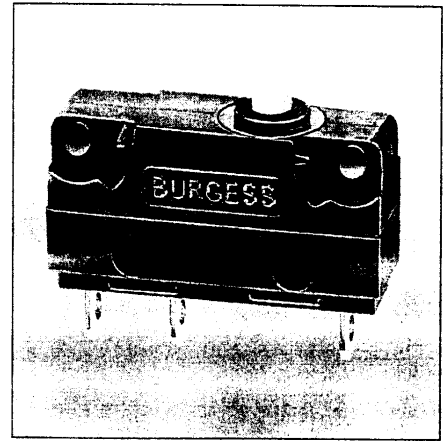
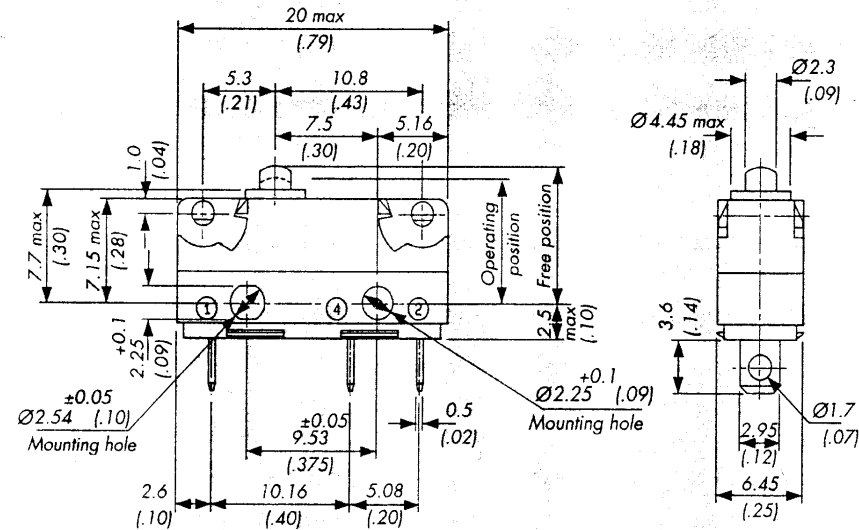


# V4N-Series



V4NT7

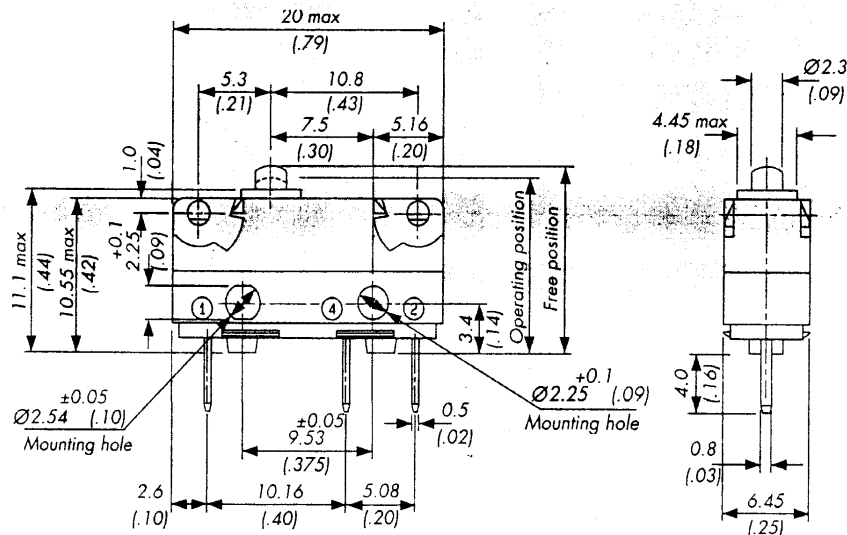


An exciting new range of sub-miniature switches embracing a host of innovative design features:

- Seven terminal options all sealed
- Mounting holes or moulded pegs
- Standard and low force models
- Wide range of clip on levers – two styles
- Choice of lever position
- Silver contacts for power switching; gold on silver for logic circuits
- Long overtravel versions
- Snap-on terminal covers

The ultimate in versatility.

