

## TECHNICAL DATA SHEET

### OUTSTANDING FEATURES

- ◆ DC or AC powered transmitter.
- ◆ Pulse and analog output.
- ◆ Optional Hi and Lo alarms.
- ◆ Factory configured when purchased with a Hoffer flowmeter.
- ◆ Several Enclosure options.
- ◆ CE Compliant.

### PRODUCT DESCRIPTION

The CAT2 is a versatile DC or AC powered transmitter that can be interfaced with any Hoffer flow sensor. It provides a pulse output and an analog signal proportional to the flow rate. The CAT2 can be configured with High and Low alarms.

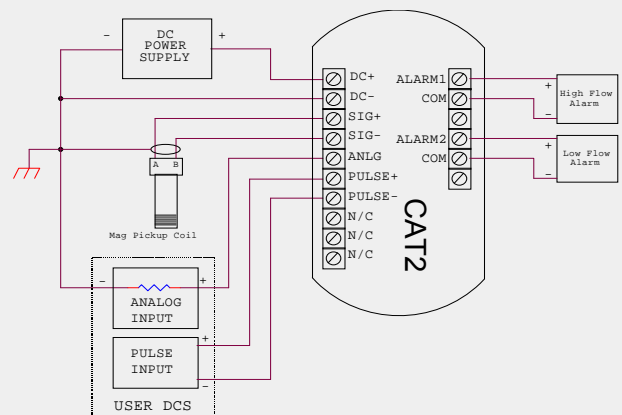
### SPECIFICATIONS

|                                  |  |
|----------------------------------|--|
| <b>Input Signal Type:</b>        | Magnetic pickup, MCP pickup, Contact Closure, Pulse.   |
| <b>Input Frequency Range:</b>    | 0.2 Hz to 4 KHz.   |
| <b>Signal Level:</b>             | 10 mV rms to 30 Vdc.   |
| <b>Power Supply:</b>             | 13-30 Vdc, 100-240 Vac.<br>Reverse polarity protection.  |
| <b>Analog Output:</b>            | 4-20mA, 1-5V, 0-5V,<br>0-10V.  |
| <b>Load Resistance:</b>          | Max 550 Ohms at 24 Vdc.  |
| <b>Accuracy:</b>                 | ±0.1% of full scale.   |
| <b>Temperature Drift:</b>        | 200 ppm/deg. C.  |
| <b>Zero and Span Adjustments</b> |  |
| <b>Pulse Output:</b>             | 0-5, 0-10V, Open Collector, AC Square. Internal pull up 2.7 k Ohms. Recommended minimum load resistance 50 k Ohms. |
| <b>Pulse Scaling:</b>            | Divide by 2,4,8,16,32.   |



|                               |  |
|-------------------------------|--|
| <b>Hi/Lo Alarm:</b>           | Relay (2A, 30Vdc), 0-5V, Open Collector (0.5A, 30V).                       |
| <b>Operating Temperature:</b> | T5 & STD: -40° ≤ Ta ≤ +85°C.<br>T6: -40° ≤ Ta ≤ +79°C.                     |
| <b>Humidity:</b>              | 0-90% Non-Condensing.  |
| <b>Enclosure:</b>             | Extruded Aluminum.<br>DIN Rail Mount.<br>Explosion-Proof.<br>CE Compliant. |
| <b>Regulatory:</b>            | CE Compliant.  |

### INSTALLATION WIRING



# ENCLOSURE OPTIONS

## ORDERING INFORMATION

Model CAT2 - ( ) - ( ) - ( ) - ( ) - ( ) - ( ) - ( ) - ( )

### PULSE INPUT

- 1 MAG COIL, DRY CONTACT
- 2 MC3P
- 3 ISOLATED PULSE, RPM, RPR AND HALL EFFECT COILS

### PULSE OUTPUT

- 1 0-5 TTL/CMOS
- 2 OPEN COLLECTOR
- 3 OPEN COLLECTOR WITH PULL UP TO V+
- 4 AC SQUARE WAVE
- 5 0-10V SQUARE WAVE

### ANALOG OUTPUT

- 1 4-20MA
- 3 0-5 VDC
- 4 0-10 VDC
- 5 1-5 VDC

### POWER SUPPLY

- DC 13-30 VDC  
 AC 100-240 VAC (ALARM OPTION NOT AVAILABLE WHEN SELECTED)

### ALARM OUTPUT

- 1 HIGH/LOW OPEN COLLECTOR
- 2 HIGH/LOW TTL/CMOS
- 3 HIGH/LOW RELAY TWO SPDT, CONTACT RATED @ 2A 30V
- 4 HIGH OPEN COLLECTOR
- 5 HIGH TTL/CMOS
- 6 HIGH RELAY ONE SPDT, CONTACT RATED @ 2A 30V
- 7 LOW OPEN COLLECTOR
- 8 LOW TTL/CMOS
- 9 LOW RELAY ONE SPDT, CONTACT RATED @ 2A 30V

NOTE: WHEN ALARM OPTION IS SELECTED, AC POWER IS NOT AVAILABLE. USE REMOTE POWER SUPPLY.

### ENCLOSURE STYLE

- 1 GENERAL PURPOSE
- D 2" LONG DIN RAIL MOUNT SINGLE UNIT. UP TO 20 CAT2 UNITS CAN BE MOUNTED ON A SINGLE RAIL
- E3 (\*)† EXPLOSION-PROOF
- E4 EXPLOSION-PROOF FOR USE WITH AC POWERED CAT ONLY (NOT Exd SYSTEM CERTIFIED)
- E6 (\*)† STAINLESS-STEEL EXPLOSION-PROOF ENCLOSURE

\* INSERT "M" FOR M20 THREAD. M20 THREAD NOT AVAILABLE IN CANADA FOR STYLE E6 ENCLOSURES.

