FLOWMETERS BY
HOFFER
Perfecting Measurement ™

CAT1

C.A.T. SERIES
Conditioners-Amplifiers-Transmitters
Product Bulletin CAT1-001 I

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°≤Ta≤ +85°C. T6: -40°≤Ta≤ +79°C.
Humidity:	0-90% Non-Condensing.
Enclosure:	Extruded Aluminum. DIN Rail Mount. Explosion-Proof.
Regulatory:	CE Compliant.

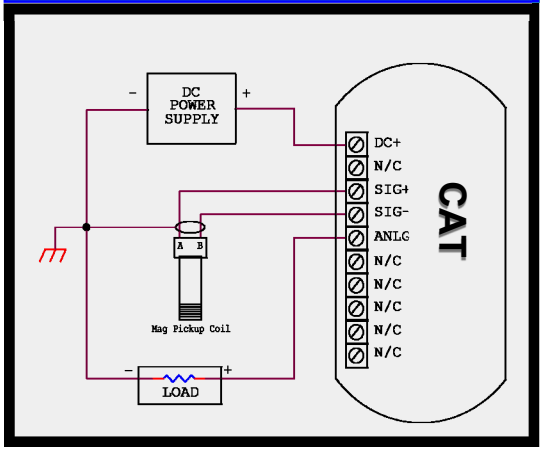
Up to 20 point linearization.

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

PRODUCT DESCRIPTION

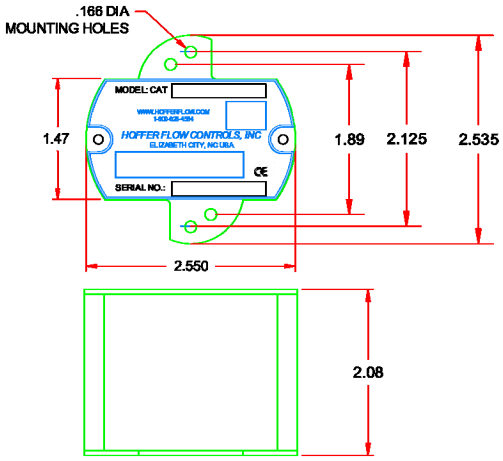
The CAT1 is a microprocessor controlled 2-wire 4-20mA transmitter. The CAT1 converts a low level, frequency signal from a flowmeter sensor into an analog 4-20mA output. The output is proportional to the flow rate.

INSTALLATION WIRING

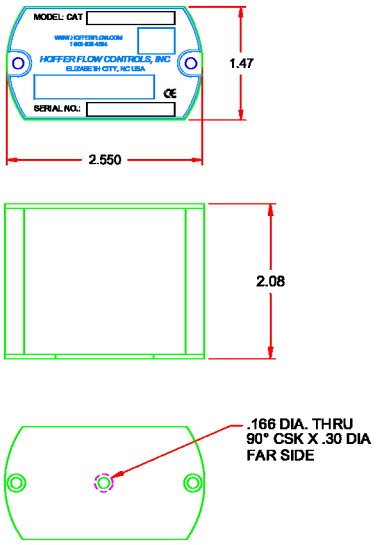


ENCLOSURE OPTIONS

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+H_2 T6/T5; Gb; Ex tb T80°C/T86°C IIIC Db; IP66;

Zones USA: Class I, Zone 1, AEx db IIB+H_2 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

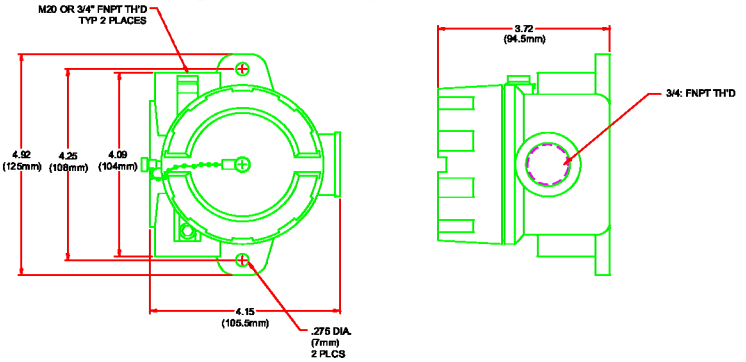
D	8 TO 24 VDC LOOP POWERED

SPECIAL FEATURES

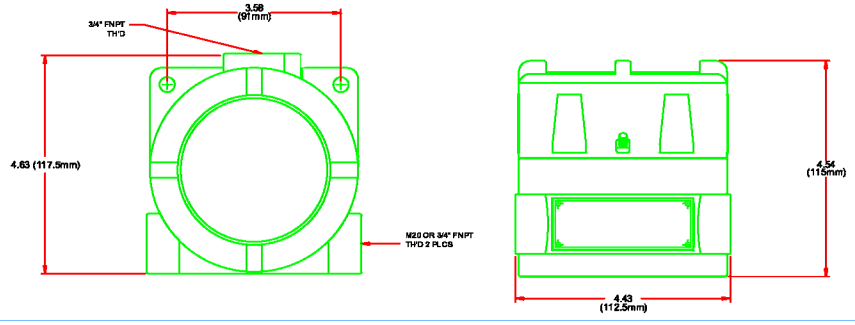
CE	MARK REQUIRED FOR EUROPE
SP	ANY SPECIAL FEATURES THAT ARE NOT COVERED IN THE MODEL NUMBER, USE A WRITTEN DESCRIPTION OF THE –SP.
CFX	6.75" LONG RISER AND UNION FOR EXPLOSION-PROOF SYSTEM CERTIFIED ENCLOSURES MOUNTED ON TURBINE. USED WITH "X" RISER TURBINE OPTION. NOTE: IF PROCESS TEMP IS < -40°C OR > 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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