

## Proximity Switch Model BI2-S12

## Instruction Manual

### General

Model BI2-S12 is a three-wire proximity switch designed to detect metal when placed in front of a sensing surface. The BI2-S12 includes an LED to indicate if an object in front of the sensor is present. This sensor is short circuit, overload, and reversed polarity protected to protect your sensor from damage.

Features include a pre-wired 2m cable assembly for easy installation. This sensor is suitable for direct use with Shimpo tachometers or competitor's products. It can be used with a single projection head or can be used with multiple projection heads.

### Specifications

<b>Sensing distance:</b>	4mm
<b>Switching frequency:</b>	1.5KHz
<b>Output:</b>	PNP, NPN
<b>Housing material:</b>	Nickel-plated brass
<b>Sensing head material:</b>	Crastin
<b>Ambient temperature:</b>	14°F to +158°F
<b>Supply Voltage:</b>	10-30VDC
<b>Protection ITC:</b>	IP67
<b>Electromagnetic Compatibility Compliance:</b>	NEMA ICS5-2000

<b>Cable:</b>	2-meter (6.56')
	PVC covered
	3-conductor
	#26AWG

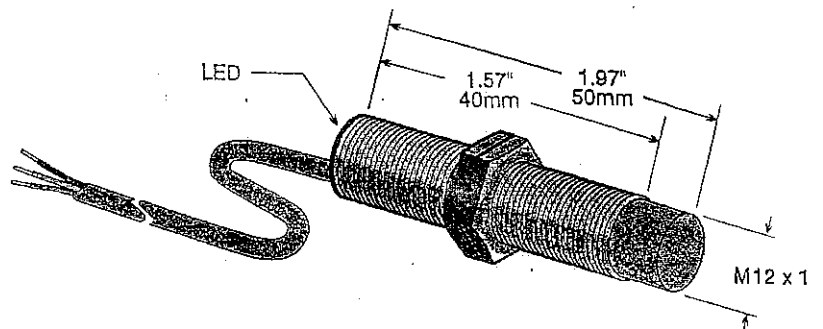
### Approvals:



### Connections

Lead	Tachometer Terminal
Brown	10-30VDC (positive)
Blue	0V (GND)
Black	Signal

### Dimensions



# Proximity Sensor Model DJ2-G

# Instruction Manual

## General

Model DJ2-G is a cost-effective proximity switch designed to detect metal when placed in front of a sensing surface. Metal objects positioned adjacent to or behind the unit will not normally be detected.

Its features include a pre-wired 2m cable assembly, zero sensing capability, lightweight and small package size with an output level suitable for direct use with Shimpo tachometers or competitor's products. It can be used with a single projection head or a 10 DP gear.

## Specifications

<b>Sensing distance:</b>	2mm
<b>Switching frequency:</b>	3KHz
<b>Output:</b>	NAMUR
<b>Housing material:</b>	Stainless steel
<b>Sensing head material:</b>	Crastin
<b>Ambient temperature:</b>	-14°F to +212°F
<b>Supply Voltage:</b>	5-25VDC
<b>Protection ITC:</b>	IP67
<b>Electromagnetic Compatibility Compliance:</b>	NEMA ICS5-2000

<b>Cable:</b>	2-meter (6.56')
	PVC covered
	2-conductor
	#22AWG

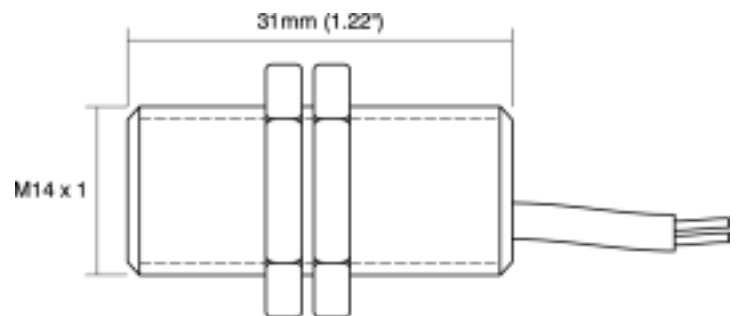
## Approvals:



## Connections

Lead	Tachometer Terminal
Brown	+ 12V
Blue	SIG

## Dimensions



## Proximity Switch Model MCS-3109

## Instruction Manual

### Description

Model MCS-3109 is a complementary (NPN-NO and NPN-NC) proximity switch normally used in areas where vibration is present and a greater sensing distance is required.

