

# 3030AN Magnetic Pick-up



## Operation Manual

Model 3030AN pick-up provides a sine wave output whenever there is an abrupt change from non-magnetic to magnetic material moving past the sensor pole. The output voltage is directly proportional to the change in magnetic flux intensity over the change in time.

### MOUNTING

The unit is designed to mount in a 5/8" - 18 threaded hole and is provided with a jam nut for securing the sensor.

### ADJUSTMENTS

The pick-up should be adjusted for a typical clearance of 0.01" (0.25 mm) between the sensor and gear. This adjustment will provide excellent sensitivity and resolution.

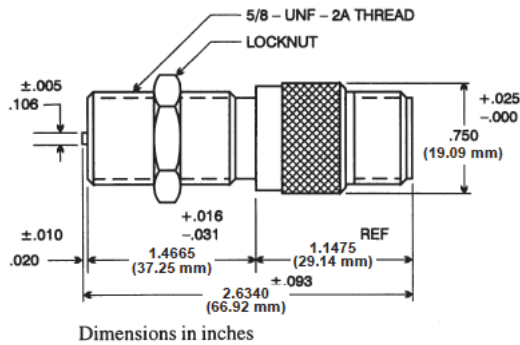
### CONNECTIONS

All connections refer to cable and mating connectors which must be purchased separately.

Lead	Terminal
Braid	Sensor Cable Shield
White	Signal Output
Black	Sensor Common

**Note:** When ferrous metal is introduced sensor magnetic field, pin B (Black) will be positive with respect to pin A (White).

### DIMENSIONS



### SPECIFICATIONS

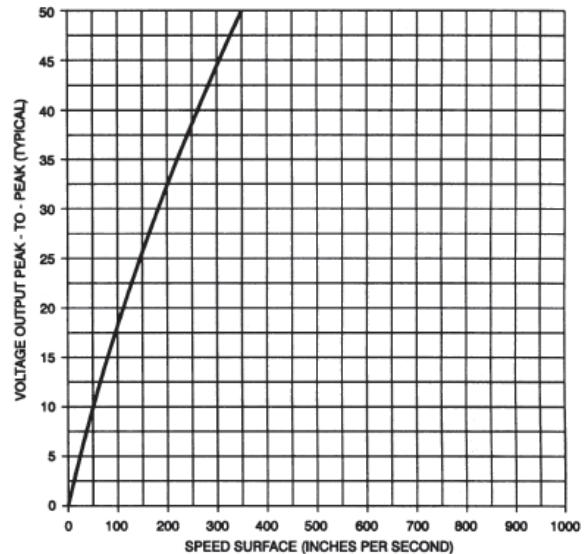
**Output:** Sine wave

**Clearance:** 0.01" (0.25 mm) between the sensor and gear

**Temperature Range:** -65 to 225°F (-54 to 107°C)

**Resistance:** 1200 ohms max.

**Inductance:** 450 mH max.



Shows peak-to-peak voltage output vs. surface speed of a 20 pitch, 30 tooth ferromagnetic gear at 0.005 inch clearance. Load = 100,000 ohms.

## NIDEC-SHIMPO CORPORATION