

# 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:

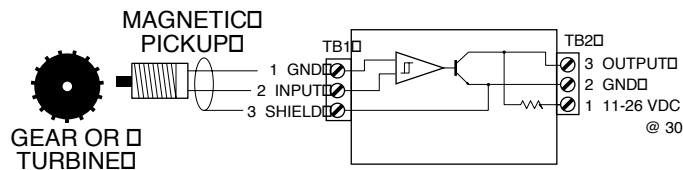
The KEP AMP 1 amplifies the low level signals from a magnetic pickup or flow transmitter by a factor of more than a hundred times to drive any ratemeter, counter or controller. The unit uses only 30 mA and operates from 11 to 26 VDC. It has a 2.7K pullup resistor attached to the open collector output 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 kΩ impedance for use with turbine and paddle wheel flowmeters.

**Listing:** CE Compliant

### Sample Hookup :



## Ordering Information

### Model

- 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 = NEMA4 Housing (add N4 to end of part number)

# AMP-1-N

## Preamplifier & Signal Conditioners For NAMUR Sensors

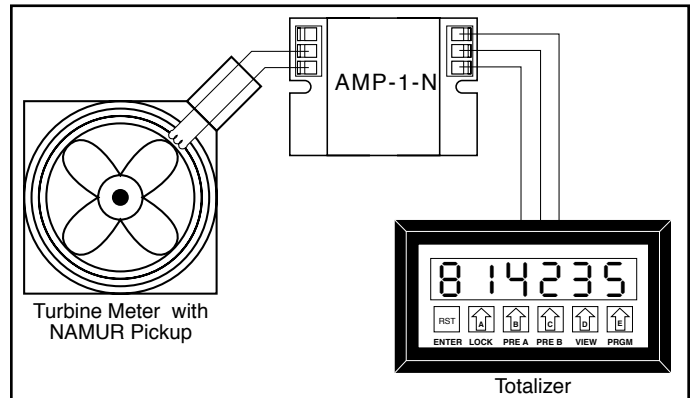
### Features:

- 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: 32° to 140° F (0° to 60° C)  
 Storage temperature: -40° to +85° C  
 Humidity: 0 - 95% non-condensing

#### Power Input

- Power requirement: 11-26VDC; 30mA maximum  
 Sensor Supply: 8VDC ± 1 VDC

#### Input Characteristics

- Input impedance: 1000 ohm nominal  
 Input frequency : 0 - 10kHz  
 Input current: High: > 3mA  
 Low: < 1 mA

#### Output Characteristics

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

#### Approvals:

- CE approved; Light Industrial  
 Fast transient: 500V (capacitive clamp)  
 EMI: No effects at 3V/m  
 ESD: 8kV (case grounded)