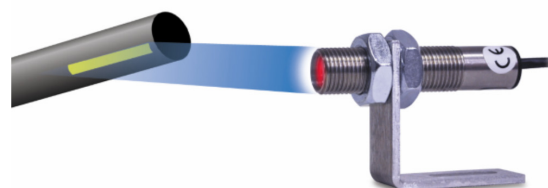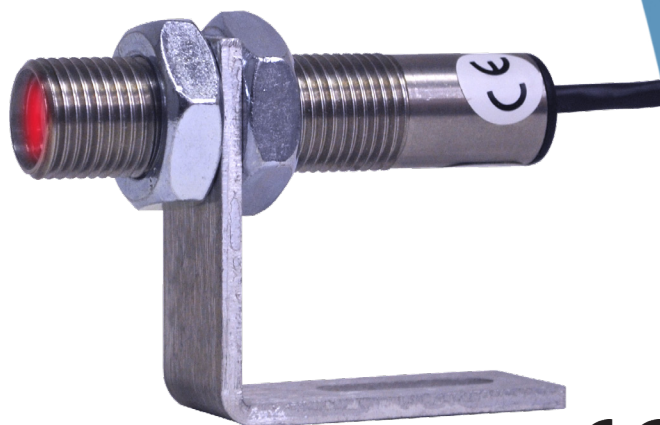# ROS/ROSM
Remote Optical Sensor/Modulated Remote Optical Sensors

Features:

- Visible red LED light source
- Green LED On-Target Indicator
- Speed range up to 250,000 RPM
- 303 stainless steel housing is non-magnetic and not hardenable by heat treatment
- Mounting hardware included for easy setup

Common Usage:

- Wide range of general purpose applications in relatively clean environments

The most versatile and popular sensors we make, the ROS-W (Remote Optical Sensor with tinned wire termination) and ROS-P (Remote Optical Sensor with 1/8" phone plug termination) are threaded stainless steel remote optical sensors with a visible red LED light source. All these sensors have the On-Target green LED indicator.

4 ROS configurations to choose from!

Model	Cable Length	Cable Termination
ROS-P	8 feet	1/8 in. [3.5 mm] male stereo plug
ROS-W	8 feet	Tinned wires
ROS-P-25	25 feet	1/8 in. [3.5 mm] male stereo plug
ROS-W-25	25 feet	Tinned wires

2 ROSM configurations to choose from!

Model	Cable Length	Cable Termination
ROSM-5P	8 feet	1/8 in. [3.5 mm] male stereo plug
ROSM-5W	22 feet	Tinned wires

MADE IN THE USA with US and Imported Components

ROS/ROSM Remote Optical Sensors

Specifications*	ROS	ROSM
Speed Range	1-250,000 RPM	1 - 20,000 RPM
Illumination	Visible red LED	
On-Target Indicator	Green LED on wire end cap	
Operating Range	Up to 36 in. [0.9 m] and 45° offset from target	1 in. [2.5 cm] up to 24 in. [0.6 m] and 45° offset from target
Power Requirement	3.0 - 15 V dc @ 40 mA	5.0 - 24 V dc @ 50 mA
Output Signal	Negative pulse input voltage (+V) to 0	Positive pulse input voltage 0 to +5 V
Operating Temperature	14 °F to 158 °F (-10 °C to 70 °C)	
Humidity	Maximum relative humidity 80% for temperature up to 88 °F (31 °C) decreasing linearly to 50% relative humidity at 104 °F (40 °C)	
Connection	1/8 in. [3.5 mm] male stereo plug (ROS-P, ROS-P-25 and ROSM-5P); Tinned wires (ROS-W, ROS-W-25 and ROSM-5W)	
Cable Length	ROS-P, ROS-W: 8 ft. [2.4 m] ROS-P-25: 25 ft. [7.6 m] ROS-W-25: 25 FT. [7.6 m]	ROSM-5P: 8 ft. [2.4 m] ROSM-5W: 22 ft. [6.7 m]
Material	303 stainless steel tube supplied with mounting bracket and two M16 jam nuts†	
Lens	Acrylic plastic	
Dimensions	Threaded tube: 2.90 in. x 0.625 in. diameter [M16 x 1.5 x 74 mm] long	

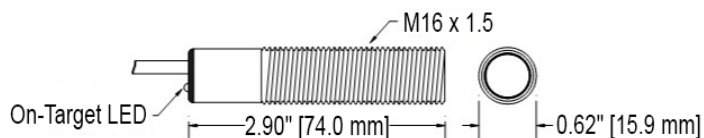*Specifications are subject to change without notice.
†ROSM-5W doesn't come with mounting bracket and jam nuts

Ordering Information

Model	Description	Part No.
ROS-W	Sensor with 8 ft. cable with tinned leads, mounting bracket and 12" of T-5 Tape	6180-056
ROS-P	Sensor with 8 ft. cable, 1/8" phone plug, mounting bracket and 12" of T-5 Tape	6180-057
ROS-P-25	Sensor with 25 ft. cable, 1/8" phone plug, mounting bracket and 12" of T-5 Tape	6180-057-25
ROSM-P	Modulated Remote Optical Sensor with 8 ft. [2.4 m] cable, 1/8" [3.5 mm] phone plug connector, mounting bracket, and 12" of T-5 Tape	6180-902
ROSM-W	Modulated Remote Optical Sensor with 22 ft. [6.7 m] cable with tinned leads, mounting bracket, and 12" of T-5 Tape	6180-903

Accessories available on website

Dimensions:

M16 x 1.5
On-Target LED
2.90" [74.0 mm]
0.62" [15.9 mm]

ROS/ROSM 0522