

1 INTRODUCTION

FLEXxxx.150.ACxx.xMS transducers 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 from low frequencies to 1 kHz. FLEXxxx.150.ACxx.xMS transducers are manufactured in different lengths for diameters of current conductors from 90mm to 270mm.

2 SPECIFICATION

2.1 General data

	METRIC	INC
Dimension		
Transducer O.D. (coil cross section)	15.5mm	0.7inch
Transducer length (standard)	see attached	see attached
Cap coupling O.D. (max)	23mm	0.9inch
Max diameter of conductor or bus bar	see attached	see attached

Materials

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
Shielded:	Coil NO; 100% output cable

Working temperature

-20°C to 70°C

Electrical data

Maximum measurable current:	100kA at 50/60 Hz.
Internal Resistance:	30 Ohms/ 400 mm. ; 30 Ohms/1ft and 4inc transducer length $\pm 10\%$
Accuracy:	$\pm 10\%$ (coil must be calibrated with amplifier/integrator load impedance)
Linearity:	± 0.2 (with opportunity integrator)
Output signal (sinusoidal waveform)	150mV/1000A @ 50 Hz ; 180mV/1000A @ 60Hz; (* rated at 1000A 50Hz)
Frequency range	20Hz - 5 kHz

° All accuracies specified at 20°C ($\pm 2^\circ\text{C}$) with transducer centred on bus

Position sensitivity

Measured bus	$\pm 2\%$ maximum
Ext. field influence	$\pm 0,5\%$ maximum
Temperature sensitivity (max)	$\pm 0.07\%$ per °C

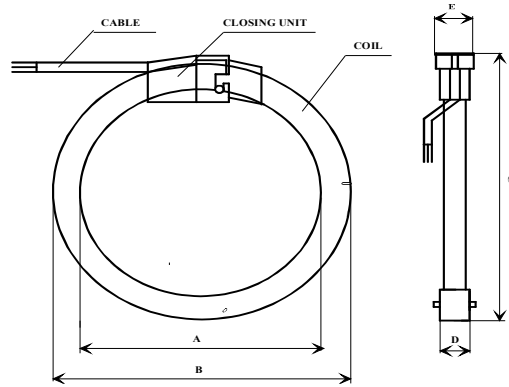
Safety

Working voltage (max)	1000V 50/60Hz.
Hi Pot Test (transducer & output cable)	7400Vac @ 50/60Hz. for one minute
Over Voltage Category (IEC 61010-1)	Installation Category III



Type FLEX xxx. 150.AC xx . xMS

Operating Instruction



STANDARD DIMENSION

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

DESCRIPTION:

Rogowski flexible coil length 350mm ; Output 150mV/kA @ 50 Hz Accuracy +/-10% Cable length= 2m.

OUR PART NUMBER

TYPE	COIL LENGTH	OUTPUT at 50 Hz	ACCURACY	CABLE LENGTH
FLEX	XXX	150mV	10%	2M

EXAMPLE

FLEX	350	150	AC10	- 2M
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Type	Coil diameter A		Coil external diameter (mm) B		Coil Length (mm) C	
	mm	inch	mm	inch	mm	inch
FLEX350.150.AC10.2MS	90	3.54	121	47.64	350	13.78
FLEX400.150.AC10.2MS	105	3.94	136	53.54	400	15.75
FLEX500.150.AC10.2MS	140	5.51	171	67.32	500	19.68
FLEX600.150.AC10.2MS	170	6.70	201	79.13	600	23.62
FLEX700.150.AC10.2MS	202	7.90	233	91.73	700	27.56
FLEX800.150.AC10.2MS	235	9.10	266	104.72	800	31.50
FLEX900.150.AC10.2MS	270	10.60	301	118.50	900	35.43

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