

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

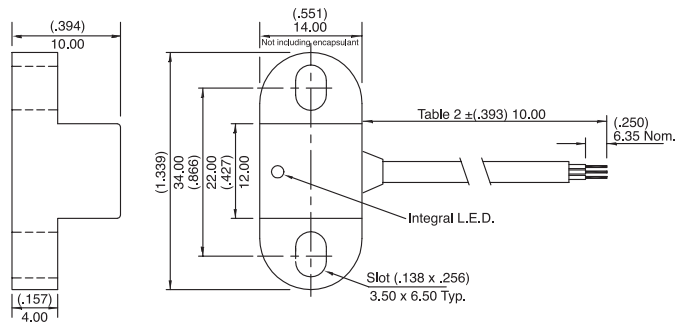
Benefits

- 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

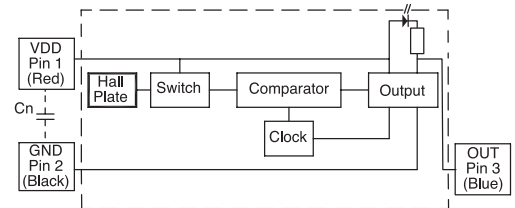
Applications

- 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

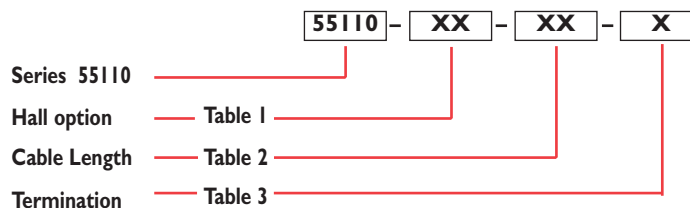
SPECIFICATIONS			Digital Switch or Digital Latch
Hall Type			3 Wire (Voltage output)
Supply Voltage (Note 1)	Absolute Ratings	Vdc	-15 to +28
	Operate	Vdc	+3.8 to +24
	Overshoot Protection	Vdc-max	32
Output High Voltage	Vdc-min	Vdd-2 @ 0.1mA (sinking output with internal pull-up)	
Output Low Voltage	Vdc-max	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 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	B	Crimped terminals	
3L	3 Wire Latch	86	(.394) 10.0	03	(19.69) 500	C	6.35mm fastons	
				04	(29.53) 750	D	AMP MTE 2.54mm pitch	
				05	(39.37) 1000	E	JST XHP 2.5mm pitch	

ORDERING INFORMATION



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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

