RLS
Rugged Laser Sensor

Description

We've taken our hugely popular Remote Optical Laser Sensor (ROLS) and packaged it in a Rugged 316L SS IP67 rated enclosure. Although optical speed sensors require atmospheres that are clean and free of mist, steam, dirt, oil and other contaminants in order to function properly there are times when contamination can occur accidentally. Our Rugged Laser Sensor will survive these unintended episodes. Simply clean off the laser and detector windows and your up and running again. The RLS utilizes a water tight M12 connector that facilitates easy removal for cleaning. With an operating range of up to 25 feet, the RLS can be used in applications where close proximity isn't convenient or safe. The laser light source makes setup incredibly easy. Simply aim the laser at a reflective tape or high contrast target and you're ready to start measuring. The sensor has an on target Indicator built in to confirm that the sensor is detecting the target. The RLS is supplied with a 3 meter cable with choice of tinned flying leads or 1/8" phone plug connector for use with all of our portable tachometers and stroboscopes. You can also extend the cable length by adding our 25 foot extension cable(s).

Features

- **Rugged IP67 package**
- **316L stainless steel housing**
- **Up to 25 foot working distance**
- **Standard TTL pulse output (other outputs available)**
- **On Target Indicator**
- **Measure up to 250,000 RPM**
- **Includes mounting bracket and hardware**
- **Includes 12" of reflective tape**
- **Includes cable with integrated water tight M12 connector.**
- **Choose flying lead or 1/8" phone plug connection**
- **Compatible with all Monarch tachometers and stroboscopes**

Typical Uses

- **Industrial process speed monitoring**
- **Engine test stands**
- **Automotive testing**
- **OEM Solutions**
- **Wind turbines**
- **Tachometer input for vibration analyzers**
- **Remote sensor input for Monarch panel tachometers**

MONARCH INSTRUMENT

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Specifications

Speed Range:	**1-250,000 RPM**
Illumination:	**Visible Red Laser** **Laser Specs:** Classification: Class 2 (Per IEC 60825-1:2014) This product complies with IEC 60825-1 Ed. 3 and 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No 50 of June 2007 **Maximum Laser Output:** 1mW **Pulse Duration:** Continuous **Laser Wavelength:** 650nm **Beam Divergence:** <18 mrad **Beam Diameter:** 4x7 mm typical at 2 meters **Laser Diode Life:** 8,000 operating hours MTBF
On Target Indicator:	Green LED (side mounted)
Operating Range:	**Distance:** Up to 25 feet (7.6m) and 60 degrees offset from target **Temperature:** -10° to 50°C (-14° to 122°F)
Power Required:	RLS-W and RLS-P: 4-15Vdc ±20% RLS24-W and RLS24-P: 10-24Vdc ±20%
Output:	**Standard:** Open Collector with internal pull up resistor (5600 ohm) to supply voltage. Positive pulse when target present. Note: On 24V unit output voltage = input voltage less 5V) . **Optional:** Negative pulse, true open collector, 3.3V output (TTL). Contact Factory to arrange for optional outputs
Enclosure:	**Material:** Body: 316L Stainless Steel, Sensor Block: ABS **Dimensions:** 0.787"(20.0mm) dia. X 4.00"(101.7mm) length **Rating:** IP67
Connection:	Water tight M12 connector (at sensor) with 3 meter cable. Cable termination end can be ordered with 1/8" phone plug connector (-P) or with tinned leads (-w)

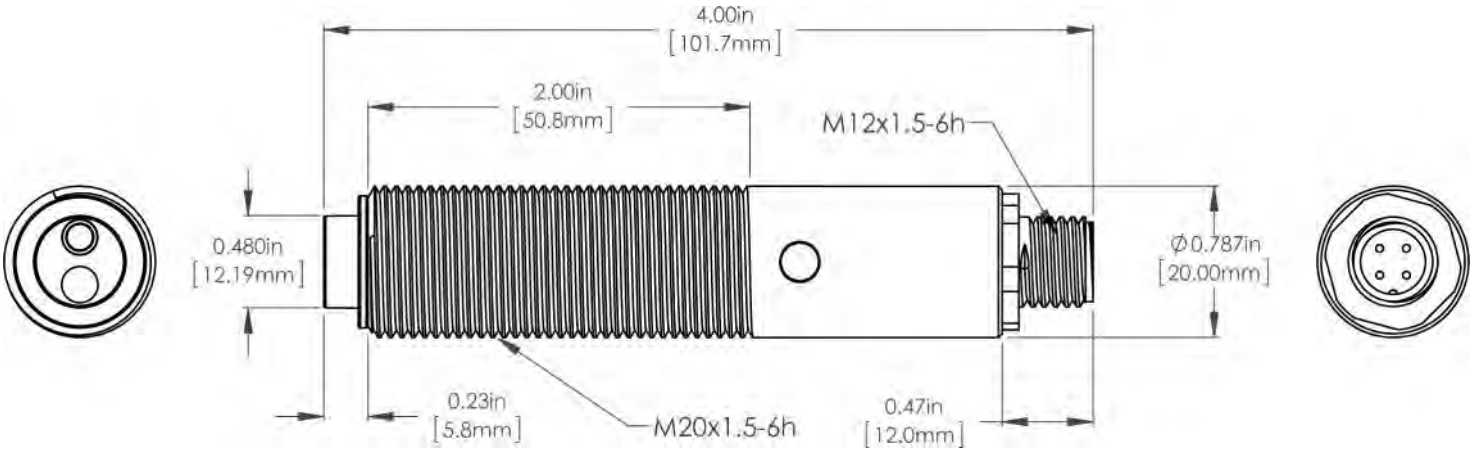
Ordering Information

Item	Description	Part No.
RLS-W	Sensor with 3m cable with tinned leads, mounting bracket and 12" of T-5 tape (4-15 Vdc input power)	6180-080
RLS-P	Sensor with 3m cable , 1/8" phone plug, mounting bracket and 12" of T-5 tape (4-15 Vdc input power)	6180-081
RLS24-W	Sensor with 3m cable with tinned Leads, mounting bracket and 12" of T-5 tape (10-24 Vdc input power)	6180-082
RLS24-P	Same as above with 24Vdc input Power (10-24 Vdc input power)	6180-083

RLS-W

RLS-P

Dimensions



(Actual Size)