

# SQUIRT

## Loop Powered Indicator

### Features

- Linear or Square Root Extraction of Input
- 3 <sup>1/2</sup> or 4 <sup>1/2</sup> Digit Rate Display (Selectable)
- 8 Digit Totalizer Display
- Calibration, High and Low Values Fully Programmable Through Keypad
- No Dipswitches or Pots to Adjust
- 16 Bit A/D Resolution
- Isolated Scaled Pulse Output
- Password Protection of Menu and Totalizer
- Flash Storage of Calibration, Setup & Totalizer

### Description:

Featuring up to 4<sup>1/2</sup> digits of rate and 8 digits of total, the Squirt is a loop powered indicator capable of accepting either linear or square root 4-20 mA inputs. An isolated scaled pulse output is available for hook up to a remote totalizer. Numeric password protection prevents unauthorized access to menu. The easy-to-read menu prompts make the Squirt so easy to program that you will feel comfortable programming it without the use of a manual.

### Specifications:

#### Power:

Loop powered 4-20 mA

#### Display:

Rate Display: (selectable decimal)

3.5 or 4.5 Digits (selectable), 0.35" High, Display updates once every two seconds.

Rate Descriptors: /SEC, /MIN, /HR or "blank"  
/MIN, /HR, /DAY with "D" option

Totalizer Display: (selectable decimal)

8 Digits (99999999), 0.2" High

Totalizer Descriptors: GAL, LIT, FT3, M3, "blank"  
GAL, BBL, MCF, M3, "blank" with "D"  
option

Under/Over range Indication: Flashing display

#### Environmental:

OPERATING TEMPERATURE

-4°F (-20°C) to + 158°F (70°C)

Extended Temp: -22°F (-30°C) to + 158°F (70°C)

HUMIDITY

0 - 90% Noncondensing

**Accuracy:** (Rate @ 20°C)

0.1% Full Scale Resolution, ±1 count

Temperature Drift:

50 ppm/°C Typical

200 ppm/°C Worst Case

**Data Storage:**

Calibration and Setup Information, Totalizer Stored in flash memory

**Listing:** CE Compliant



Flow Instruments  
FIELD INDICATORS

### Inputs:

Signal Input:

Full Scale Range: 4 to 20 mA DC

Loop Voltage Drop: 6 Volts Maximum

Reverse Polarity Protected

Over Current Protection to 60 mA with resettable fuse fault protection

16 Bit resolution; 1 sample every 2 seconds

Low Cutoff supplied to inhibit indications at low flow rates.

Reset Input: (contact closure)

Internal Pullup Resistor: 100 kΩ to +3 VDC

High (logic 1): Open or 3-30 VDC

Low (logic 0): Less Than .5 VDC

Minimum On : 25 msec

### Pulse Output:

The pulse output advances with the least significant digit of the totalizer.

Type: Photomos Relay.

Max. voltage (off state): 30 VDC

Current (on state): 5 mA @ .9 V drop, .1mA @ .7 drop

Pulse Duration: Menu selectable: 0.062, 0.125, 0.25, 0.5 sec.

Pulse output divider: User selectable, ÷1, ÷10, ÷100, ÷1000 or off

### Calibration & Operation:

Input Scaling: Via front keypad

Calibration: Via front keypad

Decimal Point: Via front keypad

Reset Input: Via front keypad or remote dry contact closure

Keypad: 4 tactile feedback keys

### Mounting:

0- Circuit Board -

OEM option (consult factory)

