

The CTG Current Transducer is a Hall-effect sensor intergrated together with an output amplifier. The CTG series offers a number of current range, outputs and sensor dimensions. Hall-effect current measurement is a non-contact technique that measures the magnetizing effects of current flowing in a conductor. This measurement type offers a number of benefits not afforded by conventional direct or contact (in-line) measurement. Some of these benefits are high electrical isolation between conductor and sensor output, high overload capability, fast response to input changes and no power consumption on measured circuit.

### Features and Applications:

- Accuracy of  $\pm 1\%$  F.S.
- 5000 Volt line-to-output isolation.
- DC to 400 Hertz response.
- Sensor and amplifier in one package.
- Available in split-core configurations.
- Output is proportional in direction and magnitude to the current flow through the window.
- Overload capability to **10** times rating (at 60 Hz).
- Stability maintained during severe vibration.
- Models available to 5,000 A.
- Replaces shunts. No insertion loss.
- Ideal for use on ac systems with dc components and/or chopped waveforms.
- Response time less than 100 microseconds.

### CTG SPECIFICATIONS:

#### INPUT

Current (See table):	DC/Peak AC
Overcurrent (without damage):	10 times rating
Instrument Power:	$\pm 13\text{Vdc}$ to $\pm 20\text{Vdc}$
Instrument Current:	$< \pm 20\text{mAdc}$
Isolation:	
Solid-core	5000Vdc
Split-core	1000Vdc

#### OUTPUT

Accuracy and Linearity:	$\pm 1.0\%$ F.S.
Load on output:	$> 2\text{K ohm}$
Response (Typ.):	500 msec
Saturation (Approx.):	13.5V @ $\pm 15\text{Vdc}$
Temp. Effects (0°C to 40°C):	$\pm 0.05\%/^{\circ}\text{C}$

#### ORDERING INFORMATION

EXAMPLE: 300 Amp split-core current sensor with  $\pm 5\text{V}$  output.

**CTG-301X5S**



Current Range	Circular Window Models		Sensor Size
	$\pm 10\text{Vdc}$ Output	$\pm 5\text{Vdc}$ Output	
0 - 100A	CTG-101	CTG-101X5	D
0 - 200A	CTG-201	CTG-201X5	D
0 - 300A	CTG-301	CTG-301X5	D
0 - 400A	CTG-401	CTG-401X5	D
0 - 500A	CTG-501	CTG-501X5	E
0 - 600A	CTG-601	CTG-601X5	E
0 - 800A	CTG-801	CTG-801X5	E
0 - 1000A	CTG-102	CTG-102X5	E
0 - 1500A	CTG-152	CTG-152X5	E
0 - 2000A	CTG-202	CTG-202X5	E
0 - 2500A	CTG-252	CTG-252X5	E



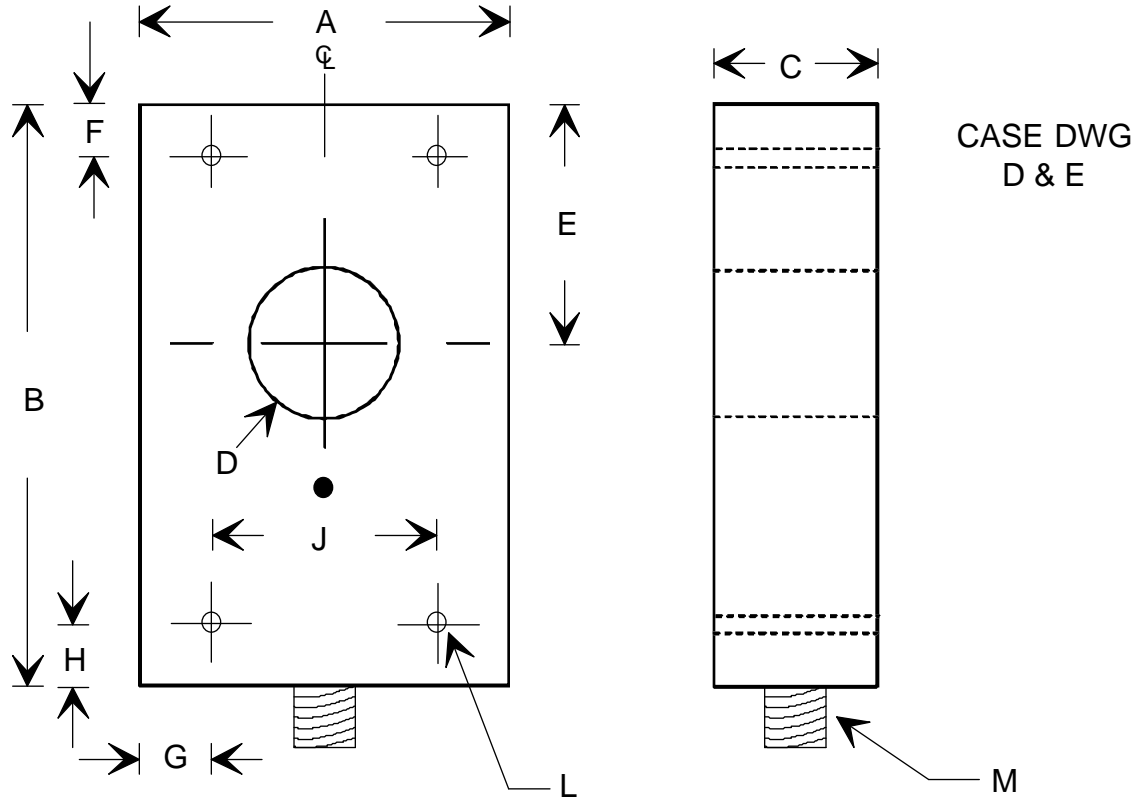
Current Range	Rectangular Window Models		Sensor Size
	$\pm 10\text{Vdc}$ Output	$\pm 5\text{Vdc}$ Output	
0 - 500A	CTG-501H	CTG-501HX5	Z
0 - 600A	CTG-601H	CTG-601HX5	Z
0 - 800A	CTG-801H	CTG-801HX5	Z
0 - 1000A	CTG-102H	CTG-102HX5	Z
0 - 1500A	CTG-152H	CTG-152HX5	Z
0 - 2000A	CTG-202H	CTG-202HX5	Z
0 - 3000A	CTG-302H	CTG-302HX5	Z
0 - 4000A	CTG-402H	CTG-402HX5	Z
0 - 5000A	CTG-502H	CTG-502HX5	Z

