

AMP-2

Dual Preamp & Signal Conditioner for Magnetic Pickups

Features:

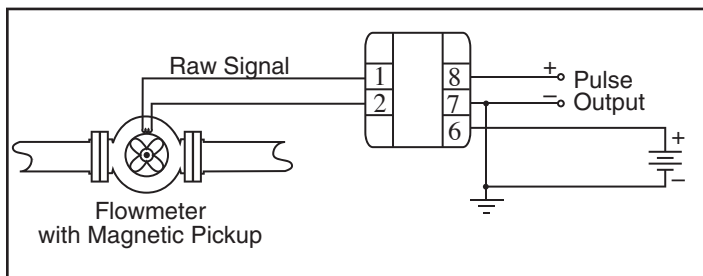
- Dual Input.
- Ultra Low Speed to 4 kHz Operation.
- 10 mV Sensitivity.
- High Level DC Voltage Pulse Output.
- 8.5 to 30 VDC Power Supply Range.
- Explosion Proof Housing.
- Screw Terminal Block Hookup.
- Explosion Proof, NEMA4X Wall Mount and Circuit Board (OEM) Mounting Options.

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 K Ω input resistance
Type: Differential Preamplifier

Pulse Output:

Maximum Voltage: DC Input
Maximum Current: 100 mA @ .7V max
Reverse Polarity Protection
Overcurrent Protection
Surge Suppression Clamp at 36V

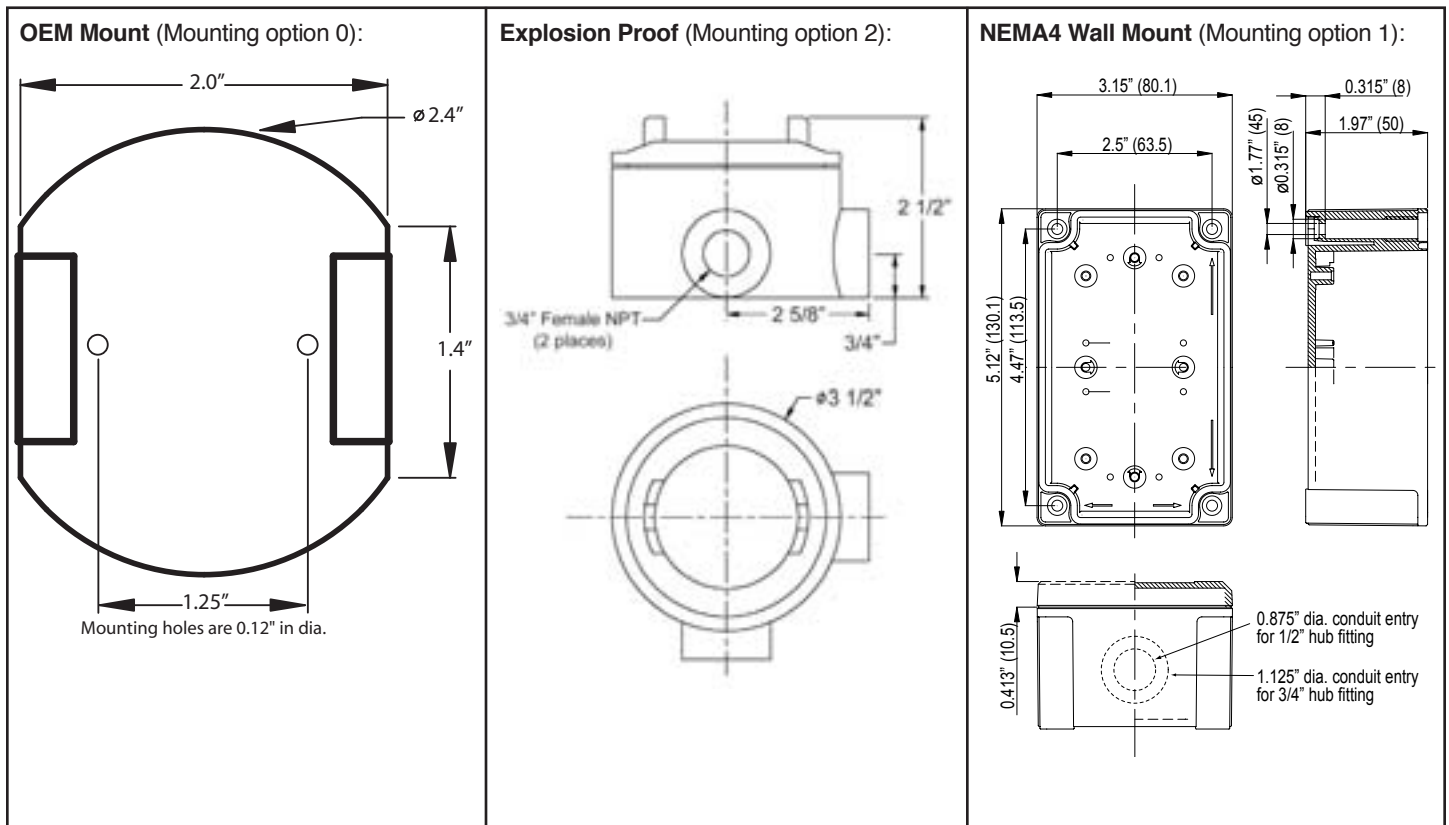
Listing for Ex-Proof Option:

