

## Features

- Based on AMR sensor technology
- Programmable to the customer specification
- Symmetric output option

# Non-Contacting Chassis Level Sensor

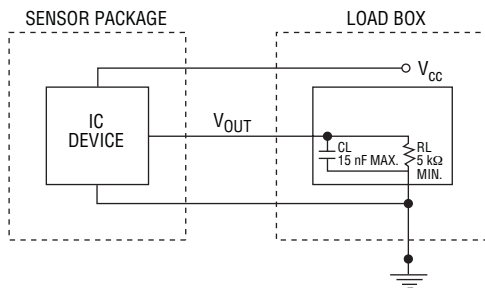
## Introduction

Bourns® Chassis Level Sensor is based on Anisotropic Magneto-resistance (AMR) sensor technology. The sensor arm or lever is attached to a magnet that is suspended above the MR sensor chip. The angular position of the sensor arm is measured and an output signal that is proportional to the angular orientation is generated. The output characteristic can be programmed to the customer specification. The output of the sensor can be programmed to be symmetric to allow the sensor to be mounted in all four suspension locations when used as a chassis level sensor or other applications.

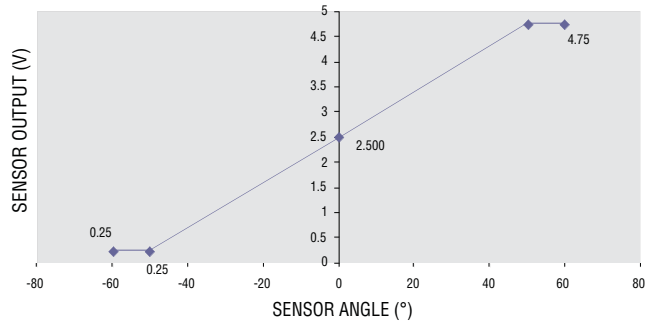
## Electrical Interface Specifications

Operating Temperature.....	-40 °C to +105 °C (up to +150 °C upon request)
Supply Voltage (V <sub>CC</sub> ) .....	5 V ±10 %
Angular Sensing Range.....	+100 ° (typical)
Resolution.....	< 0.1 °
Update Rate .....	< 1 ms
Maximum Current Draw.....	12 mA
Maximum Output Current .....	2 mA
Operating Output Voltage Range .....	0.05 V <sub>CC</sub> to 0.95 V <sub>CC</sub> (0.25 to 4.75 V @ V <sub>CC</sub> = 5 V)
Sensitivity .....	0.45 mv / degree (programmable to customer requirements)
Total Error Band.....	< ±2.5 % (static pulse noise)
Variation from Zero Point.....	±2 °
Output.....	Analog Ratiometric Single output (PWM available upon request)

## Three-Pin Interface



## Typical Analog Output Characteristic (V<sub>CC</sub> = 5 V)



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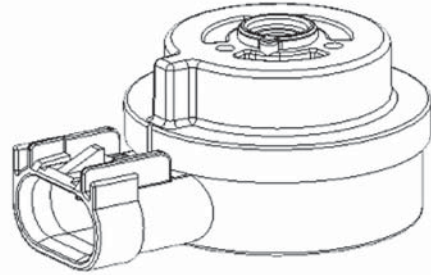
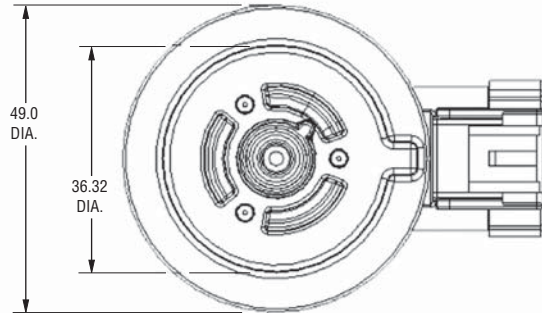
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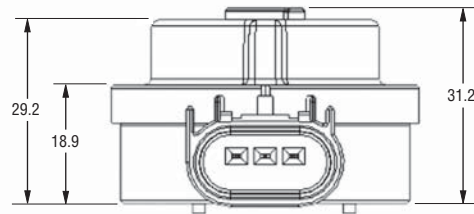
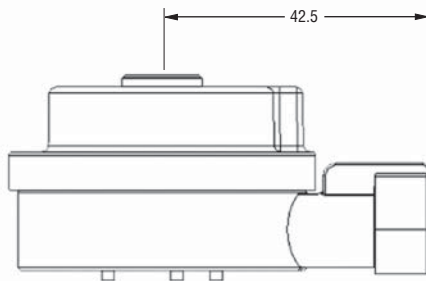
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**BOURNS®**

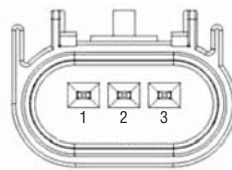
## Design and Mechanical Interface



DIMENSIONS: MM



## Connector Interface USCAR 150-S-003-1-B01



1 =  $V_{CC}$   
2 = GND  
3 =  $V_{out}$

REV. 12/11

Specifications are subject to change without notice.  
Customers should verify actual device performance in their specific applications.