive measurement of AC, pulsed DC or complex waveforms This type of transducer may be used to measure all AC current for frequencies 50-60Hz. FLEX1V400.1V.ACxx.xMS & FLEX1V400.1V.ACxx.xMS coil are manufactured with length 400mm

### 2 SPECIFICATION

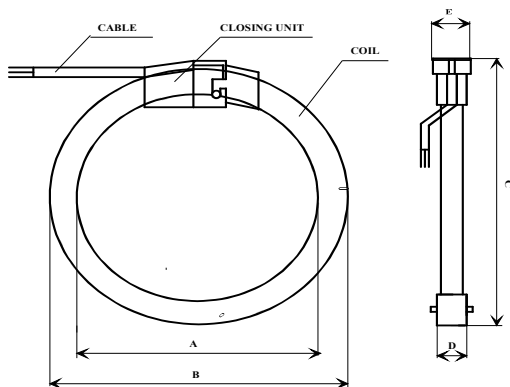
2.1 General data	METRIC	INC
<b>Dimension</b>		
Transducer O.D. (coil cross section)	15.5mm	0.7inc
Transducer length (standard)	see below	see below
Cap coupling O.D. (max)	23mm	0.9inc
Max diameter of conductor or bus bar	100mm	3.93inc
<b>Materials</b>		
Transducer & cable	Thermoplastic RUBBER, flame retardant UL 94 V-O rated	
Couplings	Polypropylene UL 94 V-O rated	
Colour (transducer)	Blue or Red (others on required)	
Cable and couplings	Black	
Cable:	1000V UL STYLE 20940; Diameter 5mm (FLEX type); 5,5mm (FLEXII type)	
Shielded:	85% coil, 100% output cable	
<b>Working temperature</b>	-20°C to 70°C	
<b>Electrical data</b>		
Maximum measurable current:	10kA at 50/60 Hz.	
Internal Resistance:	1300 Ohms/ 400 mm. ; 1300 Ohms/1ft and 4inc transducer length $\pm$ 10%	
<b>Accuracy:</b>	$\pm$ 10% (coil must be calibrated with amplifier/integrator load impedance)	
Linearity:	$\pm$ 0.2 (with opportunity integrator)	
Output signal (sinusoidal waveform )	1 Vrms/1000A @ 50 Hz ; 1.2Vrms/1000A @ 60Hz; (* rated at 1000A 50Hz)	
Frequency range	50/60Hz.	
° All accuracies specified at 20°C ( $\pm$ 2°C) with transducer centred on bus		
<b>Position sensitivity</b>		
Measured bus	$\pm$ 3% maximum	
Ext. field influence	$\pm$ 1,5% maximum	
Temperature sensitivity (max)	$\pm$ 0.7% per °C	
<b>Safety</b>		
Working voltage (max)	1000V @ 50/60Hz	600VAC
Over Voltage Category (IEC 61010-1)	CAT III	CATIV
Hipot Test	7400V @50/60Hz 1 minute	



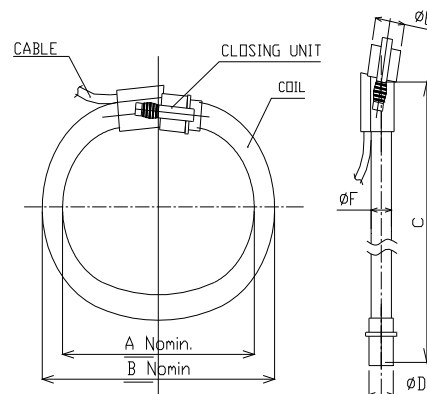
# CIEs.r.l. – Rogowski's Sensors CURRENT TRANSDUCER

## Type FLEX1Vxxx.1V.ACxx.xMS & FLEXII1Vxxx.1V.ACxx.xMS

Operating Instruction



**FLEX1V400. 1V.AC xx .xMS**



**FLEXII1V400. 1V.AC xx .xMS**

### STANDARD DIMENSION

- A Coil diameter (mm) =100
- B Coil external diameter (mm)=131
- C Coil length=400mm
- D Cap coupling cross section = 18mm
- E Cap coupling cross section = 23mm
- F Coil cross section= 15.5mm

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- B Coil external diameter (mm)=131
- C Coil length =400mm
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- F Coil cross section= 15.5mm

### DESCRIPTION:

Rogowski flexible coil length 400mm ; Output 1V/kA @ 50 Hz Accuracy +/-10% Cable length= 2m.

#### OUR PART NUMBER FOR TYPE WITH BAYONET CLOSING UNIT

TYPE	COIL LENGTH	OUTPUT at 50 Hz	ACCURACY	CABLE LENGTH
FLEX 1V	400	1V/kA	10%	2M

#### OUR PART NUMBER FOR TYPE WITH SQUEEZER CLOSING UNIT

TYPE	COIL LENGTH	OUTPUT at 50 Hz	ACCURACY	CABLE LENGTH
FLEXII 1V	400	1V/kA	10%	2M

#### EXAMPLE

FLEX1V	350	1V	AC10	2MS
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Type	Coil diameter A		Coil external diameter B		Coil Length C	
	mm	Inch	mm	Inch	mm	Inch
FLEX1V300.1V.AC10.2MS	80	3.15	111	4.33	300	11.81
FLEX1V350.1V.AC10.2MS	90	3.54	121	47.64	350	13.78
FLEX1V400.1V.AC10.2MS	105	3.94	136	53.54	400	15.75

If you have any queries regarding the FLEX1V or require specification outside our standard ranges please do not hesitate to contact us