

# 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.

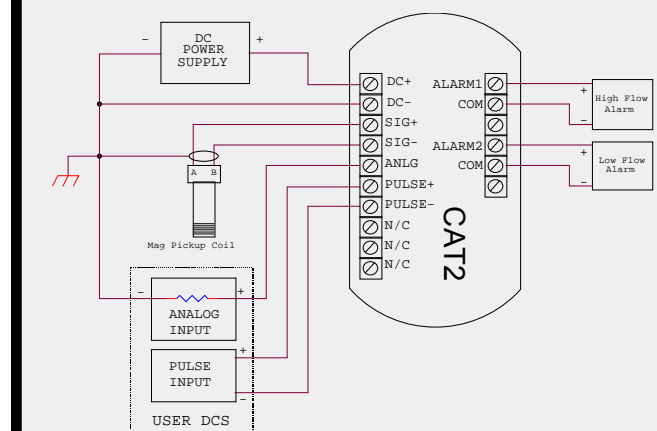
## SPECIFICATIONS

<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. Reverse polarity protection.
<b>Analog Output:</b>	4-20mA, 1-5V, 0-5V, 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 10 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>	-40° to +185°F. -40° to +85°C.
<b>Humidity:</b>	0-90% Non-Condensing.
<b>Enclosure:</b>	Extruded Aluminum. DIN Rail Mount. Explosion-Proof. 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.

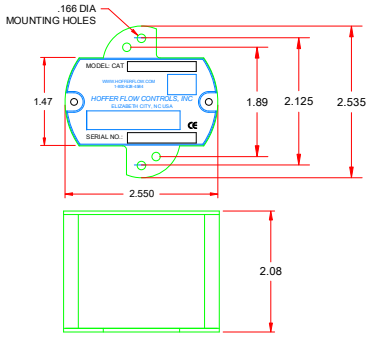
### SPECIAL FEATURES

- |     |   |
|-----|---|
| 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 > 85°C, EX-PROOF ENCLOSURE MUST BE MOUNTED REMOTELY. |

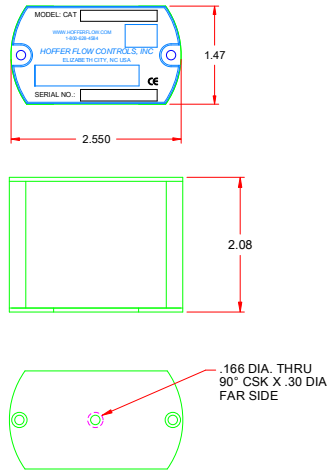
### NOTES:

- IF ENCLOSURE IS MOUNTED ON TURBINE FLOWMETER, RISER MUST BE SPECIFIED ON METER.
- 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.
- FOR UL LISTED EXPLOSION-PROOF ENCLOSURES CONTACT FACTORY.

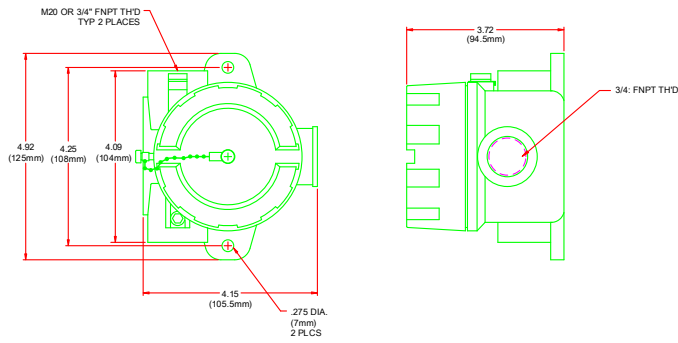
## General Purpose Enclosure



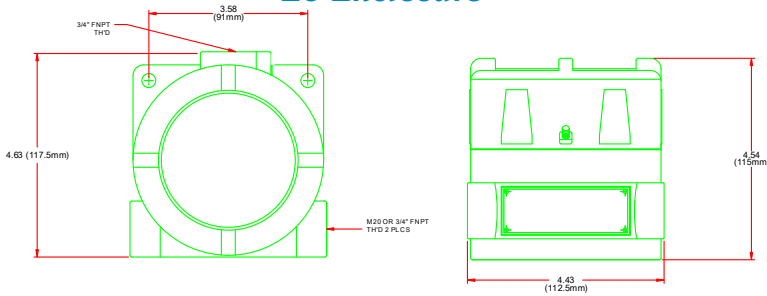
## Din Rail Enclosure



## E3 Enclosure



## E6 Enclosure



### Exd SYSTEM RATINGS for E3 and E6 Enclosures: (Pending)

#### CSA/FM:

CLASS I, DIV.1, GR.BCD, CLASS II, DIV.1, GR. EFG, CLASS III, TYPE 4X, IP66

CLASS I ZONE 1 AEx d IIB+H2, IP66

#### ATEX/IECEx:

II 2 G Ex d IIB+H2, T1-T6 Gb; IP66

T1-T5: -40°C ≤ T<sub>as</sub> ≤ 85°C; T6: -40°C ≤ T<sub>as</sub> ≤ 80°C

# H OFFER FLOW CONTROLS, INC.

The specifications contained herein are subject to change without notice and any user of said specifications should verify from the manufacturer that the specifications are currently in effect. Otherwise, the manufacturer assumes no responsibility for the use of specifications which may have been changed and are no longer in effect.

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

