

FLOWMETERS BY HOFFER

Perfecting Measurement™



Conditioners-Amplifiers-Transmitters

Product Bulletin CAT3-002J

TECHNICAL DATA SHEET

OUTSTANDING FEATURES

- ◆ DC or AC powered.
- ◆ Pulse and analog output scaled per unit of measure.
- ◆ Optional Hi and Lo alarms.
- ◆ Flowmeter Linearization.
- ◆ Factory configured when purchased with a Hoffer flowmeter.
- ◆ Several Enclosure options.
- ◆ CE Compliant.
- ◆ Windows® Configuration Software

SPECIFICATIONS

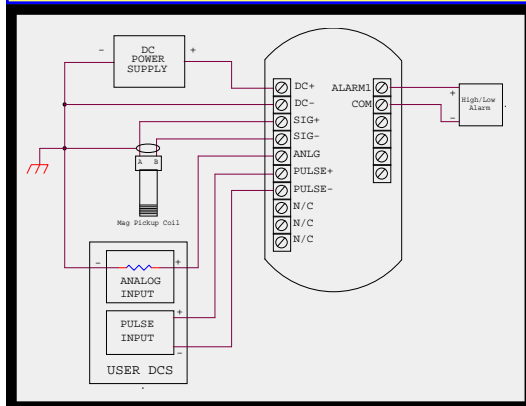
Input Signal Type:	Magnetic pickup, MCP pickup, Contact Closure, Pulse.
Input Frequency Range:	0.2 Hz to 4 KHz
Signal Level:	10 mV rms to 30 Vdc
Power Supply:	13-30 Vdc, 100-240 Vac Reverse polarity protection
Analog Output:	4-20mA, 1-5V
Analog Output Response Time:	1/8 sec. (Limited by frequency and MST settings)
Load Resistance:	Max 650 Ohms at 24 Vdc
Accuracy:	±0.02% of full scale
Temperature Drift:	40 ppm/deg. C
Pulse Output:	0-5V, 0-10V, Open Collector, AC Square. Internal pull up 10 k Ohms. Recommended minimum load resistance 50 k Ohms.
Pulse Scaling:	Divide by 1,10,100 per flow unit of measure
Hi/Lo Alarm:	Relay (2A, 30Vdc), 0-5V, Open Collector (0.5A, 30V).
Communications:	RS232 port for configuration and diagnostics.
Operating Temperature:	-40° to +185°F (-40° to +85°C)
Humidity:	0-90% Non-Condensing
Enclosure:	Extruded Aluminum, DIN Rail Mount, Explosion-Proof.
Regulatory:	CE Compliant
Up to 12 Point Linearization.	
Windows® configuration software for device configuration, diagnostics and monitoring.	



PRODUCT DESCRIPTION

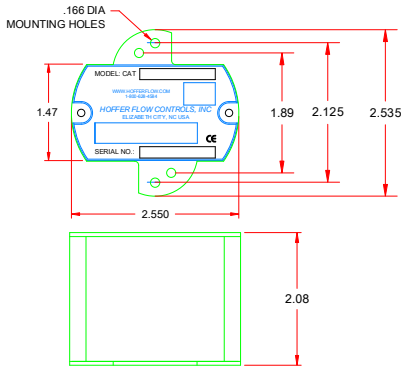
The CAT3 is a DC or AC powered, microprocessor controlled transmitter. It outputs a pulse scaled per unit of flow, and analog signal proportional to flow rate. The CAT3 can be configured with High and Low alarms.

INSTALLATION WIRING

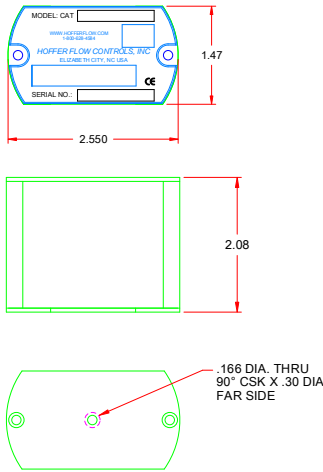


ENCLOSURE OPTIONS

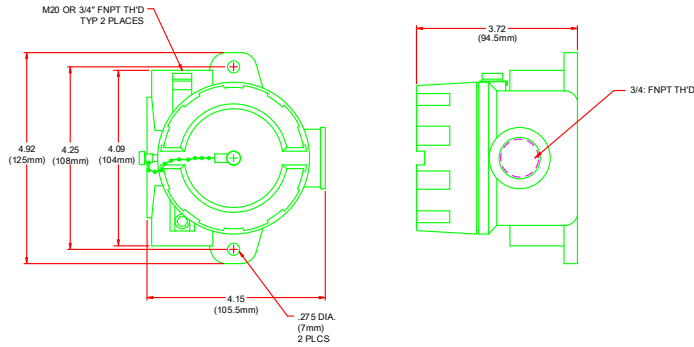
General Purpose Enclosure



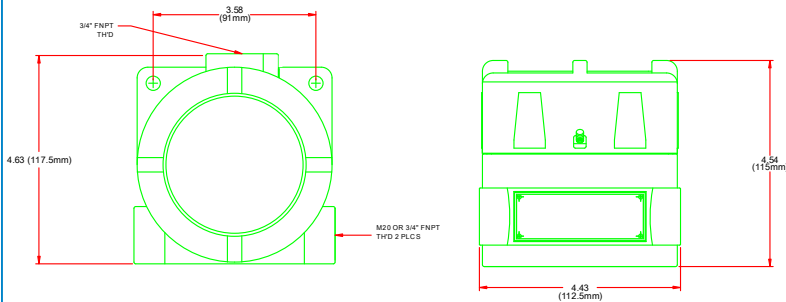
Din Rail Enclosure



E3 Enclosure



E6 Enclosure



Exd SYSTEM RATINGS for E3 and E4 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_a ≤ 85°C; T6: -40°C ≤ T_a ≤ 80°C

ORDERING INFORMATION

Model CAT3 - () - () - () - () - () - () - ()

PULSE INPUT

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

LINEARIZED 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

LINEARIZED ANALOG OUTPUT

- 1 4-20MA
- 5 1-5 VDC

POWER SUPPLY

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

ALARM OUTPUT

- 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 SELECTED, AC POWER IS NOT AVAILABLE.

ENCLOSURE STYLE

- 1 GENERAL PURPOSE
D 2" LONG DIN RAIL MOUNT SINGLE UNIT. UP TO 20 CAT3 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
MIL DESIGNED TO MEET EMC STDS EN55011-1992 AND EN61326-1:1997
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:

- 1) IF ENCLOSURE IS MOUNTED ON TURBINE FLOWMETER, RISER MUST BE SPECIFIED ON METER.
- 2) IF THE CAT IS SHIPPED UNCALIBRATED OR IS RECALIBRATED IN THE FIELD, THE WINDOWS BASED SETUP KIT MUST BE PURCHASED.
- 3) 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.
- 4) FOR UL LISTED EXPLOSION-PROOF ENCLOSURES CONTACT FACTORY.

HOFFER FLOW CONTROLS, INC.
107 Kitty Hawk Lane, P. O. Box 2145 Elizabeth City, NC 27906-2145
800-628-4584 252-331-1997 FAX 252-331-2886
www.hofferflow.com email: Info@hofferflow.com

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.

