## 55110 Miniature Flange Mounting Proximity Sensor



## Dimensions

Dimensions in mm (inch)


## Block Diagram



Note:

1. Add capacitor Cn as shown, close for the sensors for transient suppression if required.

## Description

The 55110 is a flange mounting hall effect sensor with the integral LED for visual indication of operation. The overall sensor measures $34.00 \mathrm{~m}(1.339$ ") $\times 14.00 \mathrm{~m}$ $\left(0.551^{\prime \prime}\right) \times 10.00 \mathrm{~mm}\left(0.394^{\prime \prime}\right)$. It is available as three-wire (voltage output) version and its case design enables screw or adhesive mounting. It is capable of switching up to 28 Vdc and 20 mA . It works best with Littelfuse's $\mathrm{H}-58$ magnet.

## Features

- Magnetically operated position
sensor
- Integral LED
- Medium or high sensitivities


## Benefits

- High switching speed up to 10 kHz
- Long life - up to 1 billion operations
- Visual indication of operation
- Unaffected by harsh environments
- Operates in static or dynamic magnetic field
- Customer selection of cable length and connector type


## Applications

- Position and limit sensing
- Magnetic encoders


## Hall Effect Sensors <br> LED Flange Mount > 55110

## 55110 Miniature Flange Mounting Proximity Sensor

## Electrical Ratings

| Hall Type |  |  | Digital Switch Three-Wire (Voltage Output) |
| :---: | :---: | :---: | :---: |
| Supply Voltage ${ }^{1}$ | Absolute Ratings Operate Overvoltage Protection | Vdc <br> Vdc <br> Vdc - max. | $\begin{gathered} -15 \text { to }+28 \\ +3.8 \text { to }+24 \\ 32 \end{gathered}$ |
| Output High Voltage |  | Vdc - min. | Vdd-2 @ 0.1 mA <br> (sinking output with internal pull-up) |
| Output Low Voltage |  | Vdc - max. | 0.4 @ 10mA |
| Output Current (continuously on) |  | mA - max. | 10 |
| Switching Speed |  | Khz - max. | 10 |
| Temperature | Operating | ${ }^{\circ} \mathrm{C}$ | -40 to +85 |

Note:

1. As long as Tj (Junction Temperature) max. Is not exceeded.

Hall Options

| Select Option | Hall Type | Sensitivity Gauss <br> (typ.) | Activate $-\mathbf{D}$ <br> mm (inch) |
| :---: | :---: | :---: | :---: |
| $3 M$ | 3 Wire Switch | 130 | $12.5(.492)$ |
| $3 H$ | 3 Wire Switch | 59 | $18.0(709)$ |



Note: Active distances are approximate using NEFEB Magnet $21 \times 7 \times 4.7(.8271 \times .276 \mathrm{~W} \times .185 \mathrm{H})$ LITTELFUSE P/N H-58-MAGNET.

## 55110 Miniature Flange Mounting Proximity Sensor

## Cable Length Specification

| Cable Type: 24AWG 7/32/PVC $105^{\circ}$ C Double Insulated |  |
| :---: | :---: |
| Select Option | Cable Length <br> mm (inch) |
| 02 | $300(11.81)$ |

Termination Specification

## Termination Options

| Select <br> Option | Description <br> (Two-wire versions illustrated) |  |
| :---: | :---: | :---: |
| A | Tinned leads $(6.4 \pm 0.76) \mathrm{mm}$ |  |
| F | Untinned leads $(6.4 \pm 0.76) \mathrm{mm}$ |  |
| E | JST type XHP 2.5 mm pitch |  |

## Part Numbering System



A, F, or E

## 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: |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 55110 3H 02 A | 55110 3L 02 A | 55110 3M 02 A | 55110-3L-02-A | 55110-3M-02-A | 55110-3H-02-A | 55110-3M-03-E |
| 55110-3L-01-A | 55110-3M-01-D | 55110-3L-02-E | 55110-3M-05-A | 55110-3L-05-E | 55110-3M-04-E | 55110-3H-01-E |
| 55110-3L-03-A | 55110-3M-02-E | 55110-3M-04-D | 55110-3L-05-A | 55110-3L-03-E | 55110-3M-01-A | 55110-3H-03-E |
| 55110-3M-04-A | 55110-3M-05-E | 55110-3L-03-D | 55110-3H-05-A | 55110-3H-02-D | 55110-3L-04-D | 55110-3M-01-E |
| 55110-3L-01-E | 55110-3H-02-E | 55110-3L-05-D | 55110-3M-05-D | 55110-3L-02-D | 55110-3L-04-E | 55110-3H-01-A |
| 55110-3H-03-D | 55110-3L-01-D | 55110-3M-03-D | 55110-3H-04-A | 55110-3L-04-A | 55110-3H-01-D | 55110-3H-03-A |
| 55110-3M-02-D |  |  |  |  |  |  |

