

Snap-action Microswitches – Miniature V3S

V3S

- Characteristics
- IEC IP67 sealed mechanism
 - Industry standard miniature switch mounting hole positions
 - Pre-wired - horizontal leads
 - UL, CSA and ENEC approved

Rating Up to 250 VAC, 5 A

Dimensions (mm) 31.7 x 24.2 x 10.5

Actuator Plunger, plain lever, 2 roller levers

Approvals UL and CSA, ENEC



Preferred Product Range

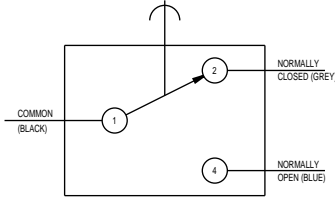
Ordering Reference	Actuating Force (N)	Actuating Force (oz)	Sealing	Operating position (mm) (in)		Terminal	Circuit	Actuator	Contacts	Electrical rating
V3SUL	3.9	14.00	IP67	14.5	0.57	Pre-wired	CO	Plunger	Silver	Up to 250 VAC, 5 A
V3SYRUL	3.9	14.00	IP67	20.4	0.80	Pre-wired	CO	Roller lever - short	Silver	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

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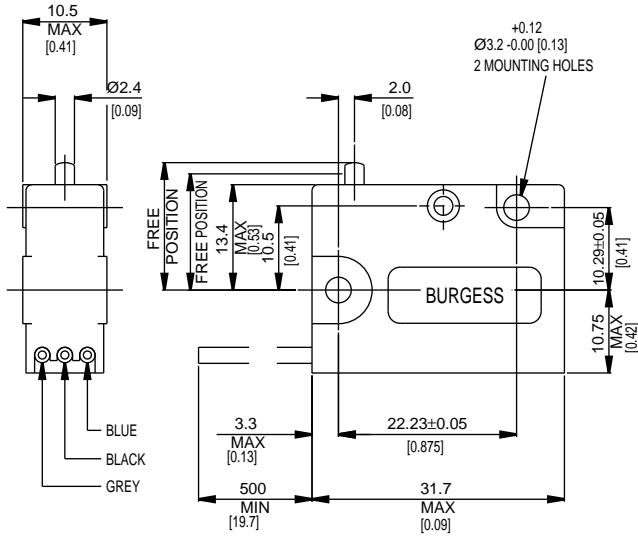
Specifications

Housing	Glass fiber 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 ⁶ 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 mm [in]

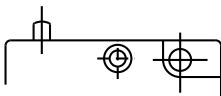
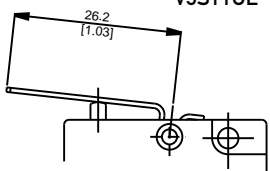
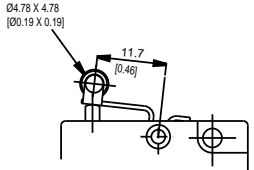
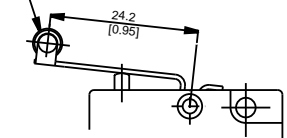


Recommended Maximum Electrical Ratings

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)

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Operating Characteristics

Actuator	Reference	Actuating Force Maximum		Release Force Minimum		Free Position Maximum		Operating Position		Movement Differential Maximum	
		(N)	(oz)	(N)	(oz)	(mm)	(in)	(mm)	(in)	(mm)	(in)
Plunger mm [in]	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 mm [in]	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 mm [in]	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 mm [in]	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 – How to Build a Part Number

Type	V3S	
Actuators	No digit	Plain plunger
	YR	Roller lever - short
	YR1	Roller lever - long
	Y1	Plain lever
Approvals	UL	UL, CSA and ENEC