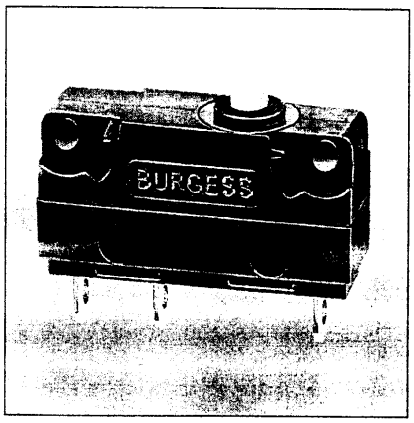
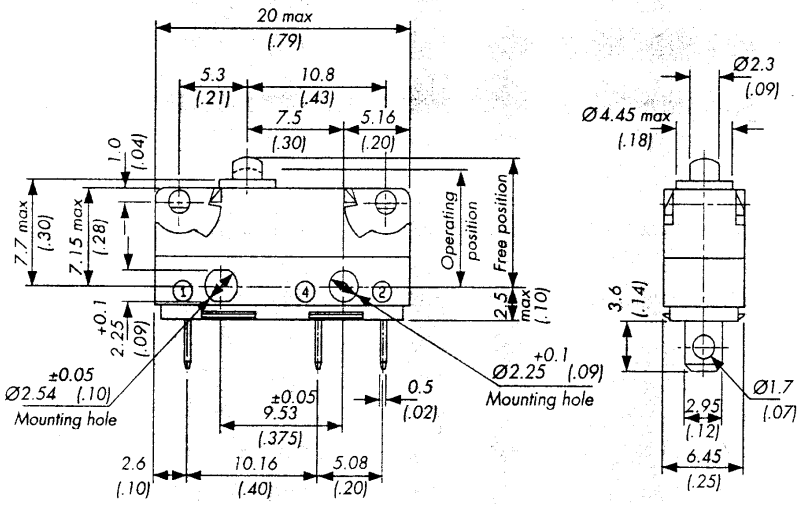
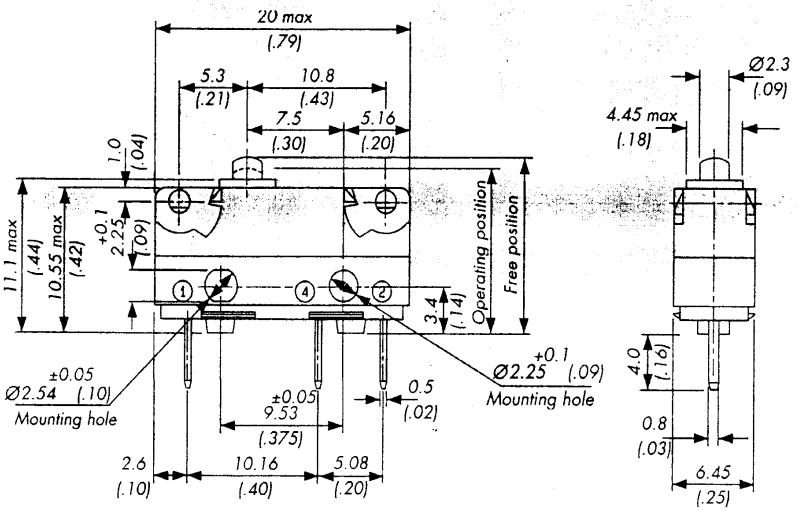
V4N-Series



V4NT7



V4NT8



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.

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:
10^7 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
AC	A	A
125	5	5
250	5	5

Recom. Max. El. Ratings V4N series

Voltage	Resistive load	Inductive load
DC	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

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

Recom. Max. El. Ratings V4N2 series

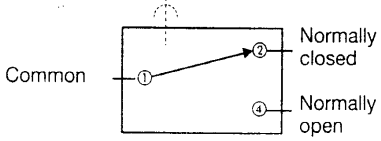
Voltage	Resistive load	Inductive load
AC	A	A
125	2	1
250	2	1

Recom. Max. El. Ratings V4N2 series

Voltage	Resistive load	Inductive load
DC	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

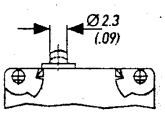
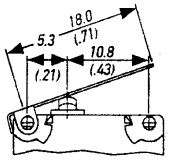
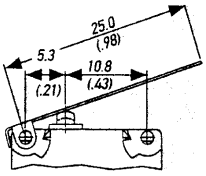
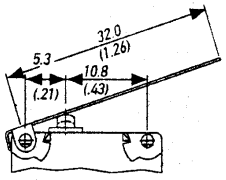
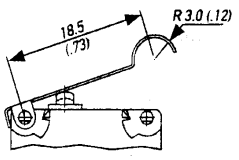
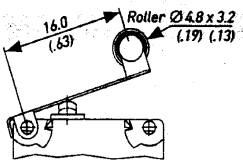
Gold-plated contacts are intended for use in signal circuits where the energy being switched is at the milliwatt level. Power being switched must be limited in order to avoid overheating and possible dispersal of the gold from the contact area.

Circuit diagram V4N



Product Range
Operating Characteristics

V4N

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.
	V4N2T7	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

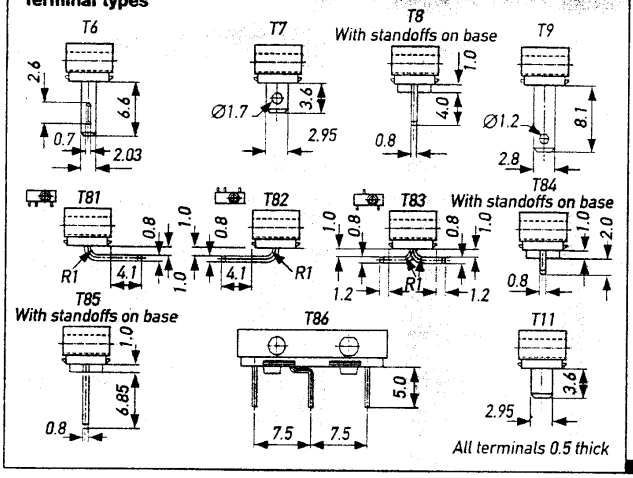
Switch range: **V4N**

Actuating Force

No symbol = Standard force
2 Low force
[4]* High

[ ]* german version

Terminal types



Circuit

No symbol = Changeover
C2 Normally closed
C4 Normally open

Actuators

No symbol = Plunger

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)

Levers fitted at end nearest to plunger. These can also be specified for fixing at end opposite to plunger – consult Burgess.

Contacts

No symbol = Fine silver
[AUX]* Gold alloy coated silver palladium
GP Gold plate on silver
GPX Gold plate on silver crosspoint

[ ]* = german version