

# V4N

## Snap-action Microswitches

Subminiature

### V4N

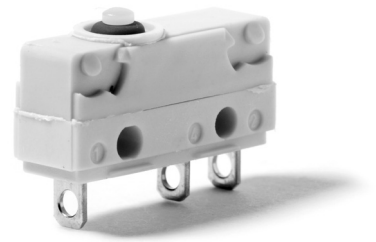
- Characteristics
- Peg mounting option
  - Solder terminals
  - 2.8 mm faston (quick connect) terminals
  - PCB terminals
  - Sealed (IP 67) / unsealed (IP 40)
  - Pre-wired option
  - Snap-on terminal covers

Dimensions (mm)

V4N	20	T	10	T	6
V4NS	20	T	17.5	T	6.4

Actuator Plunger, plain lever, roller lever

Approvals UL, CSA and ENEC



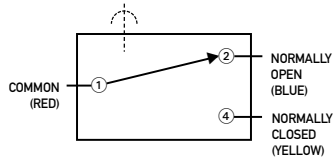
### Preferred Range

Ordering Reference	Actuating Force (N)	Actuating Force (ozf)	Sealing	Operating pos. (mm)	Operating pos. (in)	Terminal	Circuit	Actuator	Contacts	Electrical rating
V4NT7UL	1.40	5.0	IP40	8.40	0.33	Solder	CO	Plain plunger	Silver	250 VAC, 5 A
V4NST7UL	2.50	9.0	IP67	8.40	0.33	Solder	CO	Plain plunger	Silver	250 VAC, 5 A
V4NSUL	2.50	9.0	IP67	8.40	0.33	Pre-wired	CO	Plain plunger	Silver	250 VAC, 5 A
V4NT7Y1UL	0.50	1.8	IP40	10.7	0.42	Solder	CO	Straight lever	Silver	250 VAC, 5 A
V4NST7Y1UL	0.90	3.2	IP67	10.6	0.42	Solder	CO	Straight lever	Silver	250 VAC, 5 A
V4NSY1UL	0.90	3.2	IP67	10.6	0.42	Pre-wired	CO	Straight lever	Silver	250 VAC, 5 A
V4NT7YR1UL	0.50	1.8	IP40	15.7	0.62	Solder	CO	Roller lever	Silver	250 VAC, 5 A
V4NST7YR1UL	0.90	3.2	IP67	15.6	0.62	Solder	CO	Roller lever	Silver	250 VAC, 5 A
V4NSYR1UL	0.90	3.2	IP67	15.6	0.62	Pre-wired	CO	Roller lever	Silver	250 VAC, 5 A

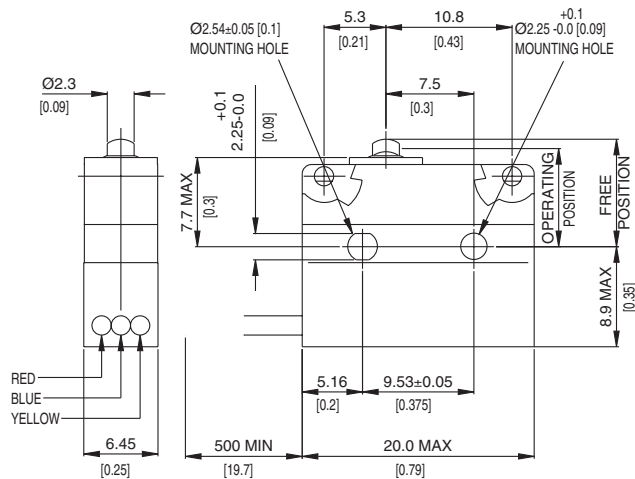
## Specifications

Housing	Flame-retardant glass-fibre reinforced nylon
Plunger	Polyacetal (POM)
Mechanism	Snap-action coil spring mechanism with stainless steel spring
Functions	Change-over, normally-closed or normally-open
Contacts	Silver
Terminals	Gold flashed
Temperature range °C	-40°C to +85°C
Mechanical life	5 ± 10 <sup>6</sup> cycles minimum (impact free actuation)
Protection	IP40 (V4N - enclosure), IP67 (V4NS - enclosure)
Mounting	Side mounting
Actuators	Plain lever, Roller lever
Accessories	Insulating sheet - N04619, Clip-on terminal cover - TC102, Long overtravel actuator - QA4

