



Features

- Magnetically operated position sensor
- Matching actuator available
- Compact size requires only 3.2cm² board space
- Screw down or adhesive mounting
- Customer defined sensitivity
- Choice of cable length
- Leads can exit from LH or RH side

Benefits

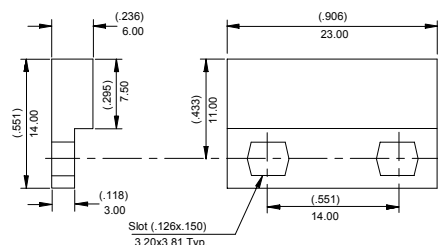
- No standby power requirement
- Operates through non-ferrous materials such as wood, plastic or aluminium
- Hermetically sealed, magnetically operated contacts continue to operate long after optical and other technologies fail due to contamination

Applications

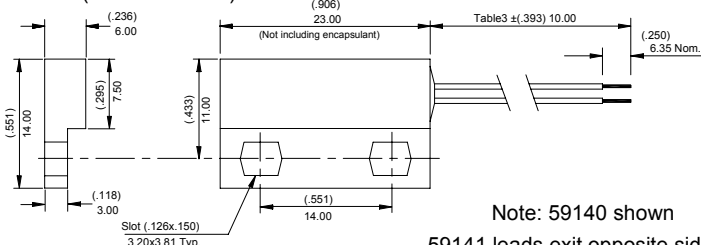
- Position and limit sensing
- Security system switch
- Linear actuators
- Door switch

DIMENSIONS (in) mm

Actuator



Sensor (2 wire versions)



Note: 59140 shown
59141 leads exit opposite side

SCHEMATICS

Switch Types 1 & 2

Black
Black

Switch Type 3

Black
Blue
White

Switch Type 4

Black
Black

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 ¹⁰	10 ¹⁰	10 ⁹	10 ⁹
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

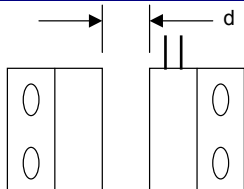
CUSTOMER OPTIONS - Sensitivity, Cable Length and Termination Specifications

TABLE 2

Sensitivity

Activate distances (d) are approximate using Hamlin 57140-000 actuator as illustrated.

Switch AT before modification



Select Option	S		T		U		V	
Switch Type	Pull-In AT Range	Activate Distance (d) (in)mm	Pull-In AT Range	Activate Distance (d) (in)mm	Pull-In AT Range	Activate Distance (d) (in)mm	Pull-In AT Range	Activate Distance (d) (in)mm
1	12-18	(.453)	17-23	(.374)	22-28	(.315)	27-33	(.295)
2		11.5		9.5		8.0		7.5
3	15-20	(.413)	20-25	(.354)	25-30	(.295)		
4		10.5		9.0		7.5		

TABLE 3

Cable Length

(Cable 24AWG 7/32 PVC 105°C UL1430 / UL1569)

Select Option Length(in)mm

02 (11,81) 300

05 (39,37)1,000

TABLE 4

Termination (2 wire versions shown)

Select Option	Description	Diagram
A or F	Tinned or untinned	

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 (02 or 05)				
Termination	Table 4 (A or F)				