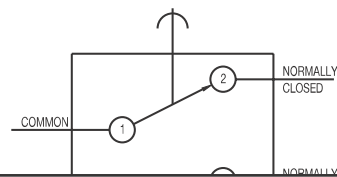


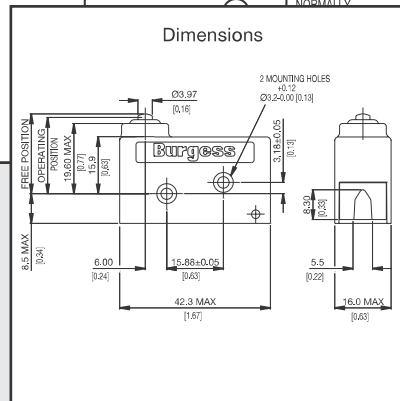
Metal housed Switches



Circuit diagram



Dimensions



V9N

V9N

| | |
|-----------------|--|
| Characteristics | <ul style="list-style-type: none"> ■ sealed (IP67) ■ metal housed ■ screw terminals or flying leads ■ pre-wired option |
| Rating | 250 VAC, 10 A max. |
| Dimensions (mm) | 42 × 24.5 × 16 |
| Actuator | <ul style="list-style-type: none"> ■ plunger ■ plain levers ■ reverse action lever ■ roller lever |
| Approvals | UL and CSA |



Preferred Range

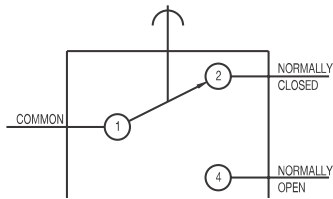
| Ordering Reference | Actuating Force (N) | Actuating Force (ozf) | Sealing | Operating pos. (mm) | Operating pos. (in) | Terminal | Circuit | Actuator | Contacts | Electrical rating |
|--------------------|---------------------|-----------------------|---------|---------------------|---------------------|----------|---------|----------------------|----------|---------------------|
| V9N | 5,5 | 19,80 | IP67 | 21,3 | 0,840 | M3 screw | CO | Plunger | Ag | Up to 250 VAC, 10 A |
| V9NLR | 6,0 | 21,60 | IP67 | 27,5 | 1,080 | M3 screw | CO | Roller lever - short | Ag | Up to 250 VAC, 10 A |
| V9NLR1 | 4,5 | 16,20 | IP67 | 34,5 | 1,360 | M3 screw | CO | Roller lever - long | Ag | Up to 250 VAC, 10 A |
| V9NL | 3,0 | 10,80 | IP67 | 24,7 | 0,970 | M3 screw | CO | Plain lever | Ag | Up to 250 VAC, 10 A |

Metal housed

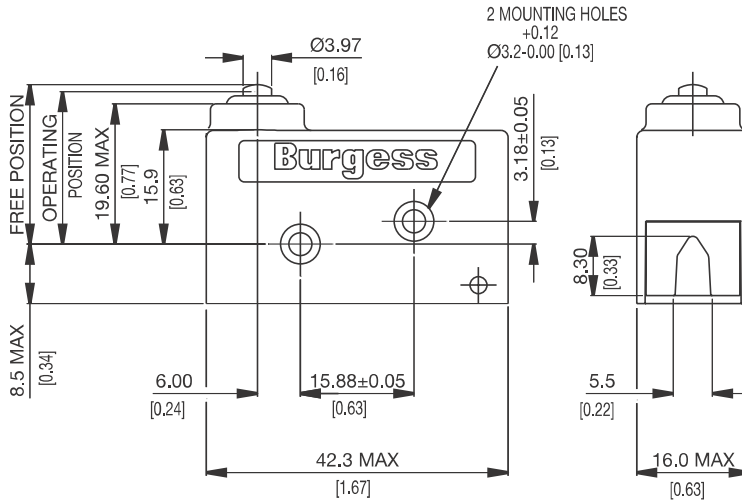
Specifications

| | |
|-------------------|---|
| Housing | Zinc diecasting |
| Plunger | Acetal |
| Mechanism | Snap-action, single pole |
| Functions | Change-over |
| Cowl | Silicon rubber |
| Contacts | Silver |
| Terminals | M3 screws with captive washers or pre-wired |
| Temperature range | -40°C to +125°C, switch only -10°C to +85°C pre-wired and roller levers |
| Mechanical life | 10 ⁶ cycles minimum, impact-free actuation |
| Protection | IP67 (enclosure) |
| Mounting | Side mounting |
| Actuators | Plain levers - stainless steel, roller levers - stainless steel, nylon roller |