### Specifications

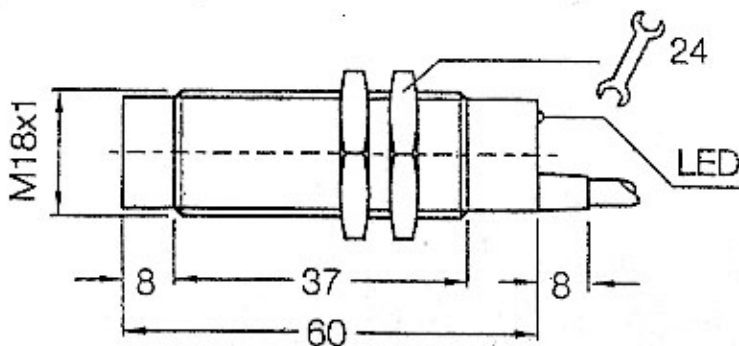
Sensing distance:	8mm (0.32")
Activating frequency:	300Hz
Voltage requirement:	10 - 30VDC
Output current:	100mA
Housing:	Nickel plated brass
Ambient temperature:	-25°C to +70°C (-13° F to 158° F)
Degree of protection:	IP67 / NEMA 4



### Connections

Wire colour	NPN - NO	NPN - NC
brown	+VDC	-VDC
white	Signal(NO)	Signal(NC)
blue	-VDC	+VDC
black	-VDC	-VDC

### Dimensions



**Gear sensor**

**SE-G2**

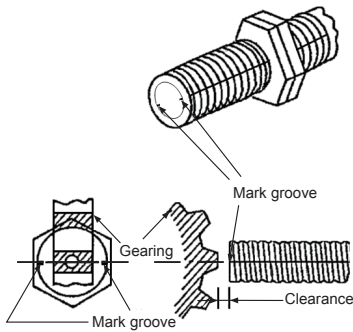
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Operation manual

Thank you for purchasing the gear sensor. Please read through the manual to use the product safely.

Model SE-G2 is a solid proximity switch especially designed for gearing sensing. The SE-G2 sensor will provide a square wave signal output and indicate detection via LED indicator on the rear of the unit.

■Installation



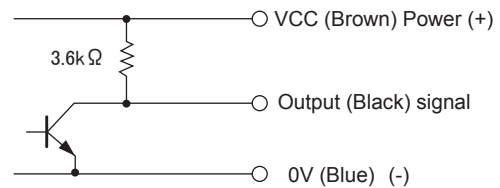
1. Install the sensor and the actuator on the same line.
2. Align the grooves to the tooth of the gear.
3. Please set the clearance less than 1mm between the sensor and the gear tooth.
4. Please keep any other metal material at least 15mm away from the sensor.
5. When the output is Low, the target lamp is less bright, and when it is High, it is brighter.
6. It detects the tooth of the gear.

■Specification

Model	SE-G2
Power supply	DC+8.5 ~ +16V DC
Power consumption	Less than 10mA
Response frequency	0 ~ 8000Hz
Actuator	Module 1.0 to 1.5 Magnetic metal gearing whose tooth width is over 4mm
Output impedance	Voltage output
Out put capacity	DC5 ~ 20V Max.25mA
Target lamp	Yes
Operation temperature	-20 ~ +70°C
Protection	IP-67
Cable	3Wires 1M

■Output diagram

Used RPM : 0 to 8000rpm  
 No of teeth : 60 pcs, in case of Module 1.0



■Dimension

