

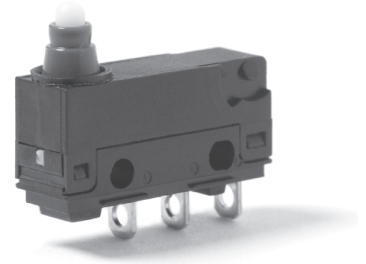
V4L

Snap-action Microswitches

Subminiature

V4L

Characteristics	<ul style="list-style-type: none"> ■ Long overtravel of 2.2 mm minimum ■ Available sealed to IP6K7 ■ Prewired option available
Rating	250 VAC, 5 A
Dimensions (mm)	20 × 11 × 6,4
Actuator	Plain lever, Ice break lever
Approvals	ENEC



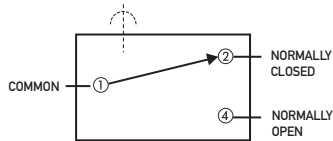
Preferred Range

Ordering Reference	Actuating Force (N) (ozf)		Sealing	Operating pos. (mm)	Terminal	Circuit	Actuator	Contacts	Electrical rating
V4LS	2.5	9.0	IP67	11,7 ± 0,4	Cable 500 mm	CO	Plunger	Fine silver	250 VAC, 5 A
V4LSA1	2.5	9.0	IP67	14,5 ± 0,8	Cable 500 mm	CO	Plain lever	Fine silver	250 VAC, 5 A
V4LSA2	2.0		IP67	16,5 ± 1,0	Cable 500 mm	CO	Plain lever	Fine silver	250 VAC, 5 A
V4LST7	2.5	9.0	IP67	11,7 ± 0,4	Solder	CO	Plunger	Fine silver	250 VAC, 5 A
V4LST7A1	2.5		IP67	14,5 ± 0,8	Solder	CO	Plain lever	Fine silver	250 VAC, 5 A
V4LST7A2	2.0		IP67	14,6 ± 1,0	Solder	CO	Plain lever	Fine silver	250 VAC, 5 A
V4LT7	2.4	8.6	no digit	11,7 ± 0,4	Solder	CO	Plunger	Fine silver	250 VAC, 5 A

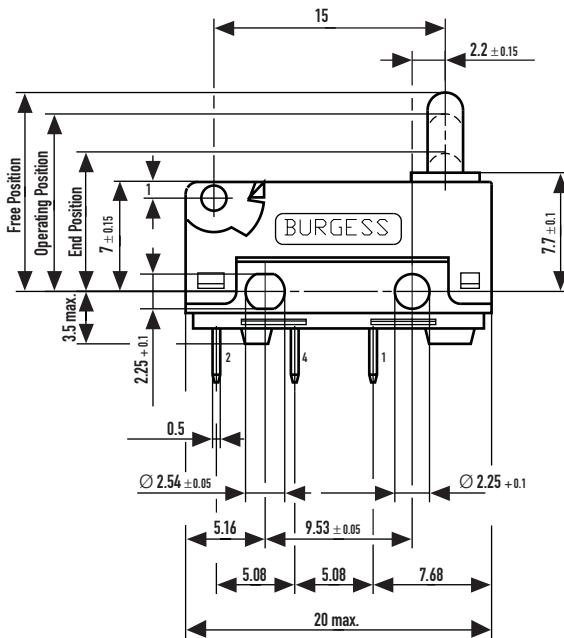
Specifications

Housing	Glass fibre reinforced polyamide (PA 6.6)
Plunger	Polyacetal (POM)
Mechanism	Snap-action coil spring mechanism with stainless steel spring. Change-over, normally closed or normally open
Contact carrier	Brass. Moving contact beryllium-copper
Contacts	Fine silver or gold crosspoint
Terminals	V4L – solder tags (gold flashed). V4LS – PVC covered leads 0.5 m long
Temperature range °C	-40°C to +85°C
Mechanical life	V4L 2 × 10 ⁶ cycles/min., V4LS 2 × 10 ⁵ cycles/min. (impact free actuation)
Protection	V4L series IP40, V4LS series IP6K7, with encapsulated terminals
Mounting	Side mounting to a flat surface.
Actuators	Plain lever, Simulated roller, Cam follower, Roller lever, Ice break lever, Spring (ice break) lever
Cowl	Silicon elastomer

Circuit diagram



Dimensions

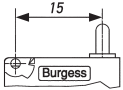
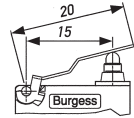
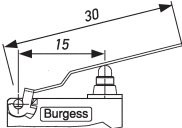
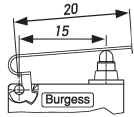


Recommended maximum electrical ratings

Voltage (VAC)	Resistive load (A) (Ag Contact)	Incandescent lamp load (A) (Ni1 Contact)	Inductive load (A) (Ag Contact)	Voltage (VDC) up to	Resistive load (A) (Ag Contact)	Incandescent lamp load (A) (Ni1 Contact)	Inductive load (A) (Ag Contact)
125	5	2	2	30	5	2	3
250	5	2	2	50	1	0.4	1
				75	0.75	0.3	0.75
				125	0.5	0.2	0.03
				250	0.25	0.1	0.03

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

Operating Characteristics

Actuator	Reference	Actuating Force Maximum		Release Force Minimum		Free Position Maximum		Operating Position		Movement Differential Maximum		Total overtravel Position		Overtravel Minimum	
		(N)	(ozf)	(N)	(ozf)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)	(mm)	(in)
 Plunger	V4LT7	2,4	8,60	0,4	1,44	12,9	0,507	11,7 ± 0,4	0,46 ± 0,012	0,9	0,023	9,2	0,36	2,2	0,09
	V4LST7	2,5	9,00	0,5	1,78	12,9	0,507	11,7 ± 0,4	0,46 ± 0,012	0,9	0,023	9,2	0,36	2,2	0,09
 A1 Lever	V4L...	2,4	8,60	0,4	1,44	14,5	0,57	12,6 ± 0,8	0,59 ± 0,03	1,0	0,04	9,6	0,38	2,2	0,09
	V4LS...	2,5	9,00	0,5	1,78	14,5	0,57	12,6 ± 0,8	0,59 ± 0,03	1,0	0,04	9,6	0,38	2,2	0,09
Width of lever 4.0 mm/0.16 in															
 A2 Lever	V4L...	1,5	5,70	0,3	1,08	16,5	0,65	13,5 ± 1,0	0,53 ± 0,04	1,3	0,05	9,6	0,38	2,9	1,1
	V4LS...	2	7,20	0,3	1,08	16,5	0,65	13,5 ± 1,0	0,53 ± 0,04	1,3	0,05	9,6	0,38	2,9	1,1
Width of lever 4.0 mm/0.16 in															
 F Lever	V4L...	For positions and forces of this actuator please contact Saia-Burgess													
	V4LS...														
Width of lever 4.0 mm/0.16 in															

Ordering Reference

Type	V4L	
Type of sealing	No symbol Sealed IP67	Unsealed
Terminals	No symbol Solder T7 PCB T8	Pre-wired 500 mm with cable box (V4LS only) 2.95 × 0.5 × 3.55 long 0.8 × 0.5 × 4.0 long
Circuit	No symbol Normally closed C2 Normally open C4	Change over
Actuators	No symbol Plain lever A1 Plain lever A2	Without lever 20.0 mm, fitted at the end nearest plunger 25.0 mm, fitted at the end nearest plunger
Contact Material	No symbol Gold plate on silver (GP) G Gold alloy on silver palladium crosspoint (AUX) X	Fine silver
Approvals	No symbol ENEC approval only EN	Without approval