

MS817

Preamplifier Signal Conditioner & Pulse Isolator

Features:

- Preamplifier Signal Conditioner & Pulse Isolator for Magnetic Pickups and Contact Closures
- Two Year Warranty
- Various Mounting Styles
- Power LED Indicator
- Amplify and shape signals from magnetic pickups sensors
- Debounce and shape signals from contact closure sensors
- Condition and shape signals requiring isolation

Description:

The model MS817 is a signal conditioner which permits the user to condition and scale the input pulses from a pulse producing sensor into a high level output where each pulse represents an engineering unit of measure.

Several pulse input types are supported including magnetic pickup, contact closure, and an isolated pulse input.

The pulse output is a nominal square signal.

The pulse output is available in isolated and non-isolated versions. User selections include output pulse and internal pullup resistors. The user may select his pulse output configuration by means of a dip switch.

The unit is powered to 8 - 35 VDC. Reverse polarity protection is provided. A power indicator is provided.

The unit is available in enclosures intended for either DIN rail, NEMA4X or Explosion Proof.

Specifications:

Pulse Input:

Isolated Pulse:

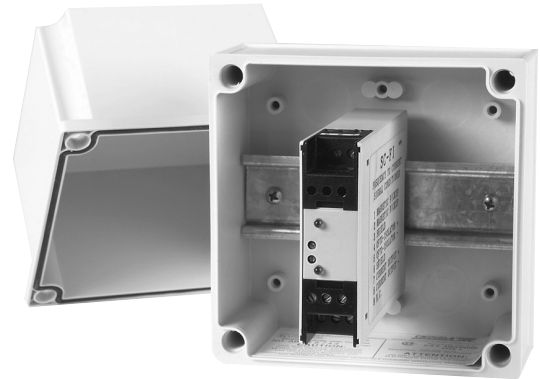
- Logic 1 (high): 3 - 30 VDC
- Logic 0 (low): 0 - 1 VDC
- Input Frequency Range: 0-10000 Hz
- Input Impedance: 3.3 k Ω
- Reverse Polarity Protection
- Isolation Voltage: 500 V

Contact Closure:

- Switch Debounce: 40 CPS maximum count rate
- 10000 ohm internal pullup to 5 VDC

Magnetic Pickup:

- Sensitivity: 30 mV p-p
- Bandwidth: 0-3500 Hz
- Over Voltage Protection to 30 VDC
- 10 Kohm input resistance



Pulse Output:

Pulse Duration: Nominal 50/50 duty cycle

Open Collector Pulse:

- Maximum Voltage: 48 VDC
- Maximum Current: 100 mA @ .1.5 VDC (typ.)
- Max. Output Speed: 10 kHz
- Reverse Polarity Protection
- Overcurrent Protection
- Jumper selectable for 5 V and 24 V pulse output

Isolated Pulse:

- Maximum Voltage: 30 VDC
- Maximum Current: 10 mA
- Max. Output Speed: 1 kHz
- Isolation Voltage: 500 VDC
- Reverse Polarity Protected

Power Input:

- Input Voltage Range: 8.5 to 35 VDC
- Supply Current: 25 mA (nominal)
- Reverse Polarity Protection
- Transient Protection

Pulse Scaling:

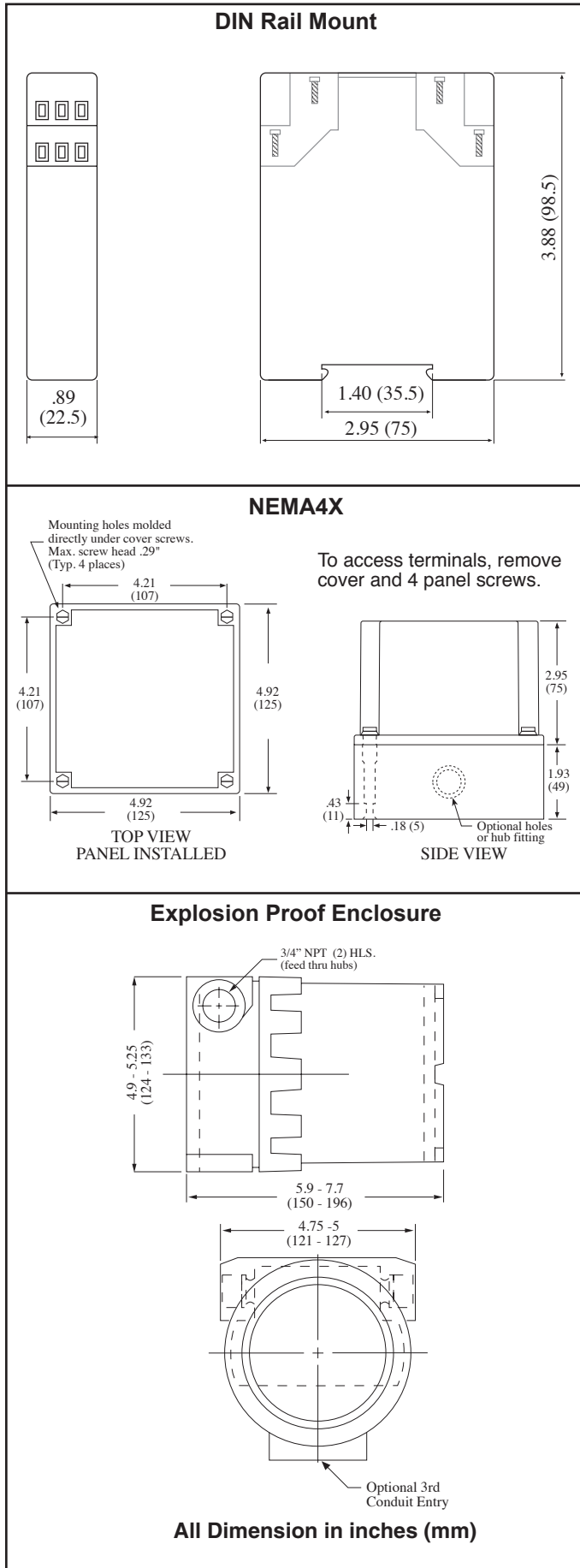
NONE - Output is a conditioned version of the pulse input

Mounting Styles

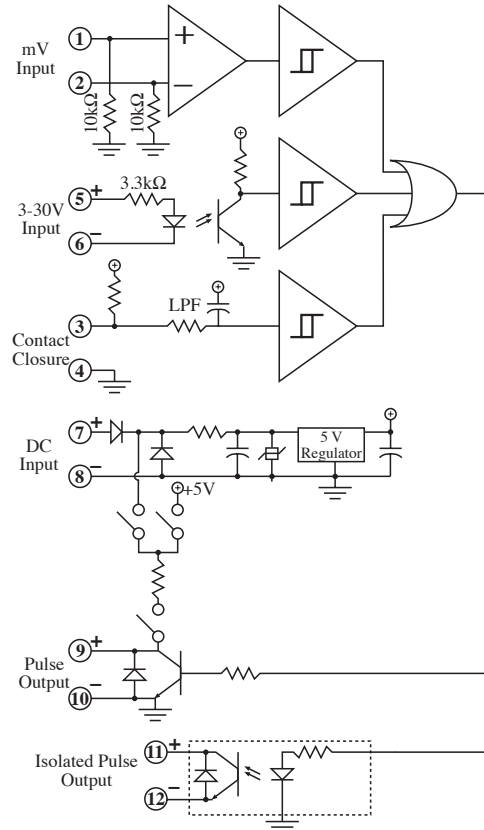
- DIN Rail Mount: Plastic enclosure with a snap fastener for fitting to DIN 46 277 and DIN EN 50 022 assembly rails.
- NEMA 4X: 4.92" x 4.92" NEMA 4X Enclosure for wall mounting.
- Explosion Proof: Aluminum enclosure for:
Class I, Division 1, Groups B, C & D
Class II, Division I, Groups E, F & G.

Listing: CE Compliant

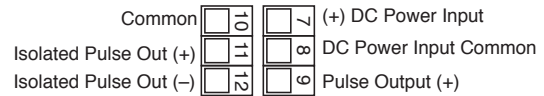
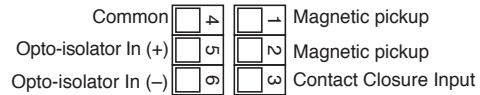
Dimensions



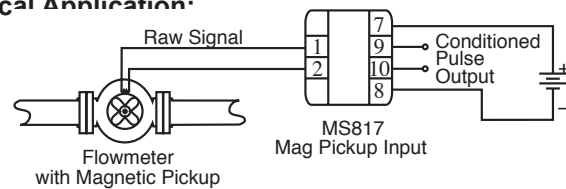
Simplified Block Diagram



Wiring:



Typical Application:



Ordering Information

Example MS817 1 B ET

Series _____

Output Type _____
1 = Open Collector & Isolated Pulse (STD)

Mounting: _____
B = Nema 4X
C = Explosion Proof
D = DIN Rail

Options: _____
ET = Extended Temp: -4° to 185°F (-20° to 85° C)
T = Third 3/4" conduit entry for Explosion Proof Housing
H2 = 0.875" Hole for NEMA4 mounting style
HF2 = 0.5" Female NPT Hub fitting
H3 = 1.125" Hole for NEMA4 mounting style
HF3 = 0.75" Female NPT Hub fitting

Accessories: (add to end of part number)
DR-4 = 4" DIN Rail