

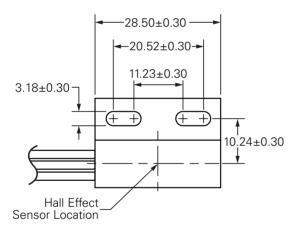
## 55310 Flat Pack Digital Hall Sensor

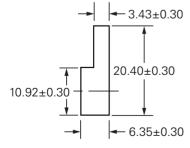
RoHS



#### **Dimensions**

Dimensions in mm





Note:

 $Standard\ actuators\ available\ pending\ application\ distance\ requirements.\ Consult\ Littelfuse.$ 

#### **Description**

The Littelfuse 55310 absolute position sensor provides a digital output signal when activated by a magnet. The internal design of the sensor uses non-contact magnetic Hall effect technology. This sensor is immune to the performance limitations of the mechanical based products that are associated with mechanical wear or contamination.

The 55310 package design commonly finds applications within all types of vehicle and industrial segments and designed to operate in the harsh environments, the sensor has an operating temperature range between -40°C and 105°C. This unit incorporates automotive grade EMI/EMC and reverse battery polarity protection, as well as commercial grade 20 AWG-TXL automotive wire and the option of a Molex type sealed connector.

#### **Features**

- Magnetically operated position sensor
- Unipolar digital hall switch
- Three-wire with open-drain output
- EMC protection
- Reverse/over voltage protection

#### **Benefits**

- Custom connector, wire length options available. Consult Littelfuse
- High switching speed up to 10kHz
- Long life up to 20 billion operations
- · Unaffected by harsh environments

#### **Applications**

- Position sensing
- · Limit sensing
- Speed measurement
- Magnetic encoders

#### **Customization Options**

Customized versions available. Contact Littelfuse for details.

- Connectors and terminals
- Wire type and length
- Magnetic actuators



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### **Specifications**

Hall Effect Device			Unipolar Digital Switch
Operating Voltage	Recommended	Vdc	4.75 to 24.0
Over Voltage	Absolute Max <sup>1</sup>	Vdc	30
Reverse Voltage	Absolute Max <sup>1</sup>	Vdc	-20
Supply Current		mA - max.	6
Output Current		mA - max.	20
Sensor Actuation with Magnetic South Pole	Operate (output low) Release (output high)	Gauss - Typical Gauss - Typical	55 35
Switching Speed		kHz Max	10
Temperature	Operating	°C	-40 to +105
Pin Out	Size Insulation Length	AWG SAE mm	20 J-1128, Type TXL 300

Notes:

## **Termination Options**

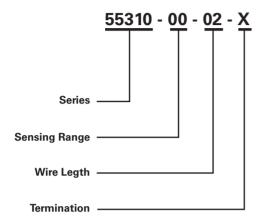
Select Option	Description	Color	Function
А	Stripped Leads	Black White Red	Ground Signal V (in)
С	Molex Connector MX 150 33481-0301	Black White Red	Pin 1: Black/Ground Pin 2: White/Signal Pin 3: Red/V(in)

<sup>1.</sup> This is a stress rating only. Functional operation is not implied for additional load/life information.



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### **Part Numbering System**



### **Packaging**

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
Bulk	Bulk	500	N/A	N/A

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## Littelfuse:

55310-00-02-A 55310-00-02-C