

## High Temperature Miniature Micro Switches

Five small changeover, snap-action micro switches constructed in materials which exhibit high stability in ambient temperatures above those encountered in normal industrial situations. The group includes two models which are also suitable for applications exposed to nuclear radiation.



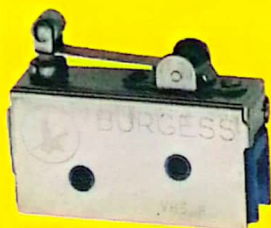
Page 195

SV4T7. Maximum continuous working temperature 150°C. Electrical Ratings table 1 below



Page 195

V3F – silver contacts and V3FN – platinum contacts. Maximum continuous working temperature 240°C. Electrical Ratings table 2 below



Page 195

VH5LR. Stainless steel roller-lever actuator. Maximum continuous working temperature 200°C. Dimensionally similar to replaced VH1LR. Electrical Ratings table 2 below.



Page 195

VH3. Maximum continuous working temperature 550°C; short runs 600°C. Electrical Ratings table 2 below

### The Range

SV4T7 differs from general purpose model V4T7 (page 97) in case, lid and plunger material only. It can be used alone or with any auxiliary actuator listed on pages 104-106 which does not have a nylon roller.

V3F and V3FN are dimensionally similar to general purpose model V3 (page 107) and may be used alone or with any auxiliary actuator without a plastic roller listed on pages 126-128. As well as high temperature mouldings, these models are provided with stainless steel mechanisms. V3FN, with platinum contacts, is nuclear radiation compatible.

VH5LR has a stainless steel case and an integral roller-lever actuator, also in stainless steel.

VH3 is designed for very high temperatures, as high as 550°C for continuous working peaking to 600°C for short periods. It has stainless steel mechanism, a spring in Nimonic 90 alloy and platinum contacts. Its base and plunger are aluminium oxide and the case is stainless steel. The mounting face, as indicated on the drawing on page 195, is also the reference plane to which is tied, physically and dimensionally, all the component parts of the switch so that operating position remains consistent throughout its life. It is recommended that stainless steel screws and spring washers should be used to mount this switch; the spring washers will allow for differential expansion of screws and base. Nuclear radiation compatible.

### Electrical Ratings

Recommended maxima in amperes. The abbreviations NC and NO mean Normally Closed and Normally Open contacts.

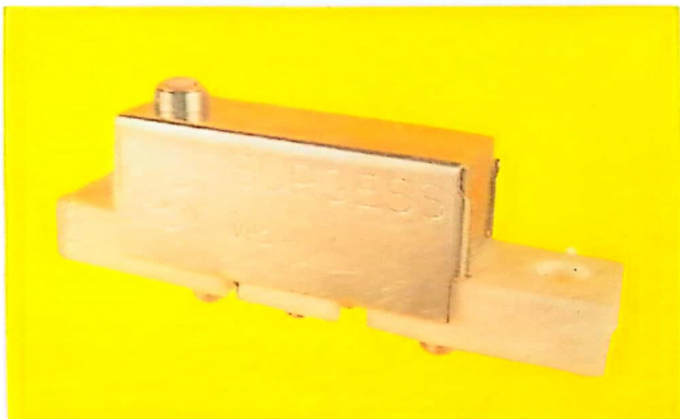
Table 1 – SV4T7 Switch

Voltage	Resistive Load	Tungsten Lamp Load		Inductive (Derate above 70°C)
		NC	NO	
AC				
125	5	0.5	0.5	5
250	5	0.5	0.5	5
DC				
Up to 15	10	3	1.5	10
30	5	3	1.5	3
50	1	0.7	0.7	1
75	0.75	0.5	0.5	0.25
125	0.5	0.4	0.4	0.06
250	0.25	0.2	0.2	0.03

Table 2 – V3F, V3FN, VH5LR and VH3 Switches

Voltage	Resistive Load	Tungsten Lamp Load		Inductive Load
		NC	NO	
AC				
125	1	0.2	0.2	1
250	1	0.1	0.1	1
DC				
Up to 15	1	1	1	1
30	1	1	1	1
50	1	0.5	0.5	1
75	1	0.35	0.35	1
125	0.5	0.2	0.2	1
250	0.25	0.1	0.1	1

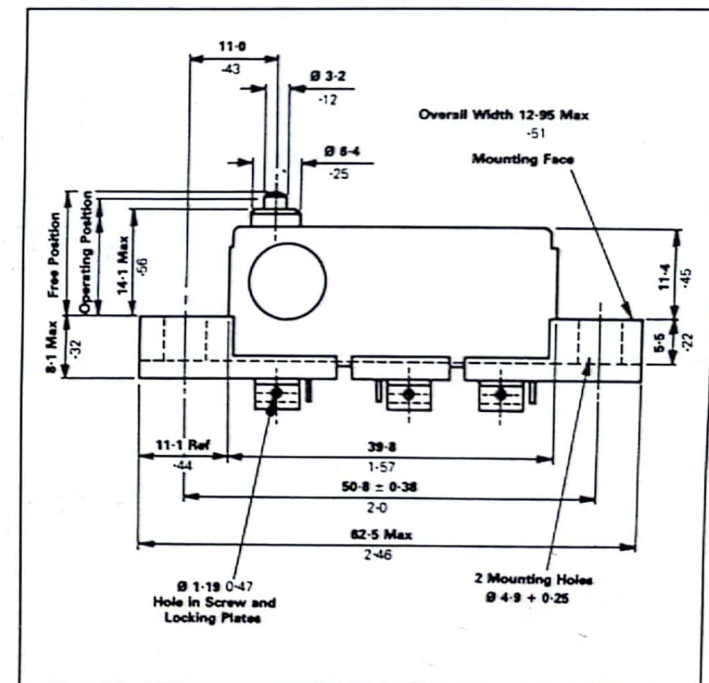
## VH3



<b>Actuator</b>	Plain plunger
<b>Mechanism</b>	Single-pole, changeover. Platinum contacts
<b>Terminals</b>	6BA lockable screws
<b>Mounting</b>	Use stainless steel screws and spring washers

<b>Electrical Rating</b>	Recommended maximum 1A on 125 or 250 Vac. Full ratings on page 72 (Table 2)	
<b>Free Position (max)</b>	16.3 mm	0.64 in
<b>Operating Position</b>	14.7	0.58 in
	±0.3 mm	
<b>Movement Differential (max)</b>	0.4 mm	0.016 in
<b>Available Overtravel</b>	Depress to sleeve	
<b>Actuating Force (max)</b>	4.5 N	16 ozf
<b>Release Force (min)</b>	0.8 N	3 ozf
<b>Mechanical Life</b>	In excess of 10 million operations	
<b>Enclosure</b>	Mechanism only: IP40 Exposed terminals	
<b>Maximum Continuous Working Temperature</b>	550°C. 600°C for short runs	
<b>Nuclear Radiation</b>	Compatible	
<b>Weight</b>	35 g max	

*This and other high temperature switches are described in detail on page 72*



\* Approved ratings can differ from those shown in the catalogue. Consult Burgess Approvals Register.