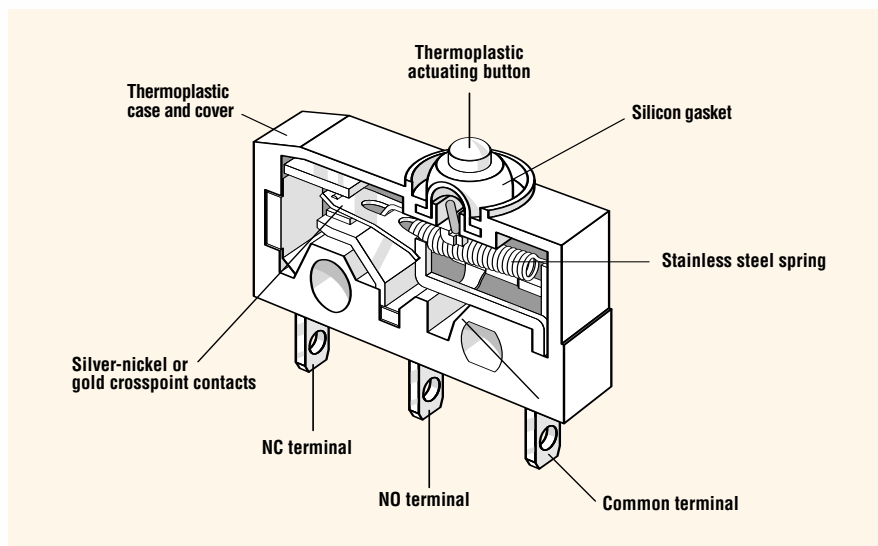


SUBMINIATURE — SEALED

DC Series

Features

- Enclosed switch complying with IP 6K7
- Silicon-free version available
- Models available for operating temperatures up to 120°C
- Rated for currents up to 10 amp at 250VAC
- Range of auxiliary actuators available (can also be retrofitted)
- Various contact materials available, depending on application
- Mechanical life: min. 1 x 10⁶ operations
- Wide variety of connection options



Electrical Ratings

| Switch Series | EN61058 Rating | UL1054 Rating | Electrical Life at Rated Load | |
|---------------|-----------------|----------------------------------|-----------------------------------|-----------------------------------|
| | | | According to EN (Min. Operations) | According to UL (Min. Operations) |
| DC1 | 6A, 250V~ | 5A, 125/250VAC; 1A, 48VDC | 10,000 | 6,000 |
| DC2 | 10(1.5)A, 250V~ | 10.1A, 125/250VAC; 1/4HP, 125VAC | 10,000 | 6,000 |
| DC3 | 0.1A, 250V~ | 0.1A, 125/250VAC | 50,000 | 6,000 |
| DC4 | 3A, 250V~ | 3A, 125/250VAC | 50,000 | 6,000 |

Specifications

Electrical

Temperature Rating: -40° to +85°C / +120°C (without wire leads)
-40° to +85°C / +105°C (with wire leads)

Flammability Rating: UL94V-O (PET, PBT)
UL94HB (POM)