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

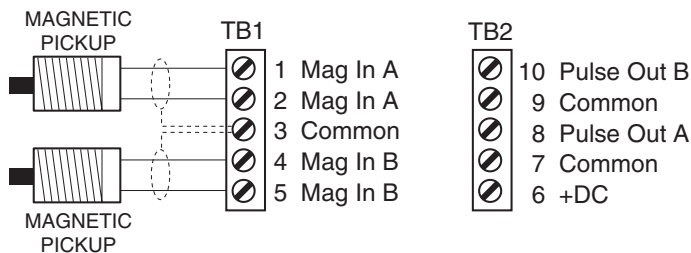
Enclosure:

- 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

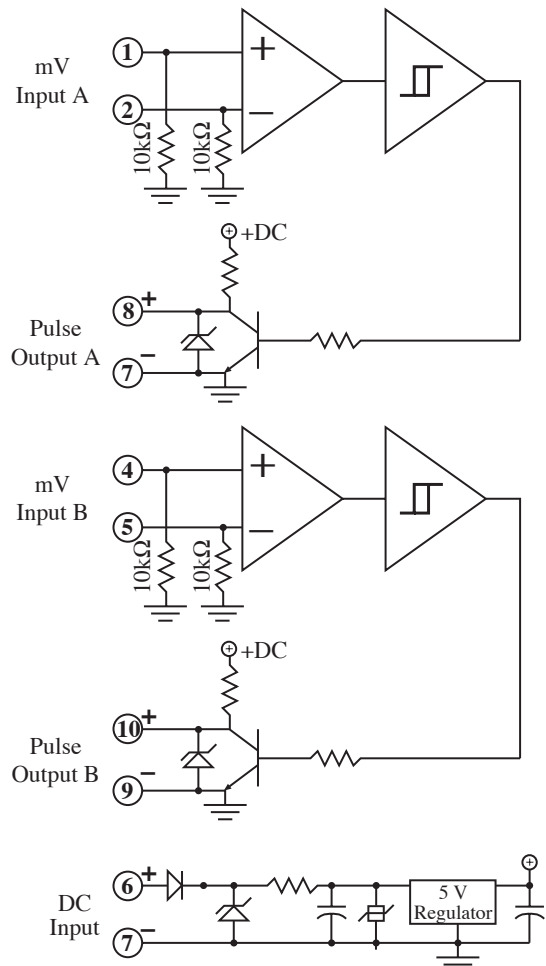
Dimensions:



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