Burgess

V13 Series Compact Micro Switches

Moulded-cased, single-pole, snap-action, changeover micro switches which facilitate tidy, space-saving cable runs and provide integral actuator and terminal variety in convenient, attractive packages.

Page 136

Plain plunger actuator. M3 screw terminals in channel

Page 136

Plain lever actuator. M3 screw terminals in channel

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Roller-lever actuator. M3 screw terminals in channel

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Reverse-acting plain lever actuator. M3 screw terminals in channel

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Plain plunger actuator. M3.5 screw terminals on platform base

Page 136

Plain lever actuator. M3.5 screw terminals on platform base

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Roller-lever actuator. M3.5 screw terminals on platform base

Page 137

Reverse-acting roller-lever actuator. M3 screw terminals in channel

These eight switches are described individually on the pages indicated. An insulated cable box for optional use with any switch having M3 screw terminals in a channel is listed on page 139.

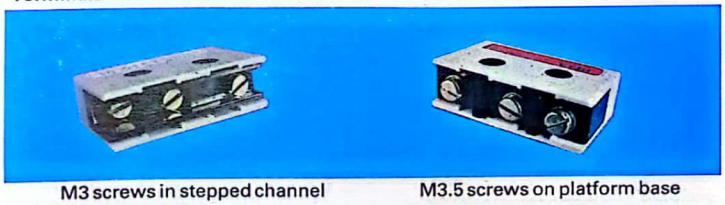
Construction

Mechanism
Single-pole, snap-action, using a coil spring as an energy store. Changeover normally open or normally closed only. Silver contacts.

Enclosure
Case moulded in strong plastic.

Actuators
Stainless steel levers, plastic roller. Note that two models have reverse-action levers. In the 'at rest' position these hold the plunger down and lever depression releases the plunger. Because of this the positions of the normally open and normally closed terminals is the reverse of those of the normal acting switches.

Terminals



M3 screws in stepped channel

M3.5 screws on platform base

Electrical Ratings

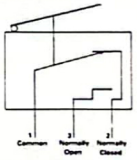
Ratings are recommended maxima and in amperes. The two columns under 'Tungsten Lamp Load' provide ratings for the following circuits:-
On plunger and normal acting lever actuated switches:
1 = Normally closed
2 = Normally open
On reverse-action lever actuated switches:
1 = Normally open
2 = Normally closed

Voltage	Resistive Load	Tungsten Lamp Load 1	Tungsten Lamp Load 2	Inductive Load
AC				
125	10	2	1	10
250	10	1.5	1	10
DC				
Up to 15	15	3	1.5	15
30	10	3	1.5	10
50	3	0.8	0.8	2.5
75	1	0.6	0.6	0.5
125	0.5	0.5	0.5	0.07
250	0.25	0.25	0.25	0.03

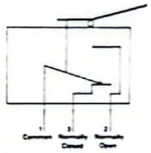
Installation and Service

Mounting
Two side-mounting holes for M3 or #4 screws.

Diagram of Connections



Plunger and normal-acting lever actuated models



Reverse-action lever actuated models

Environmental Data
Mechanism protection IP40 with exposed terminals. Working temperature −10° to +85°C.

Service
Regular checks for cleanliness and security are advocated.

Approvals

All models are approved by CSA and UL.

Cross References

Sealed miniature switches – next page.
More reverse-action lever switches pages 48-51 and 147-149.

An insulated base is available as an extra item – see page 139. It can be used with any switch with a stepped channel base.

V13L

Actuator	Plain integral lever
Mechanism	Changeover
Terminals	Three M3 screws with captive washers in a stepped channel.

	Insulated cable box available – see page 139	
Electrical Rating	Recommended maximum 10A on 125 or 250 Vac. Full ratings on page 46	
Free Position (max)	21.9 mm	0.86 in
Operating Position	18.9 ±0.3 mm	0.74 in
Movement Differential (max)	0.97 mm	0.038 in
Available Overtravel	Depress to case	
Actuating Force (max)	2.5 N	9 ozf
Release Force (min)	0.45 N	1.6 ozf
Mechanical Life	In excess of 10 million operations	
Enclosure	Mechanism: IP40 Exposed terminals	
Temperature	−10° to +85°C	
Weight	16 g max	
Approvals*	CSA, UL	

This model and similar models in the V13 Series are described in detail on page 46