Circuit diagram




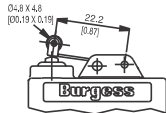
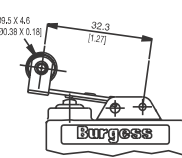
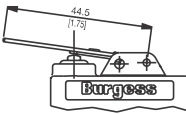
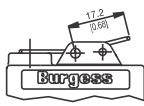
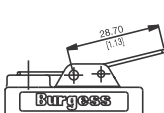
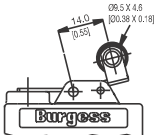
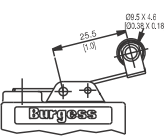
Dimensions



Recommended maximum electrical ratings

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

Operating Characteristics

| Actuator | Reference | Actuating Force | | Release Force | | Free Position | | Operating Position | | Movement Differential | | Over travel Maximum | |
|--|-----------|-----------------|-------|---------------|-------|---------------|------|--------------------|--------------|-----------------------|-------|---------------------|-------|
| | | (N) | (ozf) | (N) | (ozf) | (mm) | (in) | (mm) | (in) | (mm) | (in) | (mm) | (in) |
| Plunger  | V9N | 5,5 | 19,8 | 1,0 | 3,6 | 22,6 | 0,89 | 21,3 ± 0,3 | 0,84 ± 0,012 | 0,35 | 0,014 | * | |
| Roller lever - short  | V9NLR | 6,0 | 21,6 | 1,3 | 4,7 | 31,0 | 1,22 | 27,5 ± 0,5 | 1,08 ± 0,02 | 0,35 | 0,014 | * | |
| Roller lever - long  | V9NLR1 | 4,5 | 16,2 | 0,8 | 2,9 | 39,0 | 1,54 | 34,5 ± 0,7 | 1,36 ± 0,028 | 0,60 | 0,024 | * | |
| Plain lever  | V9NLR | 3,0 | 10,8 | 0,6 | 2,1 | 31,0 | 1,22 | 24,7 ± 0,10 | 0,97 ± 0,039 | 0,70 | 0,028 | * | |
| Reverse action lever - short  | V9NLM | 7,5 | 27,0 | 1,5 | 5,4 | 26,0 | 1,02 | 22,4 ± 0,5 | 0,88 ± 0,02 | 0,50 | 0,020 | 3,50 | 0,137 |
| Reverse action lever - long  | V9NLM1 | 4,5 | 16,2 | 1,0 | 3,6 | 29,0 | 1,14 | 23,6 ± 0,10 | 0,93 ± 0,039 | 1,20 | 0,047 | 6,00 | 0,236 |
| Reverse action roller lever - short  | V9NLMR | 9,5 | 34,2 | 1,5 | 5,4 | 36,0 | 1,42 | 32,9 ± 0,5 | 1,295 ± 0,02 | 0,45 | 0,018 | 2,00 | 0,079 |
| Reverse action roller lever - long  | V9NLMR1 | 5,0 | 18,0 | 1,0 | 3,6 | 39,5 | 1,56 | 34,0 ± 0,10 | 1,34 ± 0,039 | 1,00 | 0,039 | 5,50 | 0,216 |

Operating characteristics are specified from lower mounting hole

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

Ordering Reference

| | | |
|--------------------------------|---|-------------------------------|
| Basic typ | V9N | Example: V9N ₁ L H |
| Actuators | No symbol, without lever L Plain lever 44,5 mm LR Roller lever 22.2 mm LR1 Roller lever 32.3 mm M Reverse action lever 187.2 mm ML Reverse action lever 28.7 mm MR Reverse action roller lever 14.0 mm MLR Reverse action roller lever 25.5 mm | |
| Terminals | No symbol, unwired H Horizontal pre-wired cable V Vertical pre-wired cable | |
| Pre-wired with Terminals H + V | No symbol, 1 m cable | |
| Special Features | /□□□□ Burgess specialise in customer specific solutions. Additional product variants are available or can be provided. If your requirements cannot be satisfied from the options listed, please contact us. | |