† FOR CERTIFIED SYSTEM SPECIFY "CFX" OPTION WHEN MOUNTED ON FLOWMETER OR "C" OPTION FOR REMOTE MOUNT.

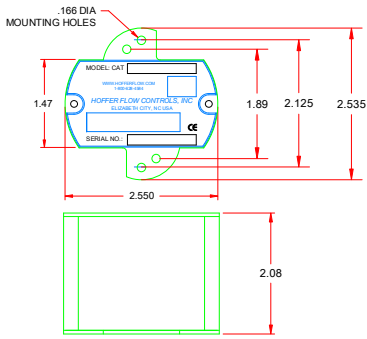
### SPECIAL FEATURES

- CE MARK REQUIRED FOR EUROPE
- SP ANY SPECIAL FEATURES THAT ARE NOT COVERED IN THE MODEL NUMBER, USE A WRITTEN DESCRIPTION OF THE -SP
- CFX 6.75" LONG RISER AND UNION FOR EXPLOSION-PROOF SYSTEM CERTIFIED ENCLOSURES MOUNTED ON TURBINE. USED WITH "X" RISER TURBINE OPTION. NOTE: IF PROCESS TEMP IS < -40°C OR > 79°C, EX-PROOF ENCLOSURE MUST BE MOUNTED REMOTELY.
- C REMOTE MOUNTED FOR EXPLOSION-PROOF SYSTEM CERTIFIED ENCLOSURE. NOTE: "X" RISER, CERTIFIED UNION, REDUCER AND ENCLOSURE (TO BE SPECIFIED) AND MOUNTED ON FLOWMETER.
- X NO SPECIAL FEATURES

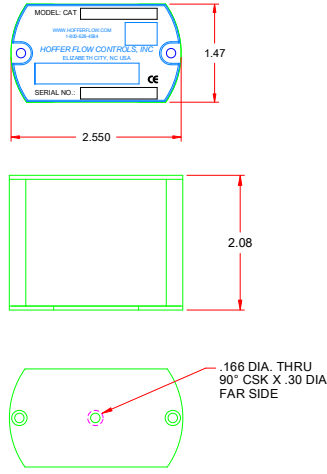
### NOTES:

1. IF ENCLOSURE IS MOUNTED ON TURBINE FLOWMETER, RISER MUST BE SPECIFIED ON METER.
2. PULSE SCALING IS SUPPLIED AS A STANDARD IN THE BASE PRICE. THE PULSE OUTPUT IS SCALED SO THAT THE MAX FLOW IS BETWEEN 75-150 HZ WHEN THE ANALOG OPTION IS SELECTED.
3. FOR UL LISTED EXPLOSION-PROOF ENCLOSURES CONTACT FACTORY.

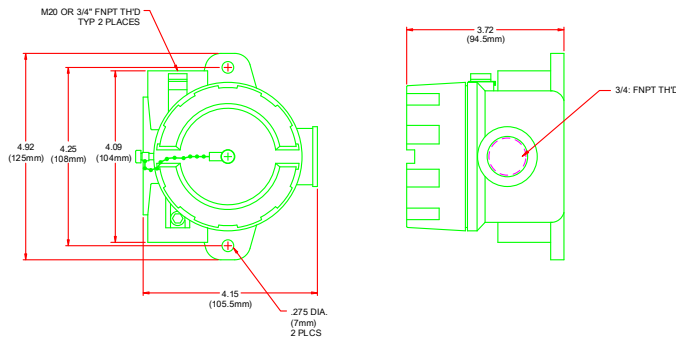
## General Purpose Enclosure



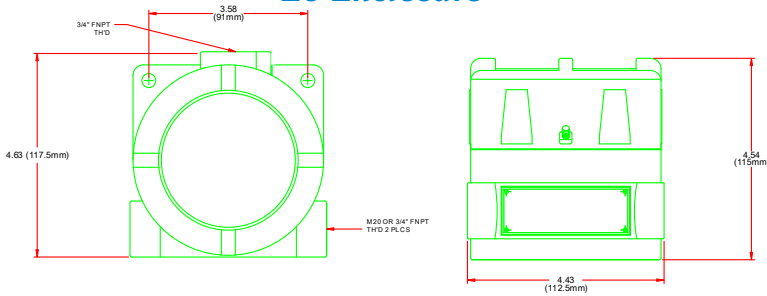
## Din Rail Enclosure



## E3 Enclosure



## E6 Enclosure



### Style E3 & E6 Certified Ratings

#### CSA/FM:

Divisions: Class I, Division 1, Groups BCD; Class II, Division 1, Groups EFG; Class III; Type 4X;  
 Zones CAN: Ex d IIB+H<sub>2</sub> T6/T5; Gb; Ex tb T80°C/T86°C IIIC Db; IP66;  
 Zones USA: Class I, Zone 1, AEx db IIB+H<sub>2</sub> T6/T5; Gb; Class I, Zone 21, AEx tb T80°C/T86°C IIIC Db; IP66

#### ATEX/IECEx:

II 2 G Ex db IIB+H<sub>2</sub> T6/T5 Gb  
 II 2 D Ex tb IIIC T80°C/T86°C Db; IP66  
 T6: -40°C ≤ Ta ≤ +79°C; T5: -40°C ≤ Ta ≤ +85°C

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The quality system covering the design, manufacture and testing of our products is certified to International Standard ISO 9001.

