

File E61760(N)

## 59145 and 59150 Flange Mount Features and Benefits



59145, 59150 Sensor

### Features

- 2 part magnetically operated proximity sensor
- Flying leads can exit either left or right hand side of the housing
- Case design allows screw down or adhesive mounting
- Customer defined sensitivity
- Choice of cable length and connector

### 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



Note: 59145 shown. 59150 leads exit opposite.

SCHEMATICS	Switch Type
	1 & 2
	3
	4

## CUSTOMER OPTIONS - Switching Specifications

TABLE 1 Contact Type			Normally Open	Normally Open High Voltage	Change Over	Normally Closed
Switch Type			1	2	3	4
Power	Power	Watt - max.	10	10	5	5
	Switching	Vdc - max.	200	300	175	175
Voltage	Breakdown	Vdc - min.	250	450	200	200
	Switching	A - max.	0.5	0.5	0.25	0.25
Current	Carry	A - max.	1.2	1.5	1.5	1.5
	Contact, Initial	Ω - max.	0.2	0.2	0.2	0.2
Resistance	Insulation	Ω - min.	10 <sup>10</sup>	10 <sup>10</sup>	10 <sup>7</sup>	10 <sup>7</sup>
	Contact	pF - typ.	0.3	0.2	0.3	0.3
Capacitance	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
Temperature	Operate	ms - max.	1.0	1.0	3.0	3.0
	Release	ms - max.	1.0	1.0	3.0	3.0
Time	Shock	11ms 1/2 sine	G - max.	100	50	50
Shock	Vibration	50-2000 Hz	G - max.	30	30	30
Vibration						

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

TABLE 2								TABLE 3		TABLE 4			
<b>Sensitivity Options:-</b> Activate Distances are approximate using Hamlin 57145/57150 actuator as illustrated Switch AT before modification								<b>Cable Type:-</b> 24 AWG 7/32 PVC 105°C ULI1430/UL1569		<b>Termination Options:-</b>			
								Standard Lengths		<b>SELECT OPTION</b>	<b>DESCRIPTION (2 WIRE VERSIONS ILLUSTRATED)</b>		
<b>Select Option</b> <b>Switch Type</b>	<b>S</b> Pull In AT Range Activate Distance d (in) mm	<b>T</b> Pull In AT Range Activate Distance d (in) mm	<b>U</b> Pull In AT Range Activate Distance d (in) mm	<b>V</b> Pull In AT Range Activate Distance d (in) mm				02 (11,81) 300 05 (39,37) 1,000 03 (19,69) 500 04 (29,53) 750 05 (39,37) 1000	A or F C D E	Tinned or untinned leads 6.35mm fastons AMP MTE 2.54mm pitch JST XHP 2.5mm pitch			
1 Normally Open	12-18 (.531)	17-23 (.453)	22-28 (.394)	27-33 (.354)									
2 High Voltage	13,5	11,5	10,0	9,0									
3 Change Over	(.433)	(.354)	(.335)										
4 Normally Closed	15-20	11,0	9,0	8,5									

## ORDERING INFORMATION

N.B. 57145/57150 actuator sold separately

59145/59150 - X - X - XX - X

Series 59145/59150

Switch Type

Sensitivity

Cable Length

Termination

Table 1

Table 2

Table 3

Table 4

**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 6047 3000 • Fax: +33 (0) 1 6015 9136 • Email: sales.fr@hamlin.com

ISSUE No: 4 DATE: 1/5/3

DETAILS PROVIDED ON THIS DATA SHEET ARE 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.