# AMP-1

# Preamp & Signal Conditioner for Magnetic Pickups

## Features:

- Ultra Low Speed to 15 kHz Operation.
- 20 mV to 50 V Sensitivity.
- 100 mA Current Sinking Output.
- 11 to 26 VDC Power Supply Range.
- Easy Mount Metal Housing.
- Screw Terminal Hookup.

## **Description:**

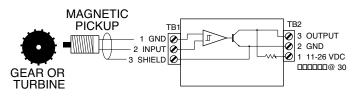
The KEP AMP 1 amplifies the low level signals from a magnetic pickup or flow transmitter by a factor of more than a hundred times to drive any ratemeter, counter or controller. The unit uses only 30 mA and operates from 11 to 26 VDC. It has a 2.7K pullup resistor attached to the open collector output and sinks a minimum of 100 mA to less than 1 V from a maximum of 26 VDC. It is mounted in a rugged 2" x 3" metal housing with screw terminals for easy installation. Operating temperature is 32 to 140° F (0 to 60° C).

**Note:** The low voltage line from the magnetic pickup to the AMP-1 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 1.1K input impedance by adding a 220 to 1K ohm resistor across TB1, pins 1 and 2, to increase noise immunity.

A special version, the AMP1-10k, is available with 10  $k\Omega$  impedance for use with turbine and paddle wheel flowmeters.

## Listing: CE Compliant

### Sample Hookup :



# **Ordering Information**

# Part Number

 AMP 1:
 Standard unit

 AMP-1-10k:
 AMP-1 with 10 kΩ input impedance

 AMP-1-N:
 AMP-1 for Nemur Sensors

### **Options:**

- E Explosion Proof Housing (add E to end of part number)
- N4 NEMA4X Enclosure (add N to end of part number) NEMA4X Options:
  - 2H2 Two 0.875" Holes for Hub fittings
  - 2HF2 Two 0.5" Female NPT Hub fittings

# AMP-1-N

# Preamplifier & Signal Conditioners For NAMUR Sensors

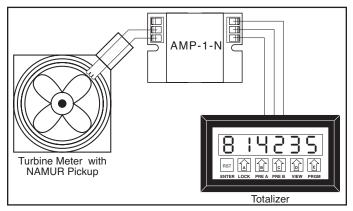
## Features:

- · NAMUR Compatible Sensitivity.
- 100 mA Current Sinking Output.
- 11 to 26 VDC Power Supply Range.
- · Easy Mount Metal Housing.
- Screw Terminal Hookup.

### Description

The KEP AMP-1-N powers and conditions the low level signals from NAMUR pickups, sensing gear teeth movement or flow, and provides a high level pulse output suitable to drive any KEP ratemeter, counter or controller.

## Application



# Specifications

Environmental Operating temperature: Storage temperature: Humidity: Power Input Power requirement: Sensor Supply: Input Characteristics Input impedance:

Input frequency : Input current:

Output Characteristics Output Type:

Max. sink current: **Approvals:** CE approved; Fast transient: EMI: ESD:

#### 32° to 140° F (0° to 60° C) -40° to +85° C 0 - 95% non-condensing

11-26VDC; 30mA maximum 8VDC ± 1 VDC

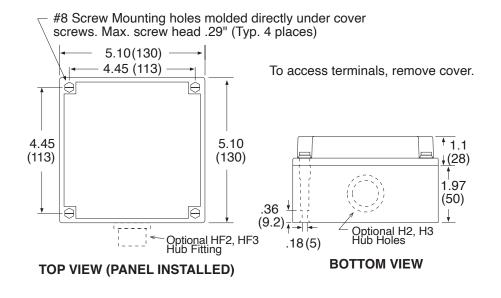
1000 ohm nominal 0 - 10kHz High: > 3mA Low: < 1 mA

Open collector with internal 2700 ohm pull-up resistor to supply voltage. 100mA sink to 1V or less

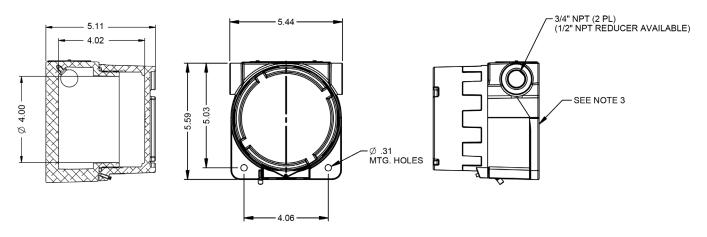
Light Industrial 500V (capacitive clamp) No effects at 3V/m 8kV (case grounded)



## **NEMA4X Mounting (N4 Option):**



**Explosion Proof Housing (E Option):** 





Kessler-Ellis Products 10 Industrial Way East Eatontown, NJ 07724 800-631-2165 732-649-7100 www.kep.com