1- Panel Mount -

NEMA 4X Clear Front

2- Wall Mount -

NEMA 4X Enclosure with Squirt mounted behind clear cover

3- Explosion Proof -

Class I, Division I, Groups B, C & D

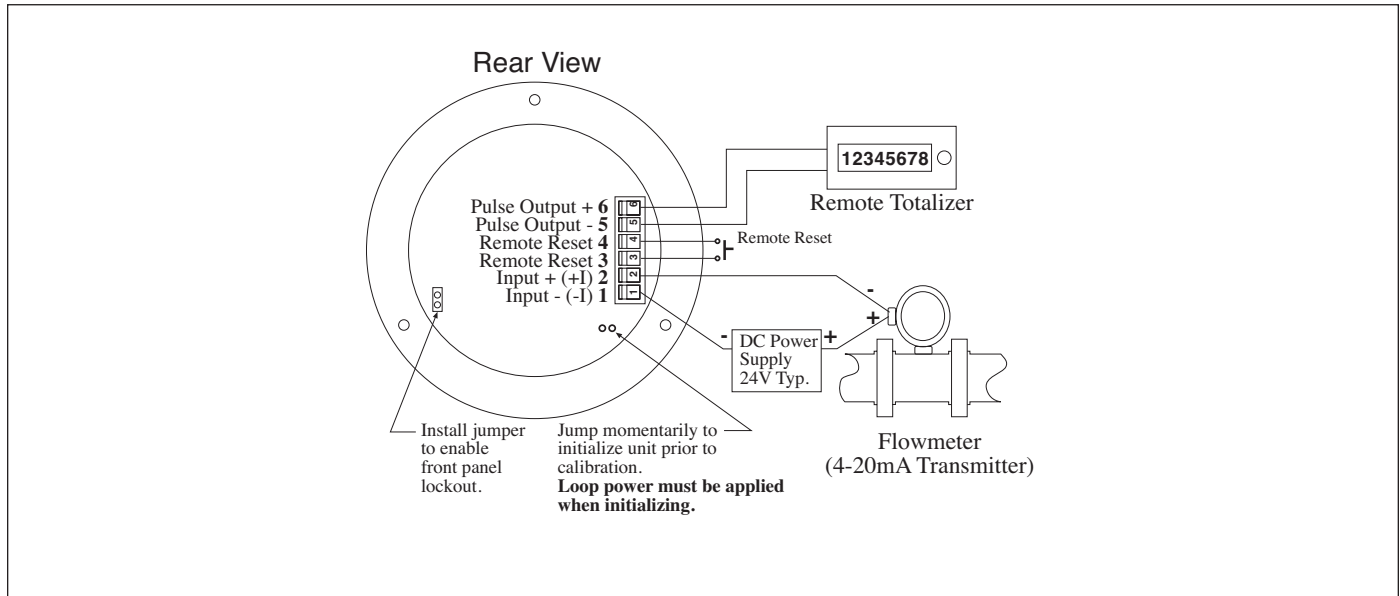
Class II, Division I, Groups E, F & G

5- Wall Mount -

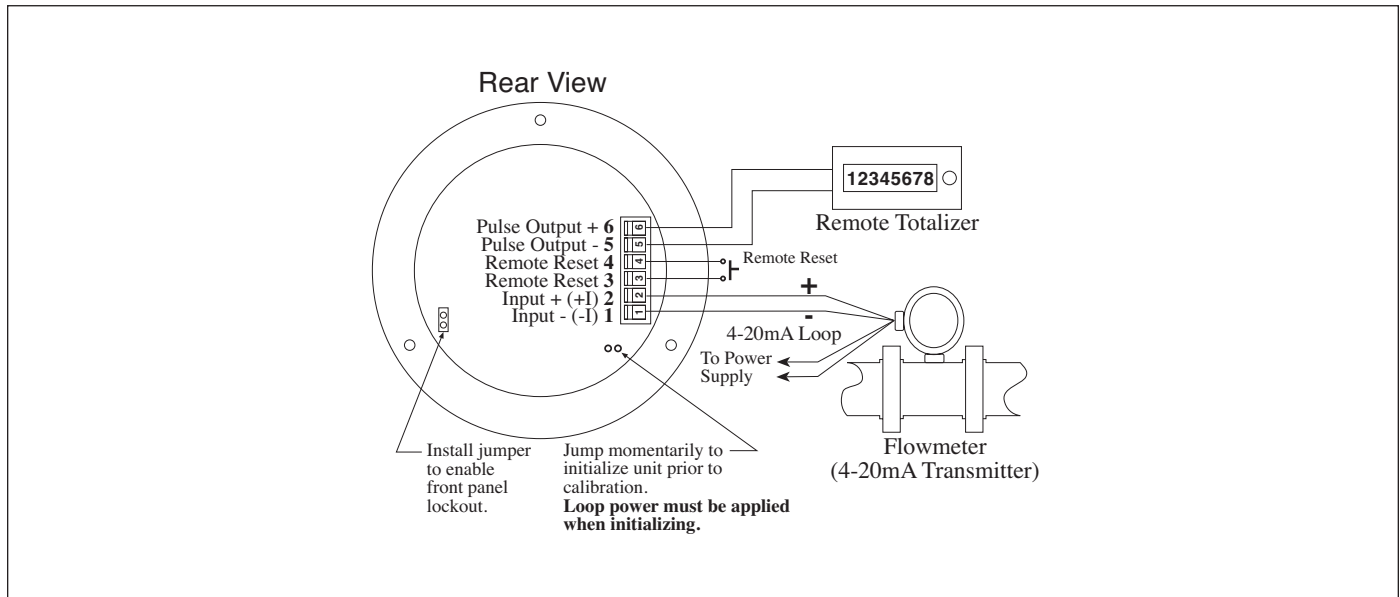
NEMA 4X with Squirt mounted outside opaque cover

