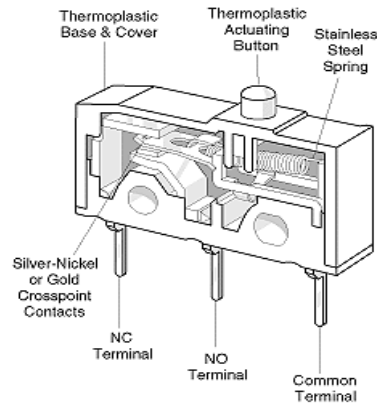


Subminiature Snap Action Switch DB Series



Features

- Precision switch with high repeat accuracy
- Models available for operating temperatures up to 120°C
- Rated for currents up to 10A @ 250VAC
- Range of snap-on auxiliary actuators, two mounting positions
- Wide variety of terminal options available
- International approvals standard
- Mechanical life up to 15×10^6
- RoHS Compliant

| Electrical Ratings and Operating Life | | | | | |
|---------------------------------------|------------------------|------------------|-----------------------------------|------------------|------------------|
| Switch Series | According to EN61058-1 | | According to UL1054 | | Mechanical Life |
| | Nominal Load | Operation cycles | Nominal Load | Operation cycles | |
| DB1 | 6A, 250V~ | 10,000 | 5A 125/250 VAC | 6,000 | 15×10^6 |
| | 0.1A 80 VDC | 10,000 | 1A 48 VDC | 15,000 | |
| DB2 | 10(1.5)A, 250 V~ | 10,000 | 10.1A 125/250 VAC | 6,000 | 10×10^6 |
| | 0.1A 80 VDC | 10,000 | ¼ HP 125 VAC | | |
| DB3 | 0.1A 250 V~ | 50,000 | 0.1A 125/250 VAC | 100,000 | 15×10^6 |
| | 0.1A 80 VDC | 50,000 | | | |
| DB5* | 1A 250 V~ | 50,000 | 1A 125/250 VAC | 6000 | 15×10^6 |
| | | | 1A 48VDC | 15,000 | |
| DB6* | 6A 250 VAC~ | 50,000 | 5A 125/250 VAC | 6,000 | 15×10^6 |
| DB7* | 10(1.5)A 250 V~ | 50,000 | 10.1A 125/250 VAC ¼ HP 125 VAC | 6,000 | 10×10^6 |

*Only 85°C Rated

| Technical Specifications | | Material Specifications | |
|------------------------------|---------------------------------|----------------------------|--|
| Temperature Rating: | -40°C to 85°C or -40°C to 120°C | Base: | PET (UL 94 V-0) |
| Degree of Protection: | IP50 | Cover: | PBT (UL 94 V-0) |
| Contact Gap | < 3mm (μ) | Actuator button: | PBT (UL 94 V-0) 120°C POM (UL 94 HB) 85°C |
| Proof Tracking Index | PTI 175 | Contacts: | AuAgPt (Crosspoint), AgNi, |
| UL File Number: | E314201 | Terminals: | CuZn (silver plated) |
| | | Auxiliary actuator: | Stainless steel or plastic |

