V4NS-Series









An exciting new range of sealed sub-miniature switches embracing all the features of the V4N series and in addition

- All models sealed to IP67
- · Pre-wired versions
- High and low temperature versions
- Potted base
- Cables emerging from either end
- · Neoprene or silicone cowls
- Single, double or triple pole snap-on terminal covers
- Compact terminal cover

Specifications

Housing:

Glass fibre reinforced Polyamide (PA 6.6) *Plunger:*

Polyamide (PA 6.6) or Polyacetal (POM) *Plunger Cowl:*

Neoprene or silicone elastomer

Mechanism:

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

Contacts: Fine silver Gold plate on silver Gold alloy on silver palladium (crosspoint)

Terminals: All terminals are gold flashed Refer to page 35

Temperature Range: -10°C to +85°C (-40°C with silicone cowl) Higher temperatures possible consult Burgess

Mechanical Life: 10⁷ cycles minimum (impact-free actuation)

Type of Protection: IP67 with encapsulated terminals

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 Roller lever

Accessories: Lug mounting frame Clip-on terminal covers Insulating sheet

Approvals: UL, CSA, VDE, SEV, NEMKO, DEMKO, SEMKO.

Circuit diagram V4NS



Recom. Max. El. Ratings V4NST6-T11				
Voltage	Resistive load	Inductive load		
VAC	A	A		
125 250	5	5		

Recom. Max. El. Ratings V4NST6 - T11				
Voltage	Resisitve load	Inductive load		
VDC	A	Â		
up to				
30 50 75 125 250	5 1 0.75 0.5 0.25	3 1 0.75 0.03 0.03		

Recom. Max. El. Ratings V4NS (pre-wired)				
Voltage	Resistive load	Inductive load		
VAC	A			
125 250	3 3	3 3		

Recom. Max. El. Ratings V4NS (pre-wired)				
Voltage	Resistive load	Inductive load		
VDC	A			
up to				
30 50 75 125 250	3 1 0.75 0.5 0.25	3 1 0.75 0.03 0.03		

The breaking capacities quoted refer to the switch. The loading of the leads depends on heat dissipation and has to be checked by testing.

The breaking capacities in the table refer to silver contacts. For gold contacts see the text above 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.

V/4I

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 Maximumm mm (in)	Over Travel
Plunger		V4NS	2.5 (9)	0.3 (1.0)	9.2 (0.36)	8.4 (0.33) ± 0.3 (± 0.01)	0.1 (0.004)	
Y1 Lever Width of lever: 4.0 mm (.16)	5.3 (71) (21) (43) (43)	V4NSY1	0.9 (3.2)	0.07 (0.25)	13.2 (0.52)	10.6 (0.42) ± 1.2 (± 0.05)	0.4 (0.016)	Flush with case. The case should not be used as an end stop.
Y2 Lever Width of lever: 4.0 mm (.16)	250 (98) (.21) (.21) (.21) (.21) (.21) (.21)	V4NSY2	0.64 (2.3)	0.06 (0.2)	15.7 (0.62)	11.3 (0.44) ± 1.7 (± 0.07)	0.6 (0.02)	
Y3 Lever Width of lever: 4.0 mm (.16)	5.3 10.8 (.21) (.43) (.13)	V4NSY3	0.5 (1.8)	0.04 (0.14)	17.9 (0.70)	11.9 (0.47) ± 2.3 (± 0.09)	0.8 (0.03)	
YC Lever Width of lever: 4.0 mm (.16)	18.5 (73) (73) (73) (73) (12)	V4NSYC	0.9 (3.2)	0.07 (0.25)	16.1 (0.63)	13.3 (0.52) ± 1.2 (± 0.05)	0.4 (0.016)	
YR1 Lever	16.0 (63) (19) (.13) (19) (.13) (19) (.13)	V4NSYR1	0.9 (3.2)	0.07 (0.25)	17.8 (0.70)) 15.6 (0.61) ± 1.2 (± 0.05)	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.

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Ordering References



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