

AMP-2

Dual Preamp & Signal Conditioner for Magnetic Pickups

Features:

- Dual Input.
- Ultra Low Speed to 4 kHz Operation.
- 10 mV Sensitivity.
- High Level DC Voltage Pulse Output.
- 8.5 to 30 VDC Power Supply Range.
- Explosion Proof Housing.
- Screw Terminal Block Hookup.
- Explosion Proof, NEMA4X Wall Mount and Circuit Board (OEM) Mounting Options.

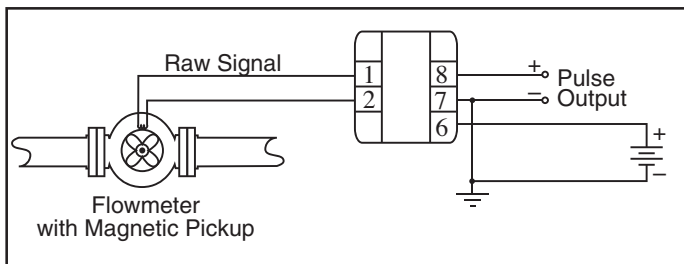


Description:

The KEP AMP-2 is a two channel amplifier for use with magnetic pickups. It amplifies and squares the low level signals from a magnetic pickup to drive any ratemeter, totalizer or controller. The unit operates from 8.5 to 30 VDC. It has a 10K pullup resistor attached to the open collector output and sinks a minimum of 20 mA to less than 1 V from a maximum of 30 VDC. It is available in OEM (PC board only), NEMA4X enclosure or in a rugged explosion proof housing with screw terminals for easy installation. Operating temperature is -40° to 65°C.

Note: The low voltage line from the magnetic pickup to the AMP-2 should be less than 10 ft. in length, shielded and isolated from relays, solenoids or other sources of electrical noise (let the output line make the long run). If the input is too sensitive, lower the 10K input impedance by adding a 1K ohm resistor across TB1, pins 1 and 2, 4 and 5 to increase noise immunity.

Typical Application:



Specifications:

Environmental:

TEMPERATURE: -40° to 65°C

HUMIDITY: 0-95% Noncondensing

Power Input:

Input Voltage Range: 8.5 to 30 VDC

Supply Current: 25 mA (nominal)

Reverse Polarity Protection

Transient Protection: Surge Suppression Clamp at 36V

Magnetic Pickup:

Sensitivity: 10 mV p-p

Bandwidth: 0-4000 Hz

Over Voltage Protection to 30 VDC

10 KΩ input resistance

Type: Differential Preamp

Pulse Output:

Maximum Voltage: DC Input

Maximum Current: 100 mA @ .7V max

Reverse Polarity Protection

Overcurrent Protection

Surge Suppression Clamp at 36V

Listing for Ex-Proof Option:

CSA for Canada and USA

Class I Division 1 Groups B,C,D

Class II Division 1 Groups E,F,G

Class III

Enclosure: Type 4X

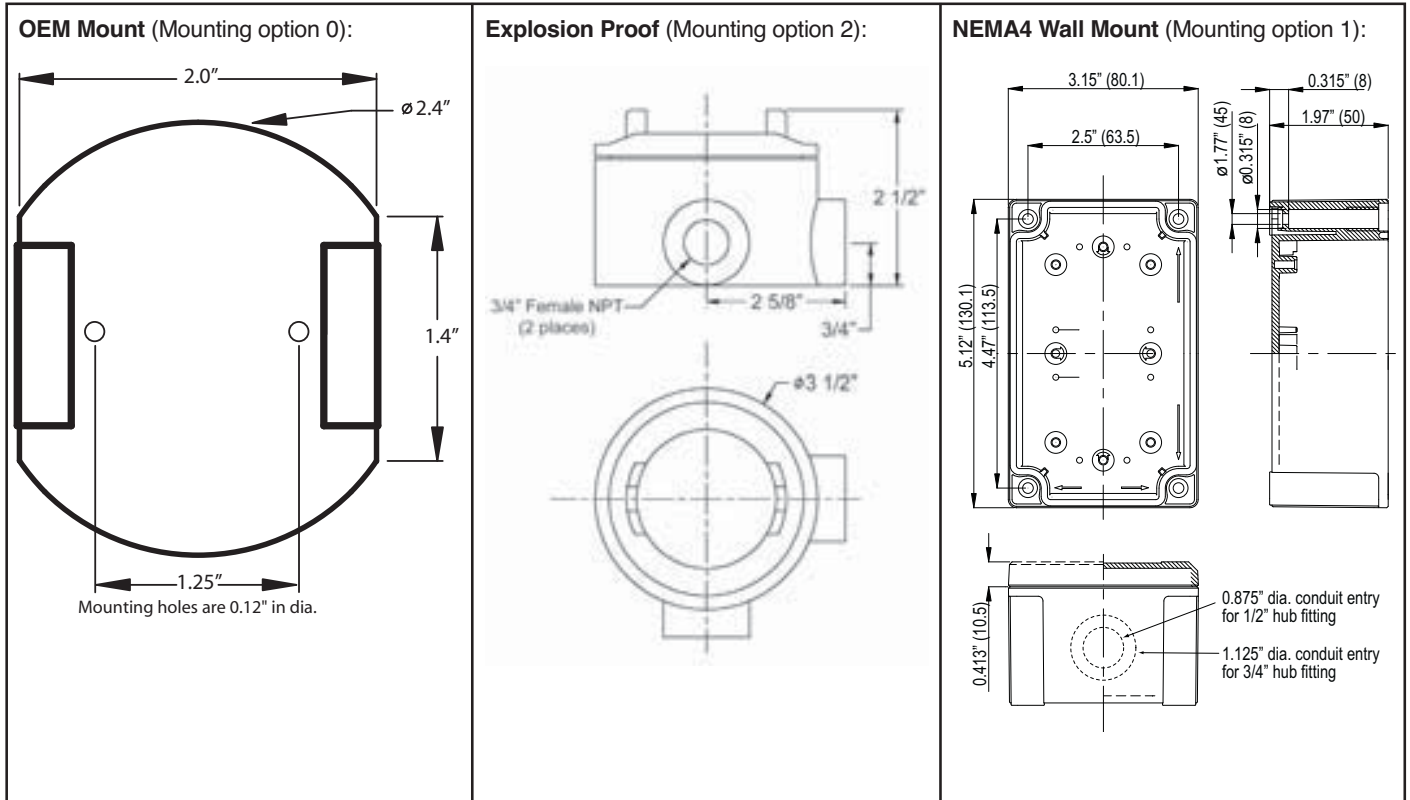
Enclosure:

0- OEM No Enclosure; for use in OEM mounting applications

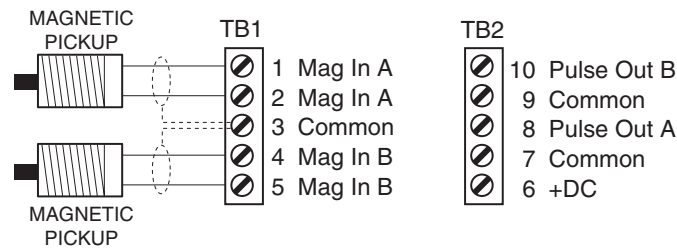
1- NEMA4X NEMA 4X Wall Mount Enclosure

2- Ex Proof (FM/CSA), NEMA 4X, Die Cast Aluminum, 3 Port Instrument Housing With Blind Cover

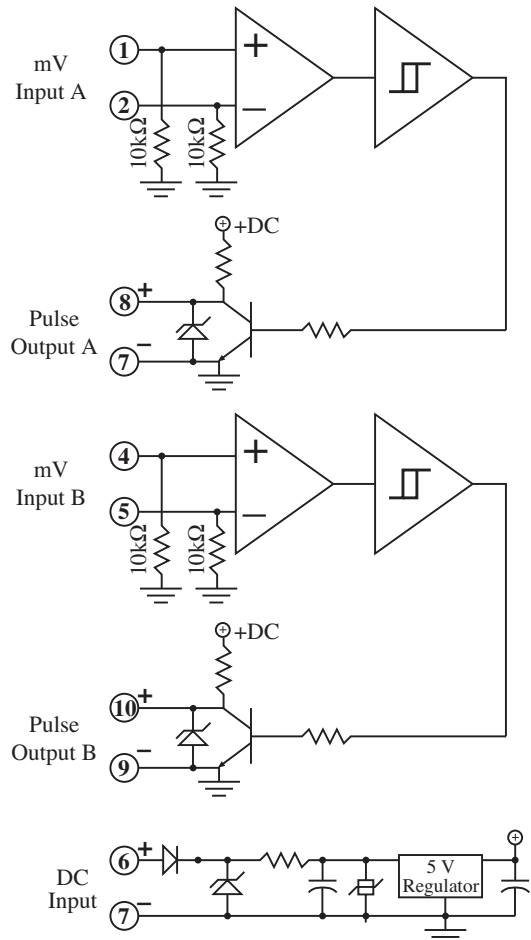
Dimensions:



Wiring:



Simplified Block Diagram



Ordering Information

EXAMPLE: AMP2 1 HF2
Series: _____
Mounting: _____
 0 = OEM (board only)
 1 = NEMA 4X Box
 2 = Explosion Proof Housing

Mounting Options for NEMA 4X: _____
 H2 = 0.875" Hole for NEMA4X mounting style
 HF2 = 0.5" Female NPT Hub fitting for NEMA4X mounting style
 H3 = 1.125" Hole for NEMA4X mounting style
 HF3 = 3/4" Female NPT Hub fitting for NEMA4X mounting style
 Additional conduit entry configurations are available, consult factory.

Accessories:
 TFM-MK -1 = Turbine Flow meter Mounting Kit for flow meters with a 1" Male NPT riser
 TFM-MK -3/4 = Turbine Flow meter Mounting Kit for flow meters with a 3/4" Male NPT riser
 CA-TM-2-18-FL = 18" Turbine Flow meter Cable Assembly