

# HAMLIN

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## 55110 L.E.D. Flange Mount Hall Effect Sensor Features and Benefits

### Features

- Magnetically operated position sensor
- Digital or latching types available
- Integral LED
- Medium or high sensitivities
- 3 wire (voltage output)
- Vibration 50g max. @ 50-2,000Hz
- Shock 150g max. @ 11ms 1/2 Sine
- EMC to DIN 40839 (Consult Hamlin)
- Reverse/Over Voltage Protection
- Built in temperature compensation

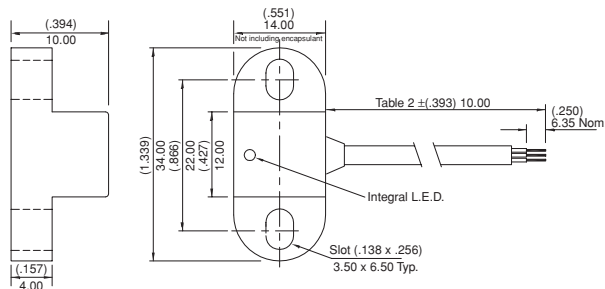
### Benefits

- High switching speed up to 10kHz
- Long life; up to 20 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

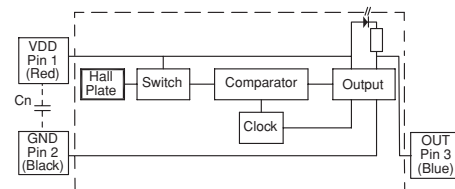
### Applications

- Position and limit sensing
- RPM measurement
- Flow metering
- Commutation of brushless dc motors
- Angle sensing
- Magnetic encoders

## DIMENSIONS (in) mm



## BLOCK DIAGRAMS



Note  
Add capacitor Cn as shown, close for the sensor, for transient suppression if required

## CUSTOMER OPTIONS - Switching Specifications

SPECIFICATIONS			Digital Switch or Digital Latch
Hall Type			3 Wire (Voltage output)
Supply Voltage (Note 1)	Absolute Ratings	Vdc	-15 to +28
	Operate	Vdc	+3.8 to +24
	Overvoltage Protection	Vdc-max	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 +100
	Storage	°C	-65 to +105

Note 1 - As long as Tj (Junction Temperature) max. is not exceeded

## CUSTOMER OPTIONS - Sensitivity, Cable Length and Termination Specification

TABLE 1 HALL OPTIONS			
ACTIVATE DISTANCES ARE APPROXIMATE USING NEFEB MAGNET (.827L x .276W x .185H) 21 x 7 x 4.7 HAMLIN P/N 5812334000			
Select Hall Option	Hall Type	Sensitivity Gauss (Typ.)	Activate - d (in) mm
3M	3 Wire Switch	130	(.492) 12.5
3H	3 Wire Switch	59	(.709) 18.0
3L	3 Wire Latch	86	(.394) 10.0

TABLE 2 Cable Length- (Cable type 24 AWG 7/32 PVC 105°C Double Insulated)	
SELECT OPTION	LENGTH (in) mm
01	(.394) 100
02	(11.81) 300
03	(19.69) 500
04	(29.53) 750
05	(39.37) 1000

TABLE 3 Termination Options:-		
SELECT OPTION	DESCRIPTION	
A	Tinned leads	
B	Crimped terminals	
C	6.35mm fastons	
D	AMP MTE 2.54mm pitch	
E	JST XHP 2.5mm pitch	

## ORDERING INFORMATION

55110 - XX - XX - X

Series 55110  
Hall option  
Cable Length  
Termination

Table 1  
Table 2  
Table 3

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 Issue No: 3 Date: 24/03/03 DCR B0063

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