SPEED+

SPEED MONITOR FOR USE WITH PLC+ PANELS

- **Provides speed input to PLC's**
- **Integrated Ethernet port for communications to a PLC/PC or other communication device**
- **Input from magnetic pickups, Hall-effect sensors, or C.D. ignition system high voltage "Shutdown Lead"**
- **Specifically designed to interface with PLC+ panels and HMIs**
- **User-selectable communication protocols: EtherNet/IP™ or Modbus/TCP**
- **On-board web page allows for configuration and monitoring**
- **Amplified output signal mimics input frequency**
- **Configurable Analog 4-20mA output with respect to speed**
- **Three adjustable setpoints: configurable high or low, can be individually mapped to two internal NO or NC output switches**
- **Low setpoints are locked out on startup**
- **Pluggable connectors with convenient push-in spring-cage connections**
- **On board diagnostic LEDs**
- **"Wink-Mode" for multiple PLC module identification**
- **DIN-rail mounted**
- **CSA Certified Class I, Division 2, Group C and D**

The PLC+ product line was developed by Altronic to allow easy integration of engine/compressor/generator function specific I/O through Ethernet to industry standard PLCs. The PLC+ Modules are designed to seamlessly deliver efficient, hazardous area approved, cost effective I/O functions that are not normally available by off-the-shelf PLC hardware.

The PLC+ modules were designed with Rockwell Automation Control Logix and Compact Logix in mind. EtherNet/IP, implemented in the PLC+ Monitors, along with Modbus/TCP, allow seamless communication over Ethernet to Rockwell Automation PLCs as well as a wide range of other industrial PLCs. The PLC+ Monitors are based upon taking a time tested Altronic designed device with specialty I/O functions such as Analog and digital I/O, vibration, detonation, speed, and others and marrying it to a communications board packaged in a rugged, cost effective, shock and dust-resistant package.

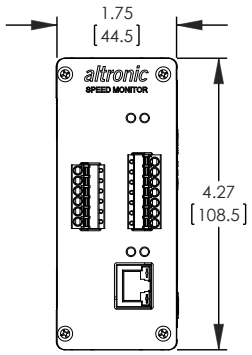
The Speed+ Speed Monitor is a module in the PLC+ product line. It converts engine and rotating equipment speed to Ethernet/IP or Modbus TCP for use in PLC's to monitor and control processes. The speed input pulse can come from magnetic, Hall-effect, or other types of active pickups or from C.D. Ignition Systems. The speed output can be at selected ratios to the measured RPM. Speed range is up to 65,000 RPM. A configurable 4-20mA analog output signal with respect to speed is offered for direct process control or directly to an Altronic Ignition System for timing control. The Speed+ has three adjustable setpoints that can be individually mapped to either or both of the two output switches. The Speed+ is designed for use as a component of a PLC+ Control Panel, or as a stand-alone product. PLC+ panels use one or more such devices for engine control and monitoring. The Ethernet port allows the monitored values to be communicated to a PC, PLC, or other communications device using either Modbus/TCP or EtherNet/IP protocol. These values can be displayed on an HMI display and compared to user adjustable setpoint levels for sequencing, and/or alarm and shutdown.

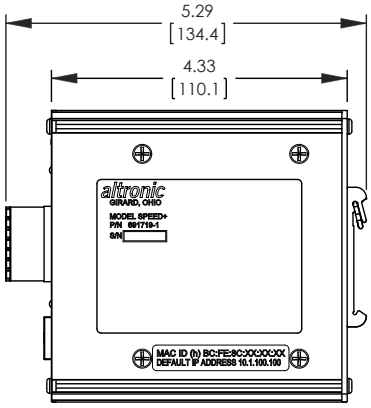
HOERBIGER

Altronic, LLC – A Member of the HOERBIGER Group

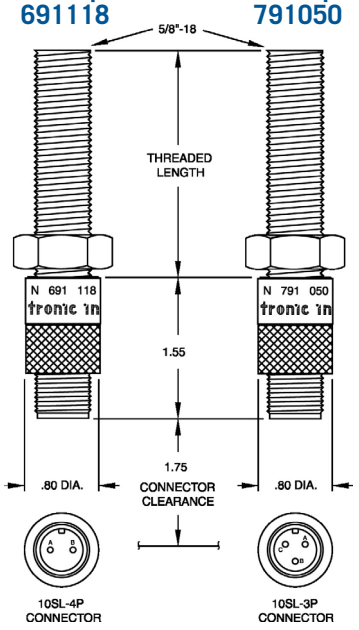
CERTIFIED CLASS I, DIVISION 2 GROUPS C AND D

Module Dimensions





Magnetic Pickup 691118 | **Hall-Effect Pickup 791050**



Specifications

Power Requirement	10-32VDC, 0.20 AMP max.
Ambient Temperature Range	-40°C to 80°C (-40°F to 176°F)
Enclosure	Extruded aluminum, NEMA Type 1
Mounting	Mounts to 35mm rails
Speed Input	Pulses from magnetic pickups, Hall-effect sensors, or "shutdown leads" from CD ignition systems
Input Frequency Range	1Hz to 100kHz
Range	0 to 65,000
Accuracy	±5%, ±1 digit
Update Rate	30 milliseconds
Configurable Input to Output Ratio	1-1000
I/O Power Connections	Pluggable, push-in, spring-cage
Comm Protocols Supported	EtherNet/IP and Modbus/TCP
Module Configuration	Built-in web pages
Connector, Ethernet Port	Shielded RJ45 socket
Network Wiring Interface	Auto MDI/MDIX
Connections	Up to 5
Data Rate	Auto-sensed, 10/100Mbps
Address	Auto IP, Boot P. Static
LED Indicators	Power, Status, Link, RX/TX, SW1, SW2
Analog Current Loop Output	4-20mA forward or reverse acting
Setpoints	3 fully configurable
Output Switch	2 programmable, solid-state, rated 32VDC, 0.2 AMP continuous, optically isolated from power supply
Switch Configurations	NC/NO, Failsafe/Shelf
Hazardous Area Classification	Class I, Div. 2, Groups C & D for direct hook-up, Temp Code T4, max ambient temp 80°C

Ordering Information

Speed Monitor	SPEED+
Magnetic pickups	
1.75" threaded length	691118-1
2.50" threaded length	691118-2
3.00" threaded length	691118-3
4.50" threaded length	691118-4
6.00" threaded length	691118-6
Cable assemblies, magnetic pickups	
Unshielded type	693104-x *
Shielded type, 180° connector	593048-x *
Shielded type, 90° connector	593054-x *
Hall-effect pickups	
1.75" threaded length	791050-1
2.50" threaded length	791050-2
4.50" threaded length	791050-4
6.00" threaded length	791050-6
Cable assemblies, Hall-effect pickups	
Unshielded type	593050
Shielded type, 180° connector	593052-x *
Shielded type, 90° connector	593057-x *

* See current price list, under MAGNETIC PICKUPS AND CABLES

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