- Add suffix 'S' for split-core units.

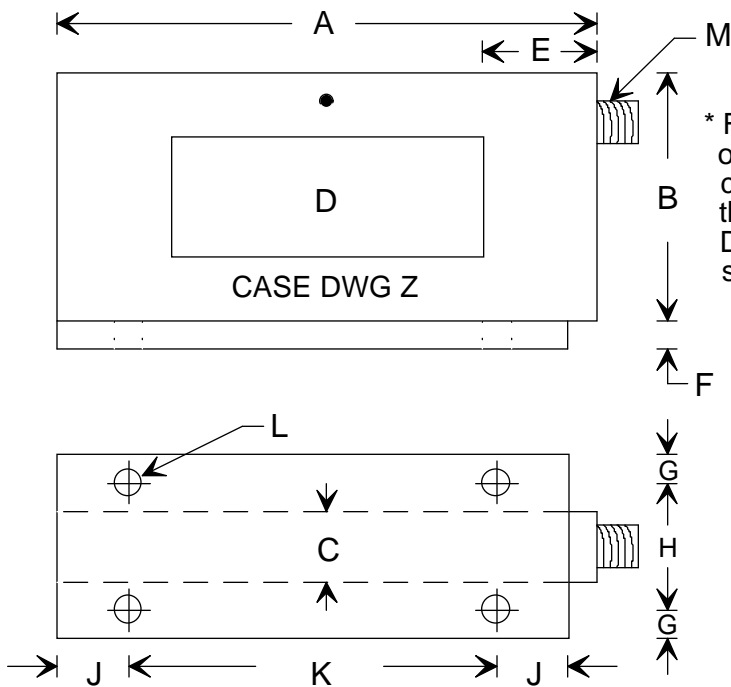
- All units require  $\pm 13\text{Vdc}$  to  $\pm 20\text{Vdc}$  instrument power.



### CONNECTIONS & DIMENSIONS FOR CASE D, E AND Z



CASE DWG	A	B	C	D	E	F	G	H	J	K	L	M
D	3 1/8	4	3/4	1 1/8	1 1/2	-	1/2	1/2	2 1/4	-	11/64	TABLE1
E	4 1/8	5	1 1/4	2	2	7/16	7/16	7/16	3 1/4	-	17/64	TABLE2
Z	7 3/16	3 13/16	1 1/8	1 1/4 X 4 1/2	1 1/4	1/4	5/16	1 7/8	1	5	3/16	TABLE1



\* For positive output, positive current cable through Red Dot side of sensor.

### CONNECTIONS

#### CABLE ASSEMBLY "M"

TABLE 1

Pins	Leads	
1	WHITE	- OUTPUT *
2	GREEN	+ INPUT
6	BLACK	-15V
8	RED	+15V
1	WHITE	COM

TABLE 2

Pins	Leads	
A	WHITE	- OUTPUT *
B	GREEN	+ INPUT
C	BLACK	-15V
D	RED	+15V
A	WHITE	COM