

FLOWMETERS BY HOFFER

Perfecting Measurement™



CAT1

SERIES

Conditioners-Amplifiers-Transmitters

Product Bulletin CAT1-001H

TECHNICAL DATA SHEET

OUTSTANDING FEATURES

- ◆ Loop powered 4-20mA.
- ◆ Optional flowmeter linearization.
- ◆ Factory configured when purchased with a Hoffer flowmeter.
- ◆ Several enclosure options.
- ◆ CE Compliant.
- ◆ Windows® Configuration Software.

SPECIFICATIONS

Input Signal Type:	Magnetic pickup.
Input Frequency Range:	0.2 Hz to 4 KHz.
Signal Level:	10 mV rms to 30 Vdc.
Power Supply:	Loop Power 10-30 Vdc. Reverse polarity protected.
Loop Burden Voltage:	8.5 V.
Analog Output:	4-20mA.
Analog Output Response Time:	1/8 sec. (Limited by frequency and MST settings).
Load Resistance:	Max 650 Ohms at 24 Vdc.
Accuracy:	±0.02% of full scale.
Temperature Drift:	40 ppm/deg. C.
Communications:	RS232 port for configuration and diagnostics.
Operating Temperature:	T5 & STD: $-40^{\circ}\leq T_a\leq +85^{\circ}\text{C}$. T6: $-40^{\circ}\leq T_a\leq +79^{\circ}\text{C}$.
Humidity:	0-90% Non-Condensing.
Enclosure:	Extruded Aluminum. DIN Rail Mount. Explosion-Proof.
Regulatory:	CE Compliant.

Up to 20 point linearization.

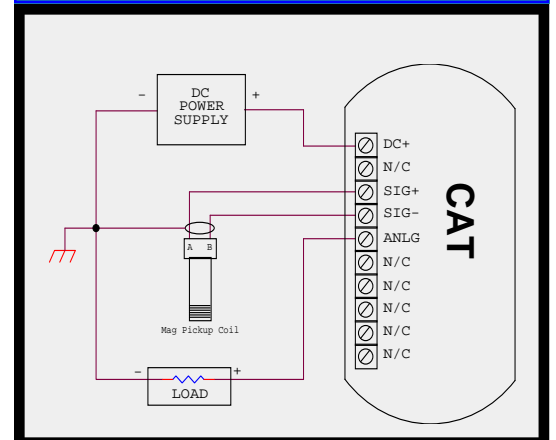
Windows® Configuration Software for Device configuration, diagnostics and monitoring.



PRODUCT DESCRIPTION

The CAT1 is a microprocessor controlled 2-wire 4-20mA transmitter. The CAT1 converts a low level, frequency signal from a flowmeter sensor into an analog 4-20mA output. The output is proportional to the flow rate.

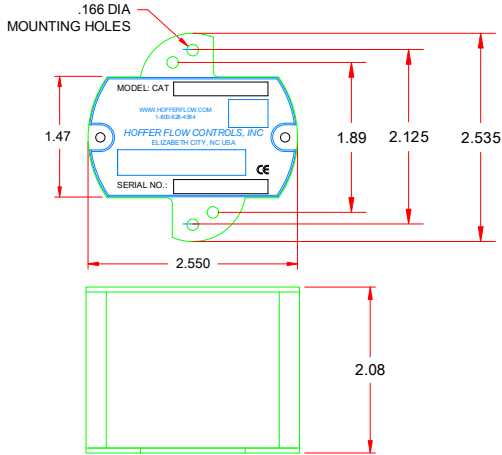
INSTALLATION WIRING



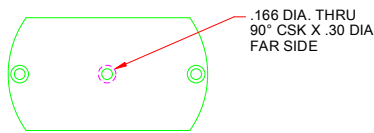
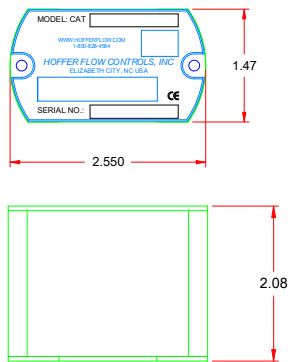
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ENCLOSURE OPTIONS

General Purpose Enclosure



DIN Style 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+H₂ T6/T5; Gb; Ex tb T80°C/T86°C IIIC Db; IP66;

Zones USA: Class I, Zone 1, AEx db IIB+H₂ T6/T5; Gb; Class I, Zone 21, AEx tb T80°C/T86°C IIIC Db; IP66

ATEX/IECEx:

II 2 G Ex db IIB+H₂ 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

ORDERING INFORMATION

Model CAT1- () - () - () - ()

ENCLOSURE STYLE

- 1 GENERAL PURPOSE ENCLOSURE
- D 2" LONG DIN RAIL MOUNT SINGLE UNIT. UP TO 20 CAN BE MOUNTED ON A SINGLE RAIL.
- E3(*) † EXPLOSION-PROOF ENCLOSURE
- 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.

LINEARIZED ANALOG OUTPUT

- 7 4 TO 20 MA UP TO 20 POINTS. ACCURACY +/- 0.02% OF FULL SCALE.

INPUT POWER

- D 8 TO 24 VDC LOOP POWERED

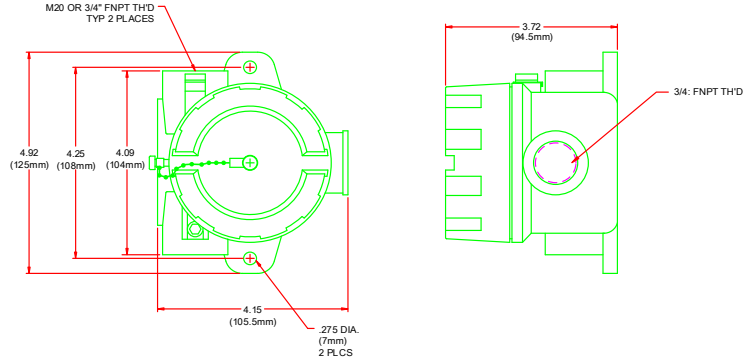
SPECIAL FEATURES

- 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

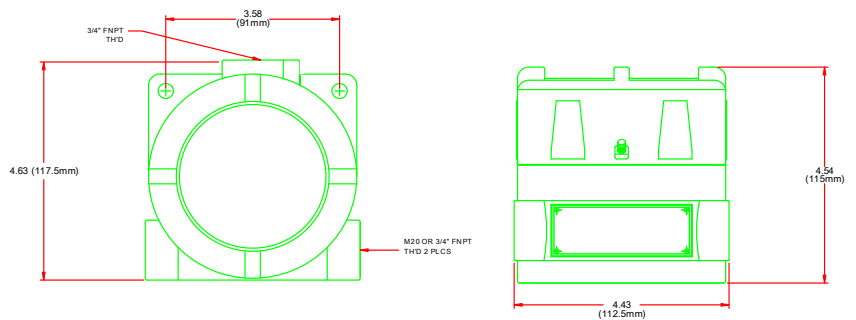
NOTES:

1. IF ENCLOSURE IS MOUNTED ON TURBINE FLOWMETER, RISER MUST BE SPECIFIED ON METER.
2. INPUTS: ACCEPTS MAGNETIC COIL ONLY.
3. IF THE CAT IS SHIPPED UNCALIBRATED OR IS RECALIBRATED IN THE FIELD, THE WINDOWS BASED SETUP KIT MUST BE PURCHASED. CONTACT FACTORY.

E3 Explosion-Proof Enclosure



E6 Explosion-Proof Enclosure



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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.

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

