



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 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



SCHEMATICS



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		Diagram						
Select Option	Switch Type	S	T	U	V			
		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	17-23	9.5	22-28	8.0	27-33	7.5	
3	15-20	(.413)	20-25	(.354)	25-30	(.295)		
4	10.5	20-25	9.0	25-30	7.5			

TABLE 3 Cable Length		TABLE 4 Termination (2 wire versions shown)	
Select Option	Length(in)mm	Select Option	Description
(Cable 24AWG 7/32 PVC 105°C UL1430 / UL1569)		A	Tinned leads
01	(3.94) 100	C	6.35mm fastons
02	(11.81) 300	D	AMP MTE 2.54mm
03	(19.69) 500	E	JST XHP 2.5mm
04	(29.53) 750	F	Untinned leads
05	(39.37) 1,000		

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)