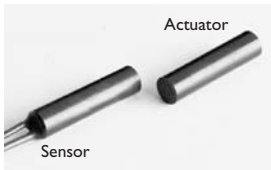


59020 Mini Firecracker Features and Benefits



Features

- 2 part magnetically operated proximity sensor
- Normally open contact
- Customer defined sensitivity
- Choice of cable length and connector

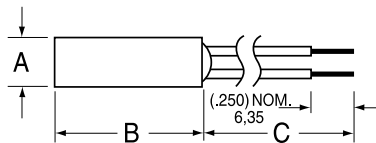
Benefits

- 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.
57020	(.201) 5,10	(.600) 15,24	-
59020	(.201) 5,10	(.600) 15,24	Table 3 ± (.393) 10,00

CUSTOMER OPTIONS - Switching Specifications

TABLE 1			Normally Open
Contact Type			I
Switch Type	Power	Watt - max.	10
	Switching	Vdc - max.	170
Voltage	Breakdown	Vdc - min.	175
	Switching	A - max.	0.5
Current	Carry	A - max.	0.5
	Contact, Initial	Ω - max.	0.2
Resistance	Insulation	Ω - min.	10 ¹⁰
	Contact	pF - typ.	0.2
Capacitance	Operating	°C	-40 to +105
	Storage	°C	-65 to +105
Temperature	Operate	ms - max.	1.0
	Release	ms - max.	1.0
Shock	11ms 1/2 sine	G - max.	100
Vibration	50-2000 Hz	G - max.	30

CUSTOMER OPTIONS - Sensitivity, Cable Length and Termination Specification

TABLE 2

Sensitivity Options:-

Activate Distances are approximate using Hamlin 57020 actuator as illustrated.

Switch AT before modification

The diagram illustrates three sensitivity options for a switch actuator. Option S shows a short stroke with a small distance 'd' between the actuator tip and the switch contact. Option T shows a medium stroke with a medium distance 'd'. Option U shows a long stroke with a large distance 'd'. The distance 'd' is indicated by a double-headed arrow between the actuator tip and the contact point.

Select Option	S	T	U			
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
I Normally Open	6-10	(.236) 6,0	10-15	(.177) 4,5	13-19	(.157) 4,0

TABLE 3

Cable Type:-

24 AWG 7/32 PVC 105°C

UL1430/UL1569

Standard Lengths

SELECT OPTION	CABLE LENGTH (in) mm
01	(3,94) 100
02	(11,81) 300
03	(19,69) 500
04	(29,53) 750
05	(39,37) 1000

TABLE 4

Termination Options:-

SELECT OPTION	DESCRIPTION
A	Tinned leads
C	6.35mm fastons
D	AMP MTE 2.54mm pitch
E	JST XHP 2.5mm pitch

ORDERING INFORMATION

N.B. 57020 actuator sold separately

Series 59020	59020	-	I	-	X	-	XX	-	X
Switch Type	Table 1								
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) 6181 953660 • Fax: +49 (0) 6181 953666 • Email: sales.de@hamlin.com
Hametrol France Tel: +33 (0) 1 4687 0202 • Fax: +33 (0) 1 4686 6786 • 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.