V4NT8



# Specifications

# V4N

**Housing:**

Glass fibre reinforced Polyamide (PA 6.6)

**Plunger:**

Polyacetal (POM)

**Mechanism:**

Snap-action coil spring mechanism with stainless steel spring. Changeover, normally-closed or normally-open

**Contacts:**

Fine silver  
Gold plate on silver  
Gold plate on silver crosspoint

**Terminals:**

All terminals are gold flashed  
Refer to page 39

**Temperature Range:**

-40°C to +85°C (higher temperatures possible - consult Burgess.)

**Mechanical Life:**

10<sup>7</sup> cycles minimum (impact free actuation)

**Type of Protection:**

Enclosure IP40  
Flux-proof terminal entries

**Mounting:**

Side mounting

Versions with moulded mounting pegs of 2.25 mm or 3.2 mm diameter are also available. Please consult Burgess.

**Actuators:**

Plain lever  
Cam follower } Choice of two styles  
Roller lever

**Accessories:**

Lug mounting frame  
Clip-on terminal covers  
Insulating sheet

**Approvals:**

UL, CSA, BEAB, VDE, SEV, NEMKO, DEMKO, SEMKO.

Recom. Max. El. Ratings V4N series		
Voltage	Resistive load	Inductive load
<b>AC</b>	A	A
125	5	5
250	5	5

Recom. Max. El. Ratings V4N2 series		
Voltage	Resistive load	Inductive load
<b>AC</b>	A	A
125	2	1
250	2	1

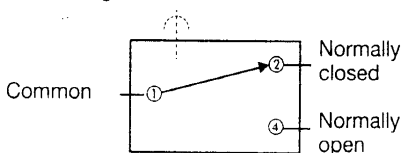
Recom. Max. El. Ratings V4N series		
Voltage	Resistive load	Inductive load
<b>DC</b>	A	A
up to		
30	5	3
50	1	1
75	0.75	0.75
125	0.5	0.03
250	0.25	0.03

Recom. Max. El. Ratings V4N2 series		
Voltage	Resistive load	Inductive load
<b>DC</b>	A	A
up to		
30	2	2
50	0.5	0.5
75	0.25	0.25
125	0.2	0.03
250	0.15	0.02

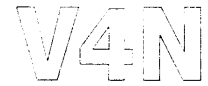
The breaking capacities in the tables refer to silver contacts. For gold contacts see the text on right.

Gold-plated contacts are intended for use in signal circuits where the energy being switched is at the milliwatt level. Power being switched must be limited in order to avoid overheating and possible dispersal of the gold from the contact area.

