

## IRS Infrared Sensor



**IRS (Infrared Sensor):** Ideal sensor for working up to 0.5" (12mm) from high speed equipment or other applications providing only contrasting light and dark surfaces or beam interruption by solid objects as small as 0.30" (1mm).

**Common usage:** Dentist and other high speed drills, slots or gear teeth. Does not require reflective tape. Use black/white contrasting colors.

### Ordering Information

Item	Description	Part No.
IRS-P	Sensor with 8 ft. cable with 1/8" phone plug connector and mounting bracket	6180-020
IRS-W	Sensor with 8 ft. cable with tinned lead and mounting bracket	6180-021

### Specifications

Operating Distance:	0.5" (12mm)
Speed Range:	1-999,990 RPM
Operating Temperature:	-40° to 185°F (-40° to 85°C)
Power Input:	3.3 to 15Vdc, 40mA
Output Signal:	TTL same as source
Standard Cable:	8 feet (2.4m)
Dimensions:	2.9" (L) x 0.625" diameter (73 x 16mm)

## M-190 Magnetic Sensor



**M-190 (Magnetic Sensor):** Most popular sensor for use with 60 tooth 20 pitch gears. Sensor mounts within 0.005 inches (0.127mm) of a minimum 0.1 inch (2.5mm) target. Requires no power from the display module and self-generates an AC signal.

**Common usage:** Ferrous metals, primarily gear teeth.

### Ordering Information

Item	Description	Part No.
M-190-W	Sensor with 8 ft. cable with tinned leads	6180-012

### Specifications

Operating Distance:	0.005" (0.127mm) gap w/ 0.1" target (2.5mm) min.
Speed Range:	1-99,999 RPM
Operating Temperature:	-100° to 225°F (-73° to 107°C)
Power Input:	None (self generating)
Output Signal:	190V Peak to Peak
Standard Cable:	8 feet (2.4m)
Dimensions:	2.0" (L) x 0.625" (50 x 16mm)

## MT-190 Magnetic Sensor/Amplifier



**MT-190 (Magnetic Sensor with Amplifier):** Extends operating gap to 0.25 inches (6.35mm) from the target. Frequently used on gears as the M-190, but can also sense bolt heads or shaft keys and provides a TTL output signal that is equal to the source voltage.

**Common usage:** Ferrous metals including bolt heads or shaft keys for on-line systems.

### Ordering Information

Item	Description	Part No.
MT-190W	Sensor with 8 ft. cable with tinned leads/Amplifier with tinned leads	6180-037
MT-190P	Sensor with 8 ft. cable with tinned leads/Amplifier with phone plug connector	6180-036

### Specifications

Operating Distance:	0.25" (6.35mm) gap with 0.1" target (2.5mm) min.
Speed Range:	1-99,999 RPM
Operating Temperature:	-100° to 225°F (-73° to 107°C)
Power Input:	3.3 to 12Vdc, 15mA
Output Signal:	TTL same as source
Standard Cable:	8 feet (2.4m)
Dimensions:	2.0" (L) x 0.625" diameter (50 x 16mm)