

CURRENT TRANSDUCERS

HALL EFFECT DC CURRENT TRANSDUCERS

MODEL CTH

Current Sensor with Output Amplifier 5V, 10V Or 4-20mA Output

DESCRIPTION

The CTH Series Current Transducer is similar to the CTG Series but offers a 4-20mA output signal or a 4-12-20mA bi-directional output signal. The CTH current transducer can be operated from either a 24Vdc source or a low cost 24Vac control transformer. Available options are split-core, extended temperature range, ruggedized design and 15Vdc instrument power.

FEATURES

- **ACCURACY 0.5%**
- Sensor & Amplifier in one package
- Split-Core Available

APPLICATION

- **Current Sensing**

SPECIFICATIONS

INPUT

Current (See table) dc or Peak ac
 Overcurrent 10 X rating
 Instrument Power 24Vdc or ac \pm 10%
 Instrument Current 25mA + load current
 Dielectric Test (bare bus to output) 3750Vac
 Split-Core Sens. Size D 1000Vdc

OUTPUT

Accuracy and Linearity ... (All models except*) ... \pm 0.5% F.S.
 *CTH-050 thru CTH-050M \pm 1.0% F.S.
 *CTH-025 thru CTH-025M \pm 2.0% F.S.
 Load on Output (4-20mA) 0-500 Ohms
 (5V & 10V) > 2K Ohms
 Response Time (to 90%) (typical) ... 500 microseconds
 Temperature Effects ... (0°C to +40°C) \pm 0.025%/°C
 Temperature Range 0°C to +40°C

AVAILABLE OPTIONS

Add Suffix in order shown

- Split-Core Add suffix "**S**"
- Extended Temp. Range .. (-40°C to +60°C)..... Add Suffix "**T**"
- Ruggedized (potted) Add Suffix "**R**"
- Instrument Power 15Vdc Add Suffix "**-15**"
- 12Vdc Add Suffix "**-12**"

NOTE: Split-Core models are potted, so "R" is not required in model number.

ORDERING INFORMATION

Example: 0-300Adc Input ,
 4-20mA Output, Split-Core Option
 and Extended Temperature Range.
CTH-301LST

Circular Window Models



Input DC Current	4-20mA Output	4-12-20mA Output	\pm 5Vdc Output	\pm 10Vdc Output	Sensor Size
0-25	025	025M	025X5	025D	B
0-50	050	050M	050X5	050D	B
0-100	101	101M	101X5	101D	B
0-100	101L	101LM	101LX5	101LD	D
0-200	201L	201LM	201LX5	201LD	D
0-300	301L	301LM	301LX5	301LD	D
0-400	401L	401LM	401LX5	401LD	D
0-500	501L	501LM	501LX5	501LD	E
0-500	501FLS	501FLMS	501FSX5	501FSD	F
0-600	601L	601LM	601LX5	601LD	E
0-600	601FLS	601FLMS	601FX5	601FSD	F
0-800	801L	801LM	801LX5	801LD	E
0-800	801FLS	801FLMS	801FSX5	801FSD	F
0-1000	102L	102LM	102LX5	102LD	E
0-1000	102FLS	102FLMS	102FSX5	102FSD	F
0-1000	102EELS	102EELMS	102EESX5	102EESD	EE
0-1200	122L	122LM	122LX5	122LD	E
0-1200	122FLS	122FLMS	122FSX5	122FSD	F
0-1200	122EELS	122EELMS	122EESX5	122EESD	EE
0-1500	152L	152LM	152LX5	152LD	E
0-1500	152FLS	152FLMS	152FSX5	152FSD	F
0-1500	152EELS	152EELMS	152EESX5	152EESD	EE

Split-Core option "S" is available except for Sens. Size B
 All Sensor Size F & EE are Standard Split-Core.

Rectangular Window Models



Input DC Current	4-20mA Output	4-12-20mA Output	\pm 5Vdc Output	\pm 10Vdc Output	Sensor Size
0 - 500	501H	501HM	501HX5	501HD	Z
0 - 600	601H	601HM	601HX5	601HD	Z
0 - 800	801H	801HM	801HX5	801HD	Z
0 - 1000	102H	102HM	102HX5	102HD	Z
0 - 1200	122H	122HM	122HX5	122HD	Z
0 - 1500	152H	152HM	152HX5	152HD	Z

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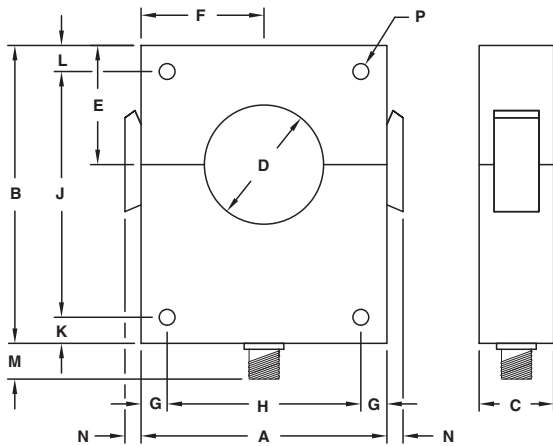
CURRENT TRANSDUCERS

