

### Features

- Magnetically operated position sensor
- Matching actuator available
- Compact size requires only 3.2cm<sup>2</sup> board space
- Screw down or adhesive mounting
- Customer defined sensitivity
- Choice of cable length and connector
- Leads can exit from LH or RH side

### Benefits

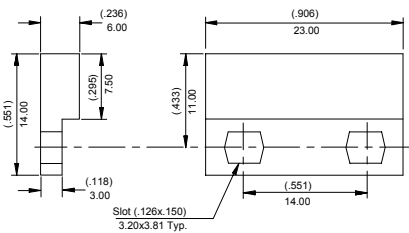
- No standby power requirement
- Operates through non-ferrous materials such as wood, plastic or aluminium
- Hermetically sealed, magnetically operated contacts continue to operate long after optical and other technologies fail due to contamination

### Applications

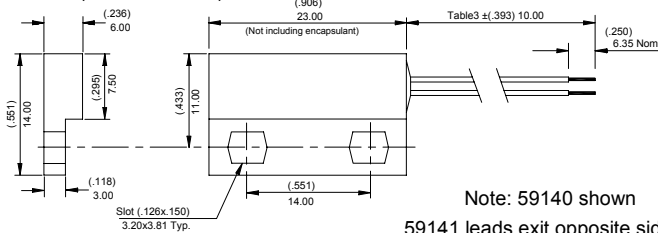
- Position and limit sensing
- Security system switch
- Linear actuators
- Door switch

### DIMENSIONS (in) mm

#### Actuator



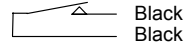
#### Sensor (2 wire versions)



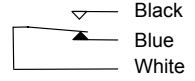
Note: 59140 shown  
59141 leads exit opposite side

### SCHEMATICS

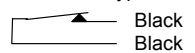
#### Switch Types 1 & 2



#### Switch Type 3



#### Switch Type 4



### CUSTOMER OPTIONS - Switching Specifications

TABLE 1		Switch Type	Select Option	1	2	3	4
			Contact Type	Normally Open	Normally Open High V.	Change Over	Normally Closed
Contact Rating	Power	Watts - max		10	10	5	5
Voltage	Switching	Vdc - max.		200	300	175	175
	Breakdown	Vdc - min.		250	450	200	200
Current	Switching	A - max.		0.5	0.5	0.25	0.25
	Carry	A - max.		1.2	1.5	1.5	1.5
Resistance	Contact, Initial	Ohms - max.		0.2	0.2	0.2	0.2
	Insulation	Ohms - min.		10 <sup>10</sup>	10 <sup>10</sup>	10 <sup>9</sup>	10 <sup>9</sup>
Temperature	Operating	°C		-40 to +105	-20 to +105	-40 to +105	-40 to +105
	Storage	°C		-65 to +105	-65 to +105	-65 to +105	-65 to +105
Time	Operate	ms - max.		1.0	1.0	3.0	3.0
	Release	ms - max.		1.0	1.0	3.0	3.0
Capacitance	Contact	pF - typ.		0.3	0.2	0.3	0.3
Shock	11ms ½ sine	G - max.		100	100	50	50
Vibration	50-2000 Hz.	G - max.		30	30	30	30

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

TABLE 2		Sensitivity		TABLE 3		Cable Length		TABLE 4		Termination (2 wire versions shown)	
		Activate distances (d) are approximate using Hamlin 57140-000 actuator as illustrated. Switch AT before modification		Select Option		Select Option		Select Option		Description	
Switch Type	AT Range	S	Activate Distance (d) (in)mm	T	Activate Distance (d) (in)mm	U	Activate Distance (d) (in)mm	V	Activate Distance (d) (in)mm	A	Tinned leads
										C	6.35mm fastons
										D	AMP MTE 2.54mm
										E	JST XHP 2.5mm
										F	Untinned leads

ORDERING INFORMATION											
Series 59140/59141			59140/59141		X	X	XX		X		
Switch Type			Table 1 (1, 2, 3 or 4)								
Sensitivity			Table 2 (S, T, U or V)								
Cable Length			Table 3 (01, 02, 03, 04 or 05)								
Termination			Table 4 (A, C, D, E or F)								

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