Circuit diagram



Dimensions

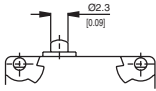
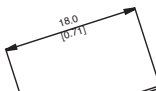
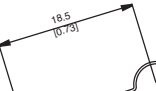


## Recommended maximum electrical ratings

	Voltage (max)	Load (A)	Inductive load (A)	Approval
V4NT7/V4NST7-UL	250 VAC	5 (0.75 pf)		UL 1054/CSA 22.2 No. 55 - 6,000 operations - 65°C EN61058-1, T85, 10,000 operations
	250 VAC	5	2	
	0 - 15 VDC	5	3	General rating - 50,000 operations (85°C) General rating - 50,000 operations (85°C)
	15 - 30 VDC	5	3	
V4NS-UL	250 VAC	3 (0.75 pf)		UL 1054/CSA 22.2 No. 55 - 6,000 operations - 65°C EN61058-1, T85, 10,000 operations
	250 VAC	5	2	
	0 - 15 VDC	3	3	General rating - 50,000 operations (85°C) General rating - 50,000 operations (85°C)
	15 - 30 VDC	3	3	

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## Operating Characteristics

Actuator	Reference	Actuating Force		Release Force		Free Position		Operating Position		Movement Differential	
		Maximum (N)	(ozf)	Minimum (N)	(ozf)	Maximum (mm)	(in)	(mm)	(in)	Maximum (mm)	(in)
Plunger 	V4NT7UL	1,4	5,00	0,28	1,00	9,2	0,36	8,4 ± 0,3	0,33 ± 0,012	0,1	0,004
	V4NST7UL	2,5	9,00	0,30	1,00	9,2	0,36	8,4 ± 0,3	0,33 ± 0,012	0,1	0,004
	V4NSUL	2,5	9,00	0,3	1,00	9,2	0,36	8,4 ± 0,3	0,33 ± 0,012	0,1	0,004
Y1 lever 	V4NT7Y1UL	0,5	1,80	0,07	0,25	13,2	0,52	10,7 ± 1,0	0,42 ± 0,04	0,4	0,016
	V4NST7Y1UL	0,9	3,20	0,07	0,25	13,2	0,52	10,6 ± 1,2	0,42 ± 0,05	0,4	0,016
	V4NSY1UL	0,9	3,20	0,07	0,25	13,2	0,52	10,6 ± 1,2	0,42 ± 0,05	0,4	0,016
Width of lever 4.0 mm/0.16 in											
YC1 lever 	V4NT7YC1UL	0,5	1,80	0,07	0,25	17,8	0,70	15,7 ± 1,0	0,62 ± 0,04	0,4	0,016
	V4NST7YC1UL	0,9	3,20	0,07	0,25	17,8	0,70	15,6 ± 1,2	0,61 ± 0,05	0,4	0,016
	V4NSYC1UL	0,9	3,20	0,07	0,25	17,8	0,70	15,6 ± 1,2	0,61 ± 0,05	0,4	0,016
Width of lever 4.0 mm/0.16 in											

Over travel: Plunger can be depressed flush with housing. The housing should not be used as an end stop.

## Ordering Reference

Type	V4N	
Type of sealing	No digit S	Unsealed Sealed IP67
Terminals	No digit T7	Pre-wired, 0.5m PVC cable (V4NS only) Solder
Circuit	No digit C2 C4	Change-over Normally closed Normally open
Actuators	No digit Y1 YC1	Plunger Plain lever Cam follower
Approvals	UL	UL approval