55110 Miniature Flange Mounting Proximity Sensor
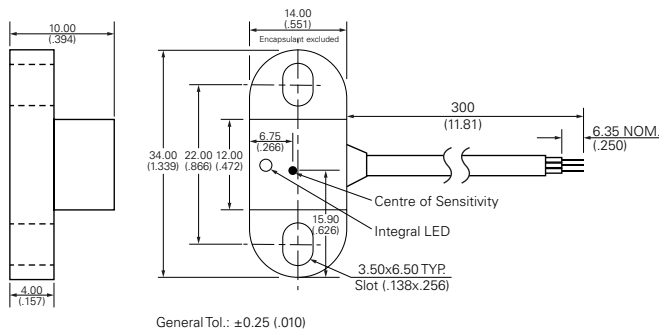
RoHS

Description

The 55110 is a flange mounting hall effect sensor with the integral LED for visual indication of operation. The overall sensor measures 34.00m (1.339") x 14.00m (0.551") x 10.00mm (0.394"). 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 28Vdc and 20mA. It works best with Littelfuse's H-58 magnet.

Features

- Magnetically operated position sensor
- Integral LED
- Medium or high sensitivities
- Three-wire (voltage output)
- Reverse/Over voltage protection
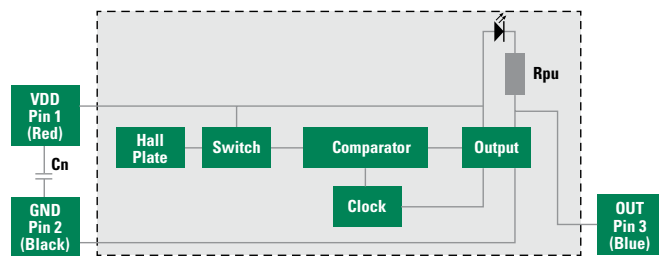- Built in temperature compensation

Benefits

- High switching speed up to 10kHz
- 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

Dimensions

Dimensions in mm (inch)

General Tol.: ±0.25 (.010)

Block Diagram

Note:

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

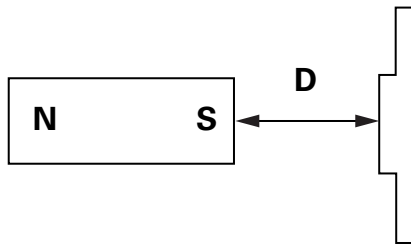# 55110 Miniature Flange Mounting Proximity Sensor

Electrical Ratings

Hall Type			Digital Switch Three-Wire (Voltage Output)
Supply Voltage [1]	Absolute Ratings Operate Overvoltage Protection	Vdc Vdc Vdc - max.	-15 to +28 +3.8 to +24 32
Output High Voltage		Vdc - min.	Vdd-2 @ 0.1mA (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	°C	-40 to +85

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

Hall Options

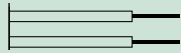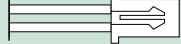| Select Option	Hall Type	Sensitivity Gauss (typ.)	Activate - D mm (inch)
3M	3 Wire Switch	130	12.5 (.492)
3H	3 Wire Switch	59	18.0 (709)

Note: Active distances are approximate using NEFEB Magnet 21 x 7 x 4.7 (.827l x .276W x .185H) LITTELFUSE P/N H-58-MAGNET.
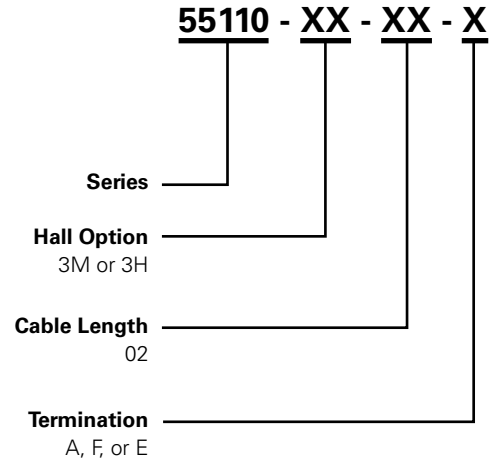
55110 Miniature Flange Mounting Proximity Sensor

Cable Length Specification

Cable Type: 24AWG 7/32/PVC 105°C Double Insulated	
Select Option	**Cable Length mm (inch)**
02	300 (11.81)

Termination Specification

Termination Options		
Select Option	**Description (Two-wire versions illustrated)**	
A	Tinned leads (6.4±0.76)mm	
F	Untinned leads (6.4±0.76)mm	
E	JST type XHP 2.5mm pitch	

Part Numbering System

55110 - XX - XX - X

Series —

Hall Option — 3M or 3H

Cable Length — 02

Termination — A, F, or E

Packaging

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