

NON-CONTACT SPEED SENSORS WITH PULSE OUTPUT FROM 0 TO 20 kHz

- ✓ For Magnetic Targets/
Ferrous Metals
- ✓ Ideal for Measuring RPM,
Tachometry and Speed
Applications
- ✓ Normally Open
Industrial Sensors,
3-Wire Configuration
- ✓ Rugged Construction
for Dirty, Humid, Oily
and Dusty Applications



The SPR101 sensor is ideal for RPM tachometer measurements. It is more than a simple Hall-effect switch. The SPR101 Series utilizes 2 hall effect sensors coupled with a permanent magnet in a bridge comparator circuit, which makes it capable of sensing from absolute 0 Hz to 20 kHz. The design also allows rotational direction detection if used with a non-symmetrical gear.

The Hall-effect design permits only magnetic targets such as ferrous metals to be used as gears.

SPECIFICATIONS

Excitation: 8-30 Vdc @ 20 mA with <10% ripple

Output: Square wave, amp equal to exc. voltage (max. current 40 mA)

Switch Frequency: 0-20 kHz

Switch: Open collector, 3-wire, normally open, reverse polarity protected

Sensing Distance: 0.5 mm (0.02")

Target: Magnetic, ferrous metals

Operating Temperature: -25 to 75°C (-13 to 168°F)

Min. Gear Size: 1 module (m) European, 25 diametrical pitch Pd ($m=d/N$, $Pd=N/d$, d is pitch dia. and N is number of teeth)

Case Material: 12 mm nickel-plated brass rolled threads

Electrical Connection: 6 ft, 3-conductor, 22 AWG, PVC insulation, pigtail leads

Weight: 85 g (3 oz)

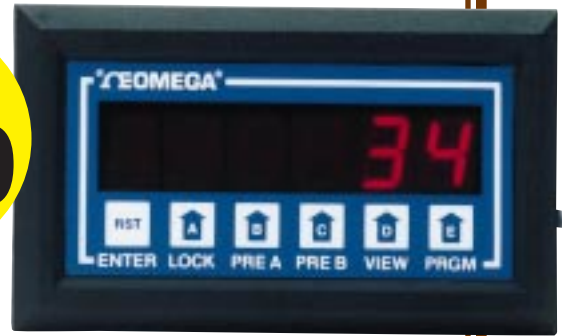
Case Material: 30 mm nickel-plated brass rolled threads

Electrical Connection: 3 screw terminals compression style 0.20-0.27" dia. wire

Weight: 225 g (9 oz)



SPR101 Series
\$180

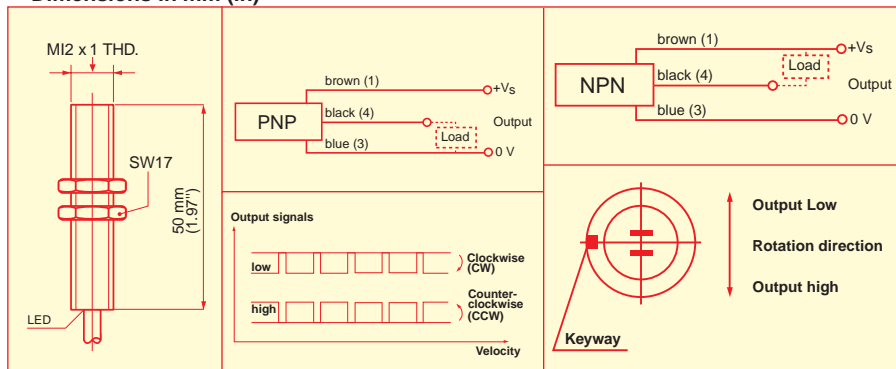


MOST POPULAR MODELS HIGHLIGHTED



Typically Used
in Gear Applications
SPR101 Speed Sensor
Shown with DPF75 Rate
and Total Meter, (\$265) and
MBL-8/12 Mounting Bracket, (\$10)

Dimensions in mm (in)



To Order (Specify Model Number)

MODEL NO.	PRICE	DESCRIPTION
SPR101-12N	\$180	Speed sensor with NPN output
SPR101-12P	180	Speed sensor with PNP output

ACCESSORIES**

MODEL NO.	PRICE	DESCRIPTION
MBL-8/12	\$10	L-shaped mounting bracket
DPF75	265	Compatible rate, batch, total meter
DPF402	470	Compatible rate, batch, total meter
DPF76	227	Compatible rate, batch, total meter
DPF701	260	Compatible batch total meter
DPC10-TL*	98	Compatible total meter
DPF78	243	Compatible rate meter
DPC10-RM	98	Compatible rate meter

*Requires external dc power supply such as PSS-D12A (\$114)

**See Section D for compatible meters.

Comes with complete operator's manual.

Ordering Example: SPR101-12N, speed sensor with NPN output, + MBL-8/12, mounting bracket, + DPC10-RM, rate meter, + PSS-D12A, external power supply, \$180 + 10 + 98 + 114 = \$402

DISPLACEMENT



UNITED STATES

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1-800-TC-OMEGA
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• Flow and Level

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

• pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

• Data Acquisition

Auto-Dialers and Alarm Monitoring Systems, Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485 and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

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• Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters