

# V3S

## Snap-action Microswitches

Miniature

### V3S

Characteristics	<ul style="list-style-type: none"> <li>■ IEC IP67 sealed mechanism</li> <li>■ Industry standard miniature switch mounting hole positions</li> <li>■ Pre-wired - horizontal leads</li> <li>■ UL, CSA and ENEC approved</li> </ul>
Rating	Up to 250 VAC, 5 A
Dimensions (mm)	31.7 × 24.2 × 10.5
Actuator	Plunger, plain lever, 2 roller levers
Approvals	UL and CSA, ENEC



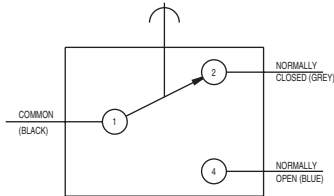
### Preferred Range

Ordering Reference	Actuating Force (N) (ozf)		Sealing	Operating pos. (mm) (in)		Terminal	Circuit	Actuator	Contacts	Electrical rating
V3SUL	3.9	14.00	IP67	14.5	0.57	Pre-wired	CO	Plunger	Silver	Up to 250 VAC, 5 A
V3SYRUL	3.9	14.00	IP67	20.4	0.80	Pre-wired	CO	Roller lever - short	Silver	Up to 250 VAC, 5 A
V3SYR1UL	2.3	8.26	IP67	22.0	0.86	Pre-wired	CO	Roller lever - long	Silver	Up to 250 VAC, 5 A
V3SY1UL	1.7	7.50	IP67	14.9	0.55	Pre-wired	CO	Plain lever	Silver	Up to 250 VAC, 5 A

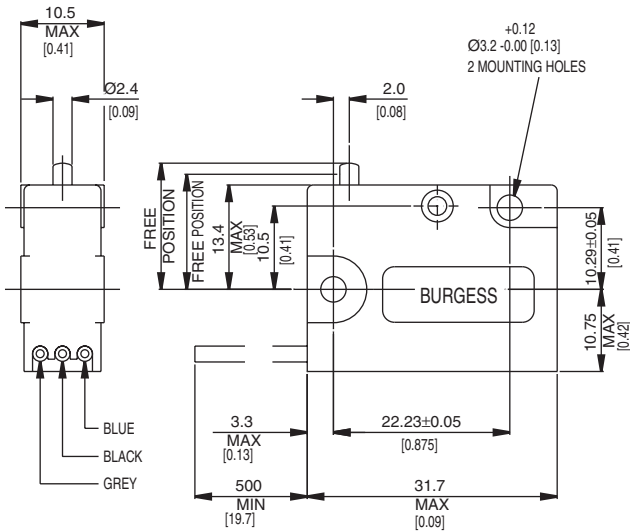
## Specifications

Housing	Glass fibre reinforced nylon
Plunger	Acetal (lever types), stainless steel (plunger version)
Mechanism	Snap-action, single pole
Functions	Change-over
Cowl	Silicone rubber
Contacts	Silver
Terminals °C	Pre-wired
Temperature range	-40°C to +85°C
Mechanical life	10 <sup>6</sup> cycles minimum, impact-free actuation
Protection	IP67 - NEMA Type 6 (enclosure)
Mounting	Side mounting
Actuators	Plain lever - stainless steel, Roller levers - stainless steel, nylon roller

Circuit diagram



Dimensions


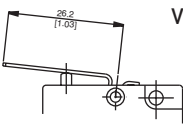
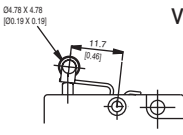
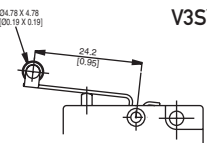


## Recommended maximum electrical ratings

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

# V3S

## 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 	V3SUL	3,90	14,0	1,10	4,00	15,9	0,63	14,5 ± 0,5	0,57 ± 0,02	0,4	0,016
Plain lever 	V3SY1UL	3,90	14,0	1,10	4,00	22,1	0,87	20,4 ± 0,64	0,8 ± 0,025	0,4	0,016
Roller lever - short 	V3SYRUL	2,30	8,3	0,40	1,44	24,8	0,98	22,0 ± 1,2	0,86 ± 0,047	1,00	0,040
Roller lever - long 	V3SYR1UL	1,65	7,5	0,42	1,50	18,1	0,71	14,9 ± 0,10	0,55 ± 0,039	1,00	0,040

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

## Ordering Reference

Type V3S

Actuators	No digit	Plain plunger
	YR	Roller lever - short
	YR1	Roller lever - long
	Y1	Plain lever
Approvals	UL	UL, CSA and ENEC