

M-190W Magnetic Sensor



SPECIFICATIONS:

Speed Range:	1-99,999 RPM
Operating Distance:	0.005" [0.127 mm] gap from target
Minimum Target Size:	0.106" [2.692 mm] minimum diameter
Power required:	None - Self Generating AC voltage
Output Signal:	190V P-P maximum
Pole Piece Magnet Diameter:	0.106 inch [2.692 mm]
Operating Temperature:	-100° to 225° F [-73° to 107° C]
Standard Cable Length:	8 feet [2.438 m]
Dimensions:	2.0" (L) x 0.625" [50.8 x 15.875 mm]
Weight:	3 oz. [85 g]

Specifications are subject to change without notice.

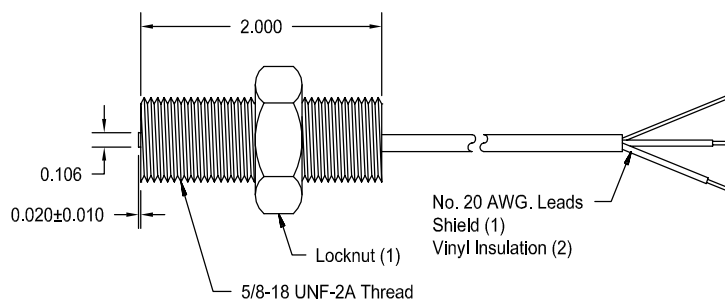
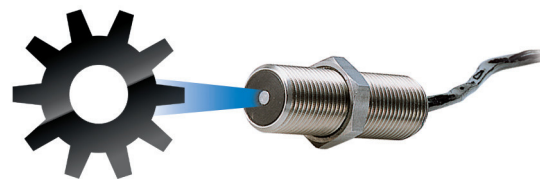


Figure 1 M-190W Dimensions

OVERVIEW:

The M-190W Magnetic Sensor is a self-powered gear sensor that is most popular for use with 60 tooth 20 pitch gears. The sensor mounts within 0.005 inches [0.127 mm] of a minimum 0.106 inch [2.692 mm] diameter ferrous target. The sensor self-generates an AC signal and requires no power from the display module.

The M-190W is compatible with all Monarch ACT Series panel tachometers and MT-190 Magnetic Trigger Sensor/Amplifier models.

CONNECTION DETAIL:

<u>Wire Color</u>	<u>Function</u>
Black	AC Signal
White	AC Signal
Shield	Housing Ground

When using the M-190W with any Monarch ACT Series panel tachometer, refer to the panel tachometer instruction manual for sensor connection detail.

OPERATION:

Magnetic sensors convert motion of a ferrous target into an AC voltage output proportional to speed. The target must not be smaller than the magnetic pole piece (0.106 inches, 2.692 mm) or larger than the diameter of the sensor (0.625 inches, 15.875 mm). Gear teeth are preferred, but bolt heads, slots or keys also work. The Monarch ACT Series panel tachometers will typically operate from all 2-wire design magnetic sensors. The stainless steel and waterproof housing of the M-190W sensor allow operation in harsh locations. The user can increase the cable length up to a total of 500 feet [152.4 m] in length.



In order to comply with EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE):

This product may contain material which could be hazardous to human health and the environment. DO NOT DISPOSE of this product as unsorted municipal waste. This product needs to be RECYCLED in accordance with local regulations, contact your local authorities for more information. This product may be returnable to your distributor for recycling - contact the distributor for details.