

SQUIRT

Loop Powered Indicator

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 Approved, UL/CSA Pending



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

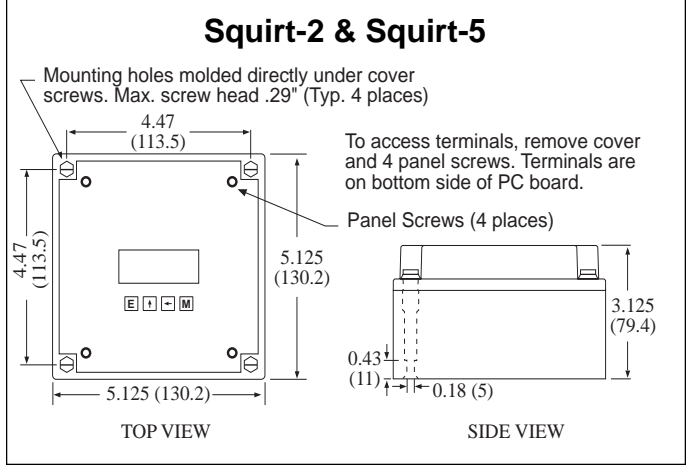
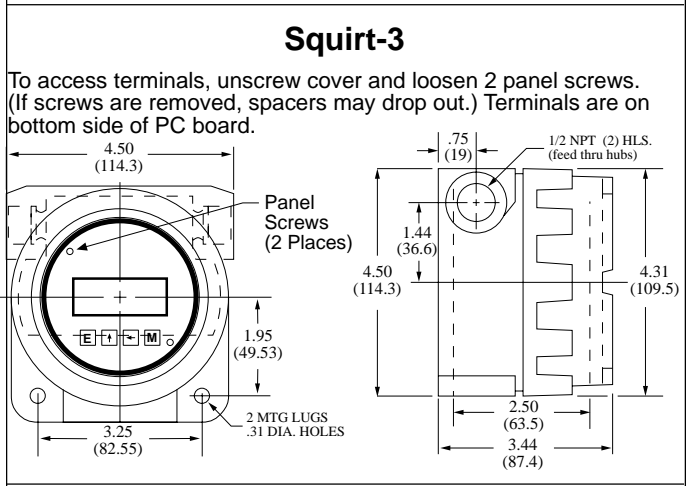
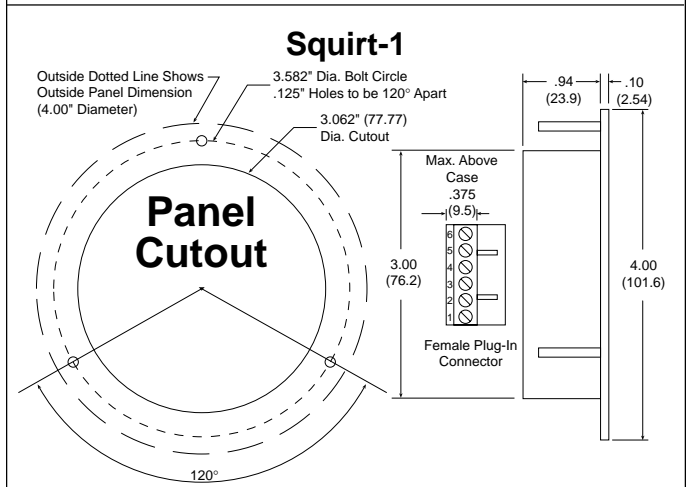
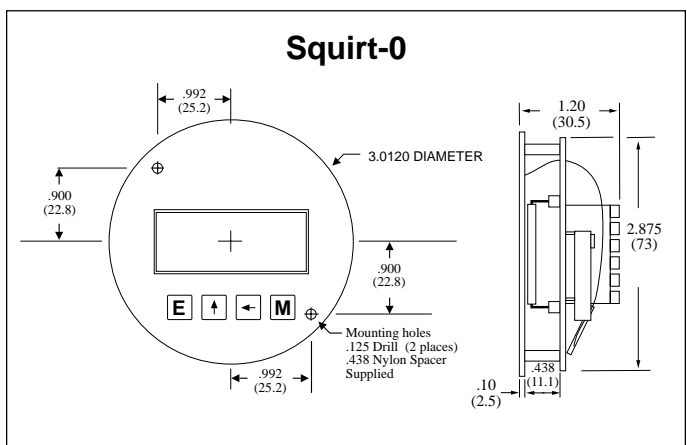
Decimal Point: Via front keypad

Reset Input: Via front keypad or remote dry contact closure

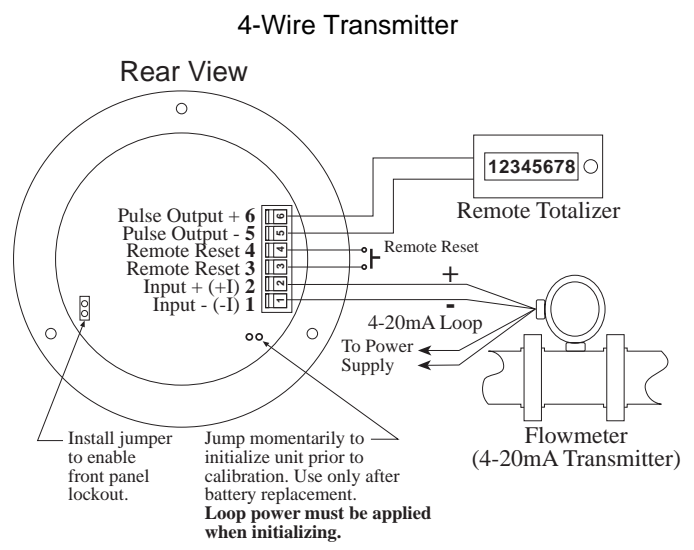
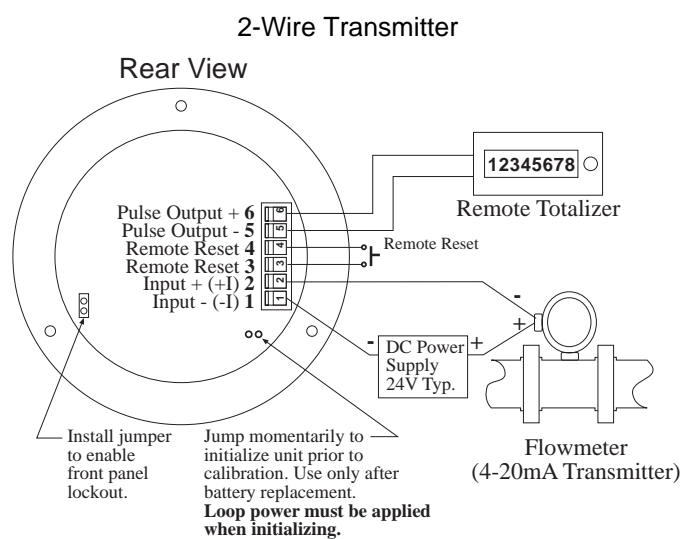
Keypad: 4 tactile feedback keys

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:



Ordering Information

Example:	SQUIRT	3	ET
	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 Temperature: -22° to 158° F (-30° to 70° C) R = External Magnetic Reset for NEMA4X & Explosion Proof Enclosures RX = NEMA7 Explosion Proof Reset Switch for Explosion Proof Enclosure with special 3/4" conduit entry.		