## Wiring:

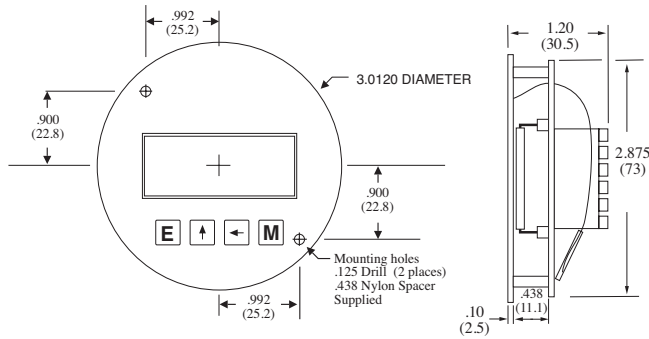
### 2-Wire Transmitter



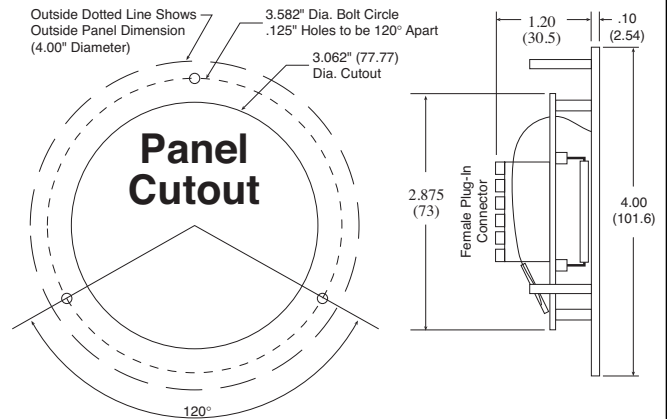
### 4-Wire Transmitter



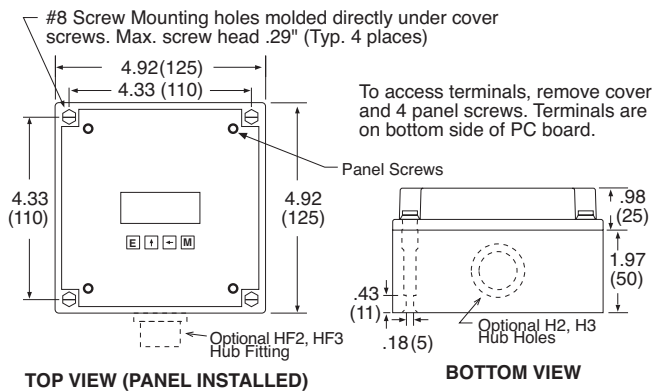
### SQUIRT-0



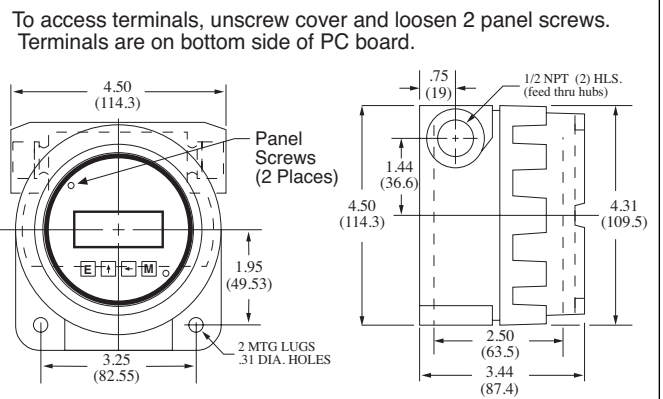
### SQUIRT-1



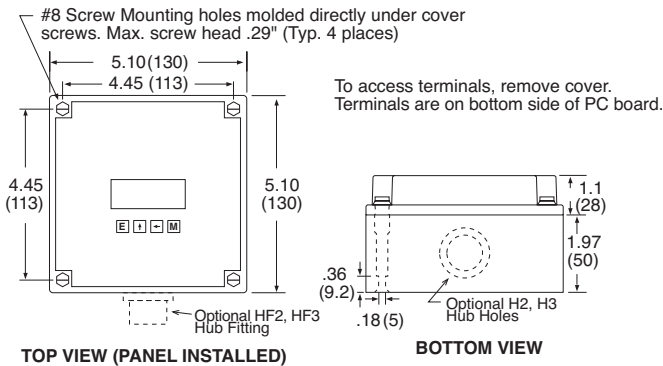
### SQUIRT-2



### SQUIRT-3



### Squirt-5



### Ordering Information

<b>Example:</b>	<b>SQUIRT</b>	<b>3</b>	<b>ET</b>
SQUIRT	Loop powered; Rate & Total		
Mounting:	0 = OEM 1 = Panel Mount 2 = NEMA 4X Box (Squirt behind clear cover) 3 = Explosion Proof Housing 5 = NEMA 4X Box (Squirt outside opaque cover)		
Options:	ET = Extended Temp.: -22°F to 158°F (-30°C to 70°C) ATEXCASE** = European Flame Proof ATEX Case (consult factory) R = External Magnetic Reset for NEMA4X & Explosion Proof Enclosures RX = NEMA7 Explosion Proof Reset Switch for Explosion Proof Enclosure with 3/4" straight thread side entry H2 = 0.875" Hole for mounting styles 2 and 5 HF2 = 0.5" Female NPT Hub fitting (mount styles 2 & 5) H3 = 1.125" Hole for mounting styles 2 and 5 HF3 = 0.75" Female NPT Hub fitting (mount styles 2 & 5)		

\*\* Contact factory for latest information