

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

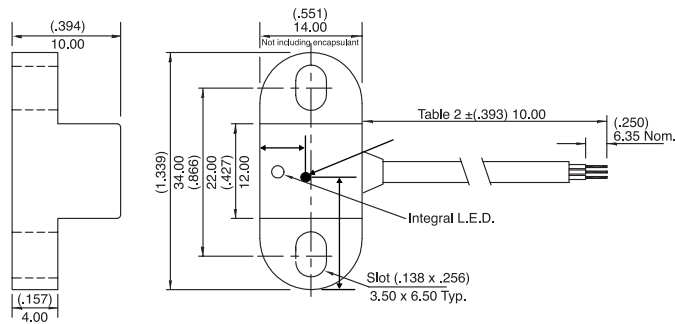
Benefits

- 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

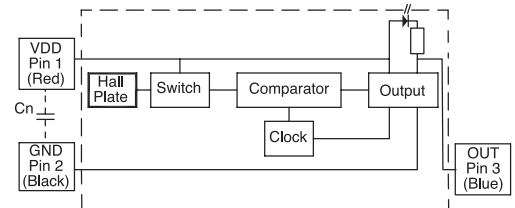
Applications

- 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

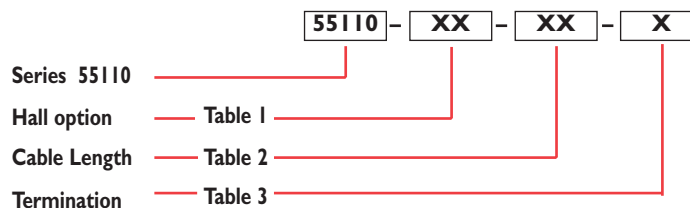
SPECIFICATIONS			Digital Switch or Digital Latch
Hall Type			3 Wire (Voltage output)
Supply Voltage (Note 1)	Absolute Ratings	Vdc	-15 to +28
	Operate	Vdc	+3.8 to +24
	Overshoot Protection	Vdc-max	32
Output High Voltage	Vdc-min	Vdd-2 @ 0.1mA (sinking output with internal pull-up)	
Output Low Voltage	Vdc-max	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 85°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.

Hamlin USA Tel: +1 920 648 3000 • Fax: +1 920 648 3001 • Email: sales.us@hamlin.com
 Hamlin UK Tel: +44 (0)1379 649700 • Fax: +44 (0)1379 649702 • Email: sales.uk@hamlin.com
 Hamlin Germany Tel: +49 (0) 6142 923920 • Fax: +49 (0) 6142 923921 • Email: sales.de@hamlin.com
 Hamectrol France Tel: +33 (0) 1 4687 0202 • Fax: +33 (0) 1 4686 6786 • Email: sales.fr@hamlin.com