

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

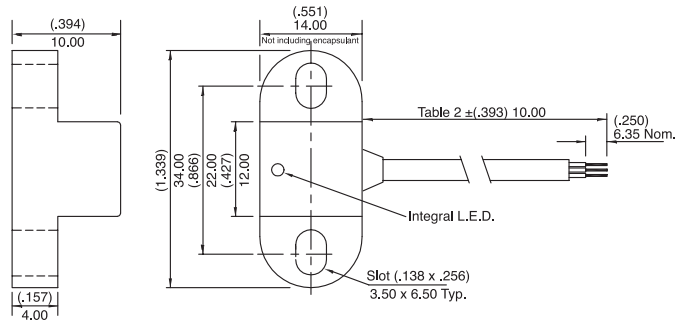
Benefits

- 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

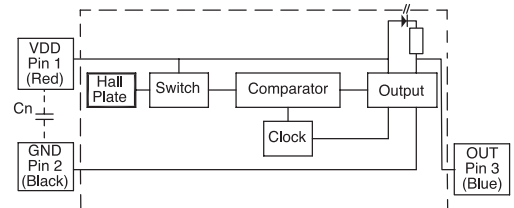
Applications

- 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

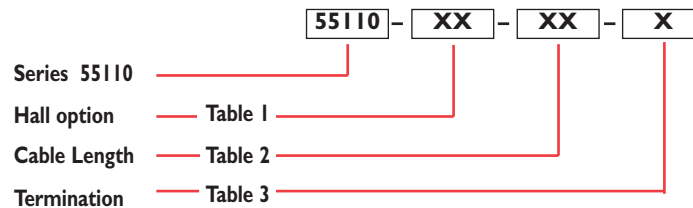
SPECIFICATIONS			Digital Switch or Digital Latch
Hall Type			3 Wire (Voltage output)
Supply Voltage (Note 1)	Absolute Ratings	Vdc	-15 to +28
	Operate	Vdc	+3.8 to +24
	Overvoltage Protection	Vdc-max	32
Output High Voltage	Vdc-min	Vdd-2 @ 0.1mA (sinking output with internal pull-up)	
Output Low Voltage	Vdc-max	0.4 @ 20mA	
Output Current (continuously on)	mA-max	20	
Switching Speed	kHz-max	10	
Temperature	Operating	°C	-40 to +85
	Storage	°C	-65 to +85

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

CUSTOMER OPTIONS - Sensitivity, Cable Length and Termination Specification

TABLE 1 HALL OPTIONS				TABLE 2		TABLE 3	
ACTIVATE DISTANCES ARE APPROXIMATE USING NeFeB MAGNET (.827L x .276W x .185H) 21 x 7 x 4.7 HAMLIN P/N 5812334000				Cable Length:- (Cable type 24 AWG 7/32 PVC 105°C Double Insulated)		Termination Options:-	
Select Hall Option	Hall Type	Sensitivity Gauss (Typ.)	Activate - d (in) mm	SELECT OPTION	LENGTH (in) mm	SELECT OPTION	DESCRIPTION
3M	3 Wire Switch	130	(.492) 12.5	01	(3.94) 100	A	Tinned leads
3H	3 Wire Switch	59	(.709) 18.0	02	(11.81) 300	C	6.35mm fastons
3L	3 Wire Latch	86	(.394) 10.0	03	(19.69) 500	D	AMP MTE 2.54mm pitch
				04	(29.53) 750	E	JST XHP 2.5mm pitch
				05	(39.37) 1000		

ORDERING INFORMATION



INFORMATION PROVIDED ON THIS DATA SHEET IS PROVIDED FOR INFORMATION PURPOSES ONLY AND SHOULD NOT BE RELIED UPON AS BEING ACCURATE FOR ANY PARTICULAR PURPOSE. Product performance may be affected by the application to which the product is put. Upon request, HAMLIN will assist purchasers by providing information specific to any particular application. HAMLIN disclaims any and all liability whatsoever for any purchaser's reliance upon the information contained on this data sheet without further consultation with authorised representatives of HAMLIN.