Circuit diagram V4N



# Product Range Operating Characteristics



Actuator	Reference	Actuating Force Maximum N (ozf)	Release Force Minimum N (ozf)	Free Position Maximum mm (in)	Operating Position mm (in)	Movement Differential Maximum (in)	Over Travel
Plunger 	V4NT7	1.4 (5)	0.28 (1.0)	9.2 (0.36)	8.4 (0.33) ± 0.3 (± 0.01)	0.1 (0.004)	Flush with case. The case should not be used as an end stop.
	<del>V4N2T7</del>	0.5 (1.8)	0.1 (0.35)	9.2 (0.36)	8.4 (0.33) ± 0.3 (± 0.01)	0.1 (0.004)	
Y1 Lever 	V4NT7Y1	0.5 (1.8)	0.07 (0.25)	13.2 (0.52)	10.7 (0.42) ± 1.0 (± 0.04)	0.4 (0.016)	
	V4N2T7Y1	0.2 (0.7)	0.02 (0.07)	13.2 (0.52)	10.7 (0.42) ± 1.0 (± 0.04)	0.4 (0.016)	
Y2 Lever 	V4NT7Y2	0.35 (1.26)	0.06 (0.2)	15.7 (0.62)	11.5 (0.45) ± 1.6 (± 0.06)	0.6 (0.02)	
	V4N2T7Y2	0.15 (0.54)	0.01 (0.03)	15.7 (0.62)	11.7 (0.46) ± 1.5 (± 0.06)	0.6 (0.02)	
Y3 Lever 	V4NT7Y3	0.3 (1.1)	0.04 (0.14)	17.9 (0.70)	12.4 (0.49) ± 2.1 (± 0.08)	0.8 (0.03)	
	V4N2T7Y3	0.1 (0.36)	0.01 (0.03)	17.9 (0.70)	12.8 (0.50) ± 1.9 (± 0.07)	0.8 (0.03)	
YC Lever 	V4NT7YC	0.5 (1.8)	0.07 (0.25)	16.1 (0.63)	13.4 (0.53) ± 1.1 (± 0.04)	0.4 (0.016)	
	V4N2T7YC	0.2 (0.7)	0.02 (0.07)	16.1 (0.63)	13.4 (0.53) ± 1.1 (± 0.04)	0.4 (0.016)	
YR1 Lever 	V4NT7YR1	0.5 (1.8)	0.07 (0.25)	17.8 (0.70)	15.7 (0.62) ± 1.0 (± 0.04)	0.4 (0.016)	
	V4N2T7YR1	0.2 (0.7)	0.02 (0.07)	17.8 (0.70)	15.7 (0.62) ± 1.0 (± 0.04)	0.4 (0.016)	

Operating Characteristics shown above are specified from mounting hole centres. To calculate the Operating Characteristics for T8 Series PCB switches from the terminals add one of the following:

1. T8 Add 3.4 to establish characteristics from stand off's on base.
2. T81/82 Add 3.8 to establish characteristics from centre line of formed terminals.
3. T83 Add 4.2 to establish characteristics from PCB

A further range of options is offered by «A» Series levers. At 0.4 mm thick they are more rigid than the «Y» Series. They are recommended in applications where switches are inverted.

# Ordering References

# V4N

<b>Switch range:</b>	<b>V4N</b>																								
<b>Actuating Force</b> No symbol = Standard force 2 Low force [4]* High	[ ]* german version																								
<b>Terminal types</b> 																									
<b>Circuit</b> No symbol = Changeover C2 Normally closed C4 Normally open																									
<b>Actuators</b> No symbol = Plunger																									
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%;">Y1</td> <td style="width: 5%;">A1</td> <td style="width: 20%;">Plain lever</td> <td style="width: 70%;">18.0 mm ( .71 in)</td> </tr> <tr> <td>Y2</td> <td>A2</td> <td>Plain lever</td> <td>25.0 mm ( .98 in)</td> </tr> <tr> <td>Y3</td> <td>A3</td> <td>Plain lever</td> <td>32.0 mm (1.26 in)</td> </tr> <tr> <td></td> <td>A7</td> <td>Plain lever</td> <td>60.0 mm (2.36 in)</td> </tr> <tr> <td>YC</td> <td>AC1</td> <td>Cam follower</td> <td>18.5 mm ( .73 in)</td> </tr> <tr> <td>YR1</td> <td>AR1</td> <td>Roller lever</td> <td>16.0 mm ( .63 in)</td> </tr> </table>		Y1	A1	Plain lever	18.0 mm ( .71 in)	Y2	A2	Plain lever	25.0 mm ( .98 in)	Y3	A3	Plain lever	32.0 mm (1.26 in)		A7	Plain lever	60.0 mm (2.36 in)	YC	AC1	Cam follower	18.5 mm ( .73 in)	YR1	AR1	Roller lever	16.0 mm ( .63 in)
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YR1	AR1	Roller lever	16.0 mm ( .63 in)																						
Levers fitted at end nearest to plunger. These can also be specified for fixing at end opposite to plunger - consult Burgess.																									
<b>Contacts</b> No symbol = Fine silver [AUX]* Gold alloy coated silver palladium GP Gold plate on silver GPX Gold plate on silver crosspoint [ ]* = german version																									