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

MAGNA-TRAN® PASSIVE SPEED SERIES OPERATING INSTRUCTIONS

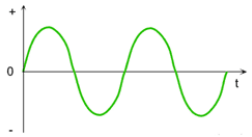
Description

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.

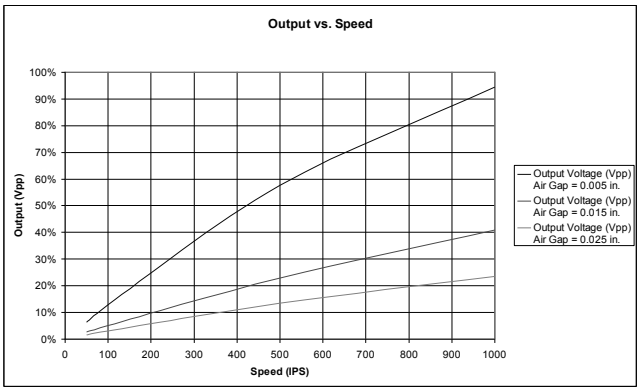
Typical Applications

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

Typical Output Waveform



Typical Output Curves

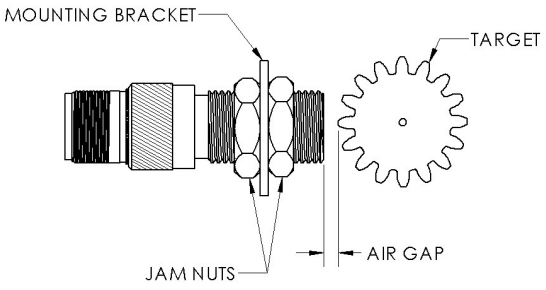


CAUTION

- *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.*

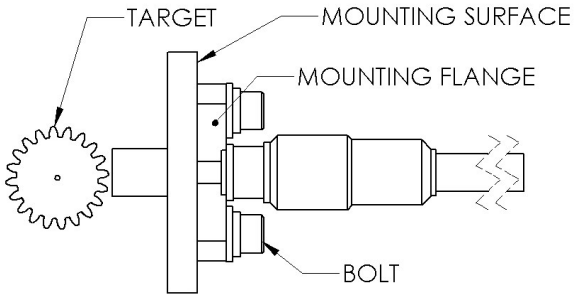
Typical Installations

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.

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