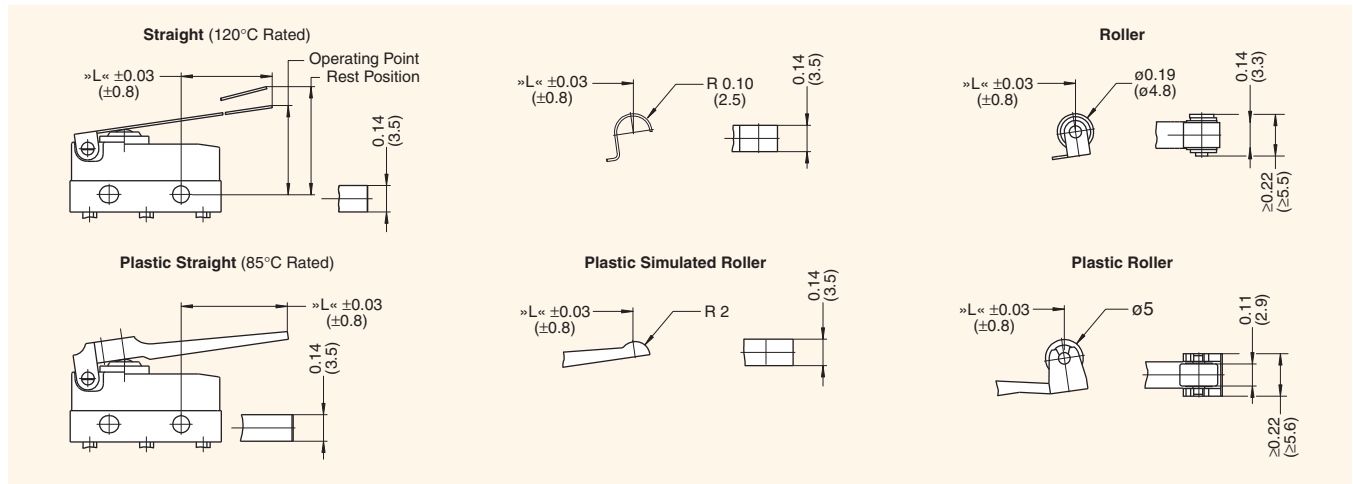
Materials

Case: PET / PBT
 Actuator: POM (T85), PBT (T120)
 Auxiliary Actuator: Stainless Steel or Plastic
 Terminals: Silver-Plated Copper-Zinc
 Contacts: Silver Alloy (DC3 — Gold Crosspoint)

PBT = Polybutyleneterephthalate • PET = Polyethyleneterephthalate • POM = Polyacetal



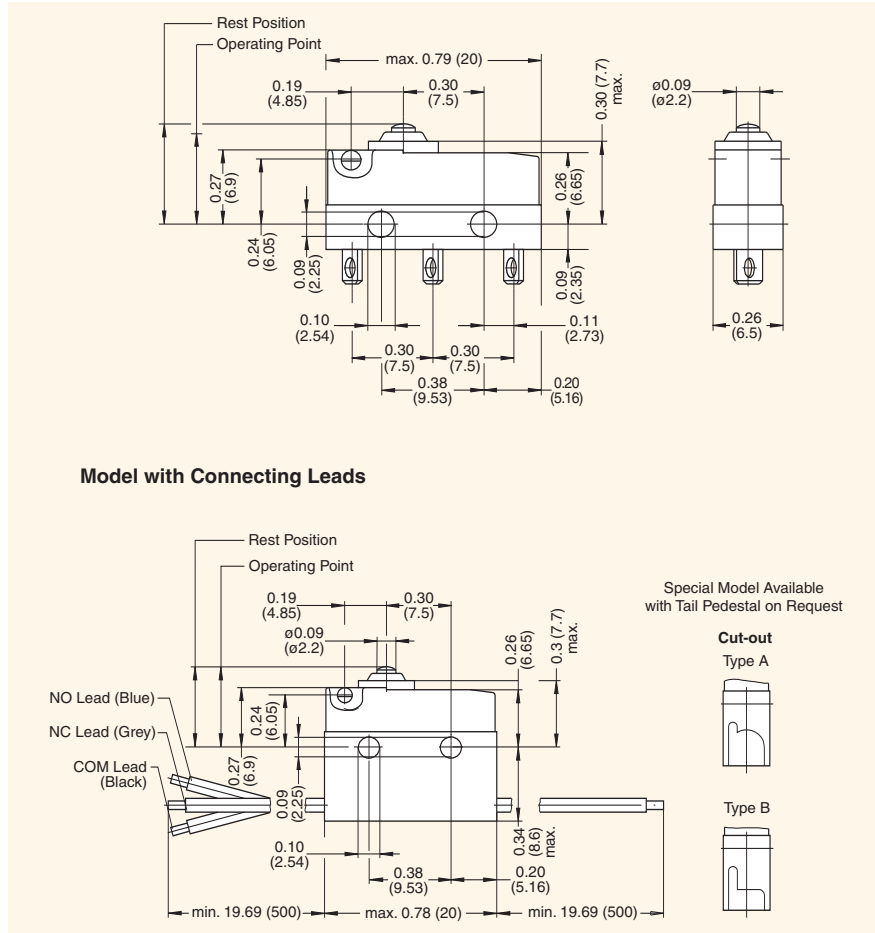
Auxiliary Actuators inches (mm)



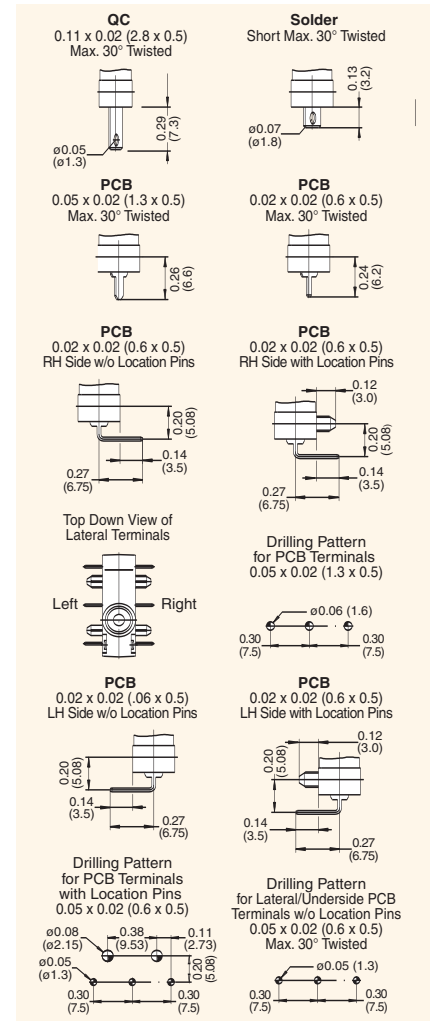
Actuator Specifications

| Actuator Code | Switch Type | Maximum Operating Force (cN) | | Maximum Pre-Travel inches (mm) | | Operating Point inches (mm) | | Minimum Over-Travel inches (mm) | Max. Movement Differential inches (mm) | | Max. Rest Position inches (mm) | Actuation Length inches (mm) |
|---------------|-------------|---|-----|--------------------------------|---------------|-----------------------------|-------------------------|---------------------------------|--|-----------------|--------------------------------|------------------------------|
| | | DC1, DC3, DC4 | DC2 | DC1, DC3, DC4 | DC2 | DC1, DC3, DC4 | DC2 | | DC1, DC3, DC4 | DC2 | | |
| AA | | 200 | 340 | 0.04 (1.0) | 0.04 (1.0) | 0.33±0.01 (8.4±0.3) | 0.33±0.01 (8.4±0.3) | 0.02 (0.6) | 0.004 (0.10) | 0.004 (0.10) | 0.37 (9.3) | — |
| LB | | 80 | 150 | 0.18 (4.5) | 0.20 (5.0) | 0.42±0.05 (10.7±1.3) | 0.42±0.06 (10.7±1.6) | 0.06 (1.5) | 0.02 (0.5) | 0.03 (0.7) | 0.55 (14.0) | 0.189 (4.8) |
| LC | | 70 | 120 | 0.20 (5.0) | 0.22 (5.5) | 0.44±0.06 (11.1±1.5) | 0.44±0.07 (11.1±1.8) | 0.06 (1.5) | 0.02 (0.6) | 0.04 (1.0) | 0.59 (15.0) | 0.276 (7.0) |
| LD | | <i>forces and travel available upon request</i> | | | | | | | | | | 1.654 (42.0) |
| SB | | 90 | 160 | 0.18 (4.5) | 0.20 (5.0) | 0.63±0.05 (16.0±1.3) | 0.63±0.06 (16.0±1.6) | 0.06 (1.5) | 0.02 (0.5) | 0.03 (0.7) | 0.75 (19.0) | 0.098 (2.5) |
| SC | | 80 | 130 | 0.20 (5.0) | 0.22 (5.5) | 0.65±0.06 (16.4±1.5) | 0.65±0.07 (16.4±1.8) | 0.06 (1.5) | 0.02 (0.6) | 0.04 (1.0) | 0.79 (20.0) | 0.185 (4.7) |
| SD | | <i>forces and travel available upon request</i> | | | | | | | | | | 1.563 (39.7) |
| RB | | 90 | 160 | 0.18 (4.5) | 0.20 (5.0) | 0.62±0.05 (15.8±1.3) | 0.62±0.06 (15.8±1.6) | 0.06 (1.5) | 0.02 (0.5) | 0.03 (0.7) | 0.75 (19.0) | 0.098 (2.5) |
| RC | | 80 | 130 | 0.20 (5.0) | 0.22 (5.5) | 0.64±0.06 (16.2±1.5) | 0.64±0.07 (16.2±1.8) | 0.06 (1.5) | 0.02 (0.6) | 0.04 (1.0) | 0.79 (20.0) | 0.185 (4.7) |
| RD | | <i>forces and travel available upon request</i> | | | | | | | | | | 1.563 (39.7) |
| WB | | 68 | 115 | 0.18 (4.5) | 0.18 (4.5) | 0.44±0.06 (11.1±1.5) | 0.44±0.06 (11.1±1.5) | 0.08 (2.0) | 0.02 (0.6) | 0.02 (0.6) | 0.59 (15.0) | 0.276 (7.0) |
| WC | | 50 | 85 | 0.24 (6.0) | 0.24 (6.0) | 0.48±0.07 (12.2±1.8) | 0.48±0.07 (12.2±1.8) | 0.12 (3.0) | 0.03 (0.8) | 0.03 (0.8) | 0.67 (17.0) | 0.551 (14.0) |
| VB | | 73 | 125 | 0.18 (4.5) | 0.18 (4.5) | 0.47±0.06 (11.9±1.4) | 0.47±0.06 (11.9±1.4) | 0.08 (2.0) | 0.02 (0.6) | 0.02 (0.6) | 0.59 (15.0) | 0.220 (5.6) |
| ZB | | 73 | 125 | 0.18 (4.5) | 0.18 (4.5) | 0.63±0.06 (16.0±1.4) | 0.63±0.06 (16.0±1.4) | 0.06 (1.5) | 0.02 (0.6) | 0.02 (0.6) | 0.75 (19.0) | 0.205 (5.2) |

Dimensions inches (mm)



Terminal Options inches (mm)



Ordering Information

| DC | | 3 | |
|----------------|------------------------------------|-----------------|--|
| Series/Prefix | | | |
| Code | UL Rating | EN 61058 Rating | |
| 1 | 5A, 125/250VAC 1A 48VDC | 6A, 250V~ | |
| 2 | 10.1A, 125/250VAC 1/4HP, 125VAC | 10(1.5)A, 250V~ | |
| 3 | 0.1A, 125/250VAC 0.1A 30VDC** | 0.1A, 250V~ | |
| 4 ⁴ | 3A, 250VAC 1A 48VDC | 3A, 250V~ | |

| Contact Configuration | | | |
|----------------------------|---------|-----------------------|---------|
| +105°/120°C Operating Temp | | +85°C Operating Temp* | |
| Code | | Code | |
| A | SPST NO | E | SPST NO |
| B | SPST NC | F | SPST NC |
| C | SPDT | G | SPDT |

| G B | | 3 L | |
|--------------------------------------|-----------------------------|----------|--|
| Code Terminal Type inches (mm) Notes | | | |
| A | Short Solder | 1 | |
| B | 0.02" (0.5') Leads (No UL) | 5, 9 | |
| C | 0.03" (0.75') Leads (No UL) | 5 | |
| H | 0.05 x 0.02 (1.3 x 0.5) PCB | 1 | |
| K | 0.02 x 0.02 (0.6 x 0.5) PCB | 1, 7 | |
| L | 0.11 x 0.02 (2.8 x 0.5) QC | 1 | |
| N | Without Leads (Type B) | 6 | |
| P | Without Leads (Type A) | 6 | |
| Q | Without Leads (No Cut-Out) | 8 | |
| S | Welding | 1 | |
| T | Leads, 20 AWG | 3, 11 | |
| U | Leads, 22AWG | 9, 11 | |
| Non-European Versions | | | |
| D | Leads 18 AWG (UL Only) | 5, 8, 10 | |
| E | Leads 16 AWG (UL Only) | 5 | |
| M | Leads 20 AWG (UL Only) | 3, 5 | |

| 3 L | | C | | | |
|----------------|---------------------|-----------------------------------|-------------|--------------|--------------|
| Code | Actuator Type | Code Actuation Length inches (mm) | | | |
| | | A | B | C | D |
| AA | Button only | — | — | — | — |
| L | Lever | — | 0.189 (4.8) | 0.276 (7.0) | 1.654 (42.0) |
| R | Roller | — | 0.098 (2.5) | 0.185 (4.7) | 1.563 (39.7) |
| S | Simulated Roller | — | 0.098 (2.5) | 0.185 (4.7) | 1.563 (39.7) |
| V ² | Plastic Sim. Roller | — | 0.220 (5.6) | — | — |
| W ² | Plastic Straight | — | 0.276 (7.0) | 0.551 (14.0) | — |
| Z ² | Plastic with Roller | — | 0.205 (5.2) | — | — |

| Code | Terminal Configuration |
|------|--|
| 1 | 30° Twisted |
| 3 | Leads on Actuator Side |
| 4 | Leads on Opposite Side from Actuator |
| 5 | Leads Attached to Underside |
| 6 | PCB Terminals Right-hand Side |
| 7 | PCB Terminals Left-hand Side |
| 8 | PCB Terminals Right-hand Side with Location Pins |
| 9 | PCB Terminals Left-hand Side with Location Pins |

* 85°C versions use plastic levers
** 30VDC UL rating applies only to 120C version

Notes:

Wire leads 500mm min. (approximately 20" long)

- Only available with terminal configuration 1.
- +85°C rated only.
- Only available with DC1, DC3 and DC4.
- Rating code 4 only as lead-version — leads 0.5mm².
- Wire versions only rated to +105°C.
- Only available with terminal configuration 3 or 4.
- Only available with terminal configuration 1, 6, 7, 8 or 9.
- Only available with terminal configuration 5.
- Only available with DC3 and DC4.
- Not available with DC2.
- Not available in North America.