



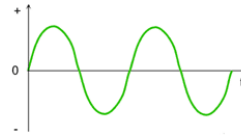
Standard and Custom  
Sensors for Speed, Motion, and Temperature  
Cabling and Controls

## MAGNA-TRAN® PASSIVE SPEED SERIES OPERATING INSTRUCTIONS

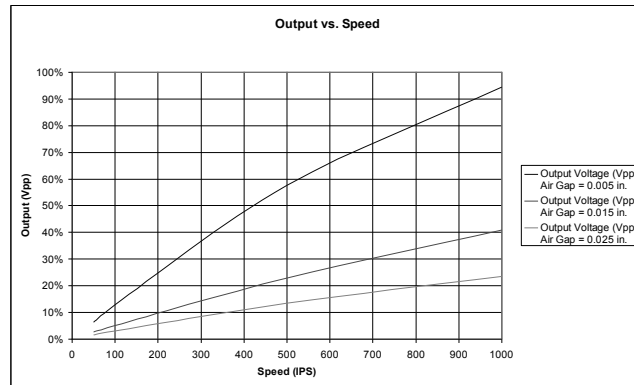
### Description

This variable reluctance line of sensors converts mechanical motion to an AC voltage without the need for an external power source. These self-contained magnetic sensors produce a magnetic field which, when in proximity of ferrous objects in motion, generates a voltage. The frequency of the signal produced is proportional to the speed of the target.

### Typical Output Waveform



### Typical Output Curves



### Typical Applications

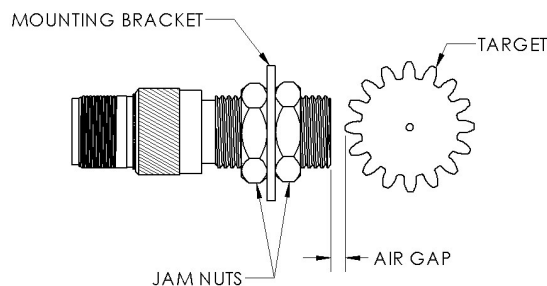
- Flow Meters
- Transmission Speed
- Engine RPM
- Over/Under Speed
- Wheel Speed
- Pump Shaft Speed
- Crankshaft Position/Engine Timing

### CAUTION

- Ensure machine cannot operate during installation.
- Do not connect sensor to a voltage source.
- Account for wobble or run-out when setting the air gap.
- Ensure all nut(s) or bolt(s) are tightened properly.

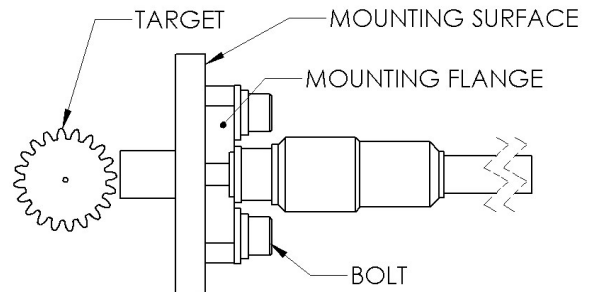
### Typical Installations

#### Threaded



- Install sensor in mounting location.
- Set air gap using feeler gage.
- Secure jam nut(s).

#### Flange



- Install sensor in mounting location.
- Secure bolt(s). The use of thread-locking washers or compounds are recommended.