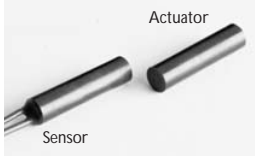


File E61760(N)

59025 Firecracker Features and Benefits



Features

- 2 part magnetically operated proximity sensor
- UL recognised
- Choice of normally open, normally closed or change over contacts
- Customer defined sensitivity
- Choice of cable length and connector

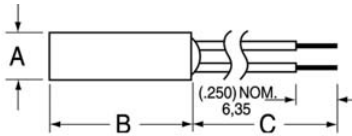
Benefits

- Quick and easy to install
- 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
- Level sensing
- Linear actuators

DIMENSIONS (in) mm



	A Max	B Max	C NOM.
57025	(.245) 6,22	(1.000) 25,40	-
59025	(.245) 6,22	(1.000) 25,40	Table 3 ± (.393) 10,00

SCHEMATICS	Switch Type
	1 & 2
	3
	4

CUSTOMER OPTIONS - Switching Specifications

TABLE I Contact Type			Normally Open	Normally Open High Voltage	Change Over	Normally Closed
Switch Type			1	2	3	4
	Power	Watt - 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	Ω - max.	0.2	0.2	0.2	0.2
	Insulation	Ω - min.	10 ¹⁰	10 ¹⁰	10 ⁹	10 ⁹
Capacitance	Contact	pF - typ.	0.3	0.2	0.3	0.3
	Operating	°C	-40 to +105	-20 to +105	-40 to +105	-40 to +105
Temperature	Storage	°C	-65 to +105	-65 to +105	-65 to +105	-65 to +105
	Operate	ms - max.	1.0	1.0	3.0	3.0
Time	Release	ms - max.	1.0	1.0	3.0	3.0
	Shock	11ms 1/2 sine	G - max.	100	100	50
Vibration	50-2000 Hz	G - max.	30	30	30	30

CUSTOMER OPTIONS - Sensitivity, Cable Length and Termination Specification

TABLE 2									TABLE 3		TABLE 4																																																																															
Sensitivity Options:- Activate Distances are approximate using Hamlin 57025 actuator as illustrated Switch AT before modification									Cable Type:- 24 AWG 7/32 PVC 105°C UL1430/UL1569		Termination Options:-																																																																															
									Standard Lengths		SELECT OPTION DESCRIPTION (2 WIRE VERSIONS ILLUSTRATED)																																																																															
<table border="1"> <thead> <tr> <th>Select Option</th> <th colspan="2">S</th> <th colspan="2">T</th> <th colspan="2">U</th> <th colspan="2">V</th> </tr> <tr> <th>Switch Type</th> <th>Pull In AT Range</th> <th>Activate Distance d (in) mm</th> <th>Pull In AT Range</th> <th>Activate Distance d (in) mm</th> <th>Pull In AT Range</th> <th>Activate Distance d (in) mm</th> <th>Pull In AT Range</th> <th>Activate Distance d (in) mm</th> </tr> </thead> <tbody> <tr> <td>1 Normally Open</td> <td>12-18</td> <td>(.315)</td> <td>17-23</td> <td>(.236)</td> <td>22-28</td> <td>(.197)</td> <td>27-33</td> <td>(.157)</td> </tr> <tr> <td>2 High Voltage</td> <td></td> <td>8.0</td> <td></td> <td>6.0</td> <td></td> <td>5.0</td> <td></td> <td>4.0</td> </tr> <tr> <td>3 Change Over</td> <td>15-20</td> <td>(.276)</td> <td>20-25</td> <td>(.216)</td> <td>25-30</td> <td>(.177)</td> <td></td> <td></td> </tr> <tr> <td>4 Normally Closed</td> <td></td> <td>7.0</td> <td></td> <td>5.5</td> <td></td> <td>4.5</td> <td></td> <td></td> </tr> </tbody> </table>									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 Normally Open	12-18	(.315)	17-23	(.236)	22-28	(.197)	27-33	(.157)	2 High Voltage		8.0		6.0		5.0		4.0	3 Change Over	15-20	(.276)	20-25	(.216)	25-30	(.177)			4 Normally Closed		7.0		5.5		4.5			<table border="1"> <thead> <tr> <th>SELECT OPTION</th> <th>CABLE LENGTH (in) mm</th> </tr> </thead> <tbody> <tr> <td>02</td> <td>(11,81) 300</td> </tr> <tr> <td>05</td> <td>(39,37) 1,000</td> </tr> <tr> <td>03</td> <td>(19,69) 500</td> </tr> <tr> <td>04</td> <td>(29,53) 750</td> </tr> <tr> <td>05</td> <td>(39,37) 1000</td> </tr> </tbody> </table>		SELECT OPTION	CABLE LENGTH (in) mm	02	(11,81) 300	05	(39,37) 1,000	03	(19,69) 500	04	(29,53) 750	05	(39,37) 1000	<table border="1"> <tbody> <tr> <td>A or F</td> <td>Tinned or untinned leads</td> <td></td> </tr> <tr> <td>C</td> <td>6.35mm fastons</td> <td></td> </tr> <tr> <td>D</td> <td>AMP MTE 2.54mm pitch</td> <td></td> </tr> <tr> <td>E</td> <td>IST XHP 2.5mm pitch</td> <td></td> </tr> </tbody> </table>		A or F	Tinned or untinned leads		C	6.35mm fastons		D	AMP MTE 2.54mm pitch		E	IST XHP 2.5mm pitch	
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 Normally Open	12-18	(.315)	17-23	(.236)	22-28	(.197)	27-33	(.157)																																																																																		
2 High Voltage		8.0		6.0		5.0		4.0																																																																																		
3 Change Over	15-20	(.276)	20-25	(.216)	25-30	(.177)																																																																																				
4 Normally Closed		7.0		5.5		4.5																																																																																				
SELECT OPTION	CABLE LENGTH (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	Tinned or untinned leads																																																																																									
C	6.35mm fastons																																																																																									
D	AMP MTE 2.54mm pitch																																																																																									
E	IST XHP 2.5mm pitch																																																																																									

ORDERING INFORMATION

N.B. 57025 actuator sold separately

59025 - X - X - XX - X

- Series 59025
- Switch Type — Table I
- Sensitivity — Table 2
- Cable Length — Table 3
- Termination — 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
 Hametrol 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.