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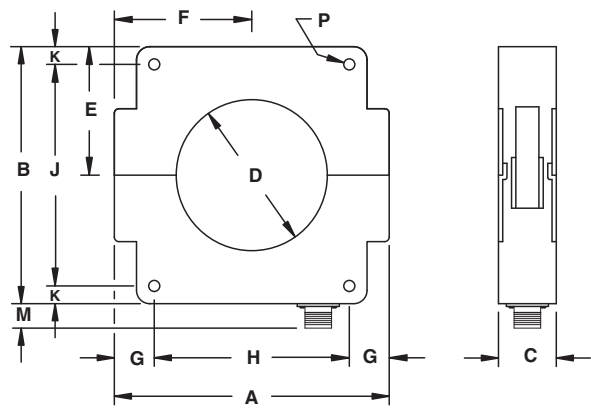
CASE DIMENSIONS & CONNECTIONS

MODEL CTH

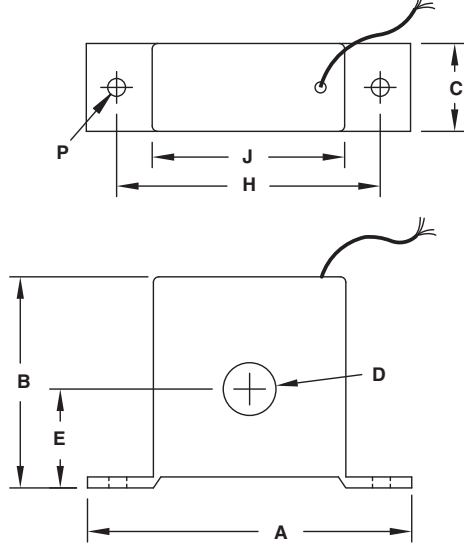
CASE DIMENSIONS D & E



CASE DIMENSIONS F & EE

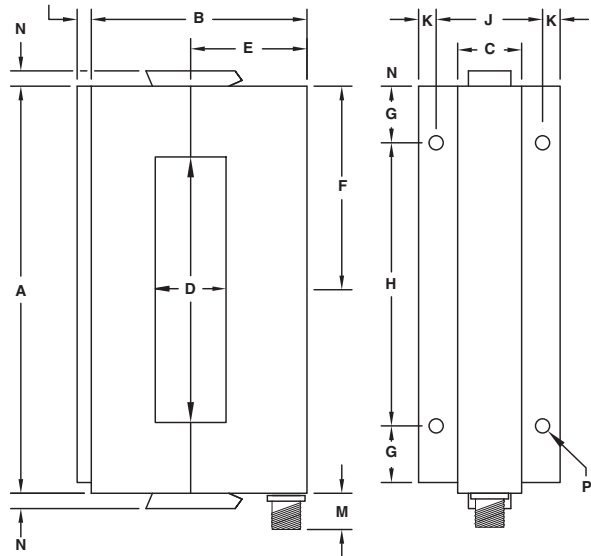


CASE DIMENSIONS B



Use Sensor Size D Cable Assembly for connections.
#22 AWG

CASE DIMENSIONS Z



All Dimensions in Inches

SENS. SIZE	SENSOR DIMENSIONS														WT. LBS.
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	
B	3/58	2 9/16	1	5/8	1 5/32	NA	NA	2 3/4	2 3/16	NA	NA	NA	NA	3/16	.2
D	3 1/8	4	3/4	1 1/8	1 1/2	1 9/16	1/2	2 1/8	NA	1/2	NA	3/8	1/4	11/64	.75
E	4 1/8	5	1 1/4	2	2	2 1/16	7/16	3 1/4	4 1/8	7/16	7/16	5/8	5/16	17/64	2
F	5 3/8	5 1/4	1 5/8	2 1/4	2 5/8	2 11/16	1 1/16	3 1/4	4 1/8	9/16	NA	5/8	NA	1/4	2.8
EE	7 3/4	7 1/4	1 5/8	4 1/4	3 5/8	3 7/8	1 1/8	5 1/2	6 1/4	1/2	NA	5/8	NA	5/16	4.5
Z	7 3/16	3 3/4	1 1/8	1 1/4 X 4 1/2	2 1/16	1/4	1	5	1 7/8	5/16	NA	3/8	1/4	3/16	2.8

CABLE ASSEMBLY							
SENSOR SIZE D,Z				SENSOR SIZE E,EE,F			
Plastic Connector				Metal Connector			
8' Rubber Cable #18AWG				8' Rubber Cable #18AWG			
Pins	Leads			Pins	Leads		
1	WHITE	-	OUTPUT *	A	WHITE	-	OUTPUT *
2	GREEN	+		B	GREEN	+	
6	BLACK	COM		C	BLACK	COM	
8	RED	+24V	INPUT	D	RED	+24V	INPUT

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

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