

SQUIRT

Features

- Linear or Square Root Extraction of Input
- 3 ^{1/2} or 4 ^{1/2} 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

Description:

Featuring up to 4 ^{1/2} 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

Internal Battery (Setup & totalizer memory storage only):

3 V 250 mA-H Lithium (2 yr. Standby life)

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"

Totalizer Display: (selectable decimal)

8 Digits (99999999), 0.2" High

Totalizer Descriptors: GAL, LIT, FT3, M3, "blank"

Low Battery Error Detection: "BAT" descriptor

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

Listing: CE Compliant

Loop Powered Indicator



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

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: Opto-isolated open collector transistor.

Max. voltage (off state): 30 VDC

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

Pulse Duration: 15 msec

Pulse Output Rate: 25 CPS max.

Pulse output divider: User selectable, +1, +10, +100 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 -

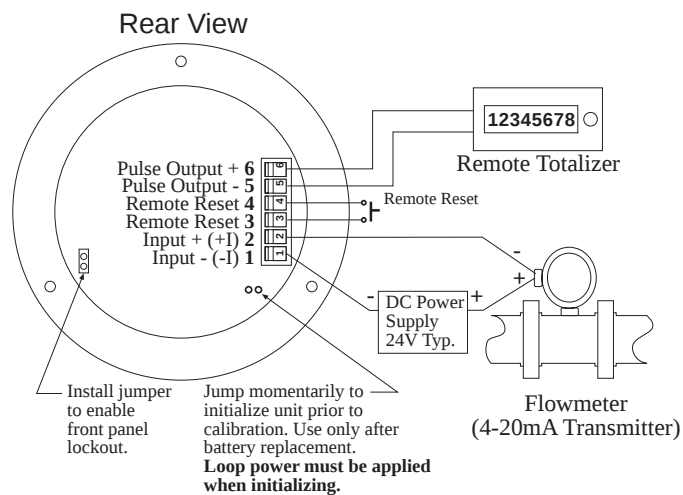
Class I, Division I, Groups B, C & D
Class II, Division I, Groups E, F & G

5- Wall Mount -

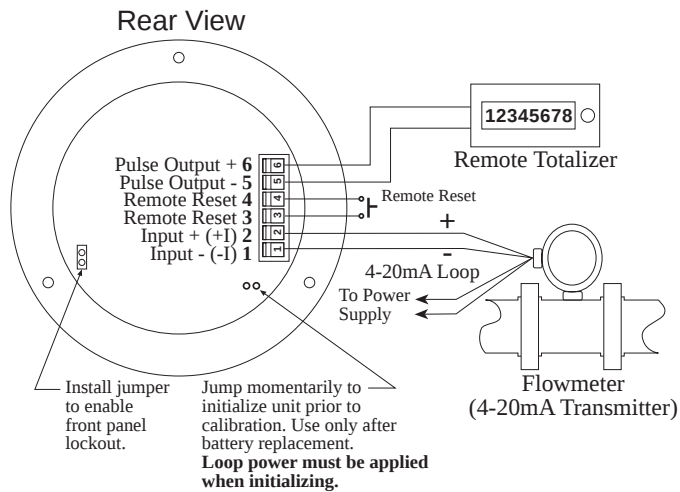
NEMA 4X with Squirt mounted outside opaque cover

Wiring:

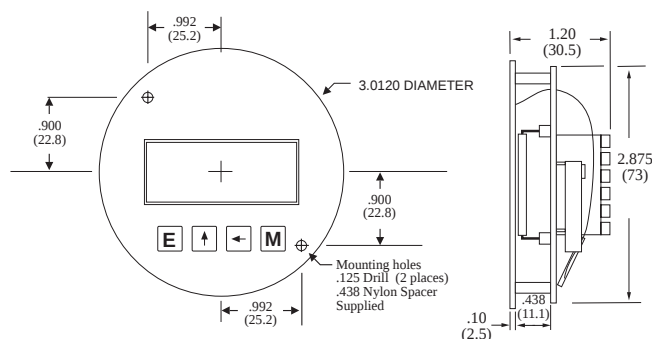
2-Wire Transmitter



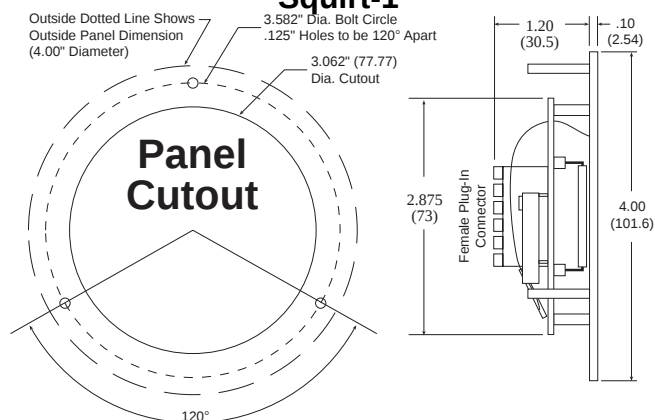
4-Wire Transmitter



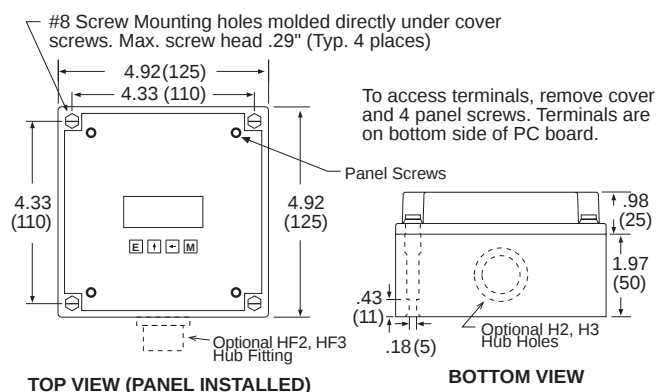
Squirt-0



Squirt-1

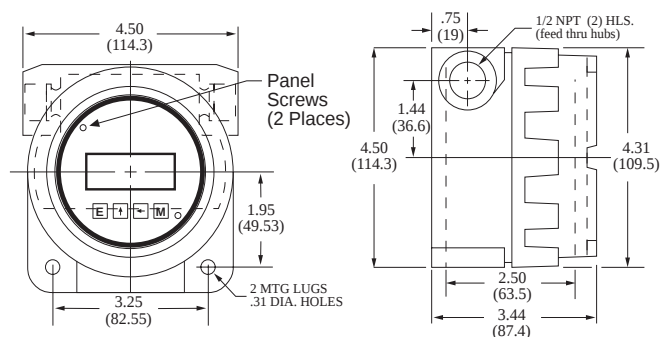


Squirt-2

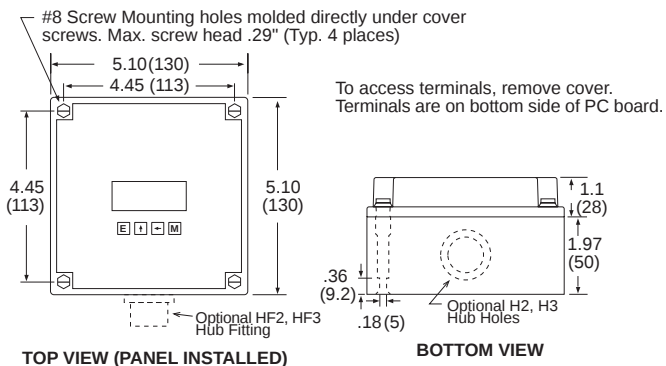


Squirt-3

To access terminals, unscrew cover and loosen 2 panel screws. Terminals are on bottom side of PC board.



Squirt-5



Ordering Information

Example: **SQUIRT** **3** **ET**

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)
 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 for mounting styles 2 and 5
 H3 = 1.125" Hole for mounting styles 2 and 5
 HF3 = 0.75" Female NPT Hub fitting for mounting styles 2 and 5