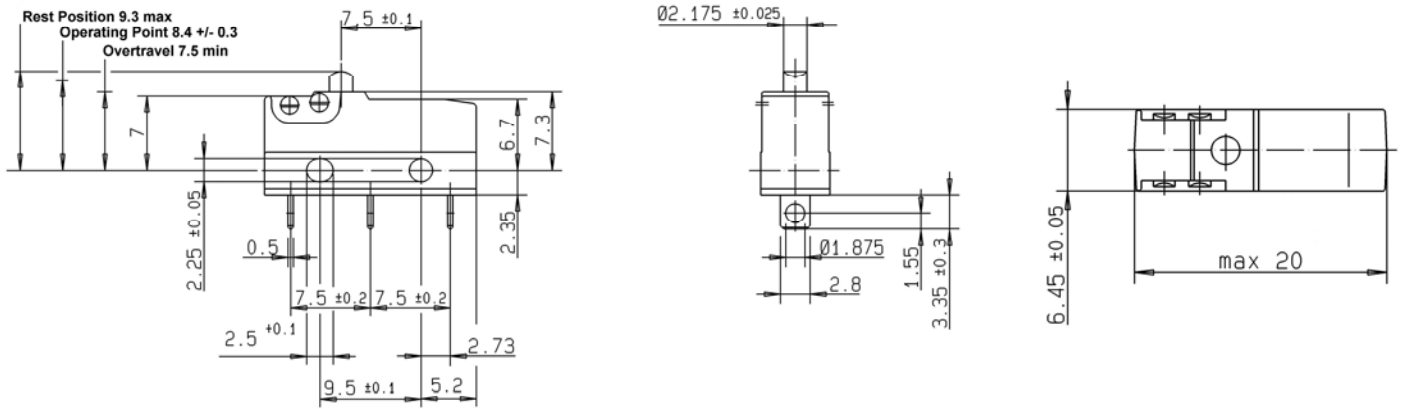
Specifications subject to change



Subminiature Snap Action Switch

DB Series

Dimensions - millimeter



Commonly Stocked Distributor Items / Preferred Part Numbers

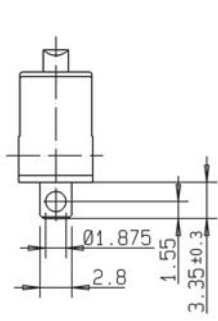
| Item Number | EN Rating | UL Rating | Terminals | Maximum Operating Force (cN) | Maximum Pretravel inches (mm) | Operating Point inches (mm) | Minimum Overtravel inches (mm) | Max. Movement Differential inches (mm) | Actuation Length inches (mm) |
|-------------|------------------|--------------------------------|-------------------------------|------------------------------|-------------------------------|-----------------------------|--------------------------------|--|------------------------------|
| DB1CA1AA | 6A 250VAC | 5A 125/250 VAC | Short Solder | 150 | .039 (1.0) | .318 / .342 (8.1 / 8.7) | .024 (0.6) | .004 (0.1) | -- |
| DB1CA1LB | 6A 250VAC | 5A 125/250 VAC | Short Solder | 60 | .157 (4.0) | .416 / .426 (10.57 / 10.83) | .079 (2.0) | .02 (0.5) | 0.189 (4.8) |
| DB1CA1RB | 6A 250VAC | 5A 125/250 VAC | Short Solder | 65 | .157 (4.0) | .571 / .673 (14.5 / 17.1) | .079 (2.0) | .02 (0.5) | 0.098 (2.5) |
| DB1CB1AA | 6A 250VAC | 5A 125/250 VAC | 2.8 x 0.5mm QC | 150 | .039 (1.0) | .318 / .342 (8.1 / 8.7) | .024 (0.6) | .004 (0.1) | -- |
| DB1CB1LB | 6A 250VAC | 5A 125/250 VAC | 2.8 x 0.5mm QC | 60 | .157 (4.0) | .416 / .426 (10.57 / 10.83) | .079 (2.0) | .02 (0.5) | 0.189 (4.8) |
| DB1CB1RC | 6A 250VAC | 5A 125/250 VAC | 2.8 x 0.5mm QC | 55 | 0.177 (4.5) | .579 / .697 (14.7 / 18.1) | .079 (2.0) | .024 (0.6) | 0.185 (4.7) |
| DB1CC1AA | 6A 250VAC | 5A 125/250 VAC | .051" x .020" 1.3 x 0.5mm PCB | 150 | .039 (1.0) | .318 / .342 (8.1 / 8.7) | .024 (0.6) | .004 (0.1) | -- |
| DB2CA1AA | 10(1.5)A 250 VAC | 10.1A 125/250 VAC 1/4HP 125VAC | Short Solder | 250 | .039 (1.0) | .330 +/- .012 (8.4 +/- 0.3) | .024 (0.6) | .004 (0.1) | -- |
| DB2CA1LB | 10(1.5)A 250 VAC | 10.1A 125/250 VAC 1/4HP 125VAC | Short Solder | 100 | .178 (4.5) | .358 / .484 (9.1 / 12.3) | .059 (1.5) | .028 (0.7) | 0.189 (4.8) |
| DB2CA1RC | 10(1.5)A 250 VAC | 10.1A 125/250 VAC 1/4HP 125VAC | Short Solder | 95 | 0.197 (5.0) | .567 / .710 (14.4 / 18.0) | .059 (1.5) | .039 (1.0) | 0.185 (4.7) |
| DB2CB1AA | 10(1.5)A 250 VAC | 10.1A 125/250 VAC 1/4HP 125VAC | 2.8 x 0.5mm QC | 250 | .039 (1.0) | .318 / .342 (8.1 / 8.7) | .024 (0.6) | .004 (0.1) | -- |
| DB2CB1RC | 10(1.5)A 250 VAC | 10.1A 125/250 VAC 1/4HP 125VAC | 2.8 x 0.5mm QC | 95 | 0.197 (5.0) | .567 / .710 (14.4 / 18.0) | .059 (1.5) | .039 (1.0) | 0.185 (4.7) |
| DB2CC1AA | 10(1.5)A 250 VAC | 10.1A 125/250 VAC 1/4HP 125VAC | .051" x .020" 1.3 x 0.5mm PCB | 250 | .039 (1.0) | .318 / .342 (8.1 / 8.7) | .024 (0.6) | .004 (0.1) | -- |
| DB3CA1AA | 0.1A 250VAC | 0.1A 125/250 VAC | Short Solder | 150 | .039 (1.0) | .330 +/- .012 (8.4 +/- 0.3) | .024 (0.6) | .004 (0.1) | -- |
| DB3CA1LB | 0.1A 250VAC | 0.1A 125/250 VAC | Short Solder | 60 | .157 (4.0) | .416 / .426 (10.57 / 10.83) | .079 (2.0) | .02 (0.5) | 0.189 (4.8) |
| DB3CB1AA | 0.1A 250VAC | 0.1A 125/250 VAC | 2.8 x 0.5mm QC | 150 | .039 (1.0) | .318 / .342 (8.1 / 8.7) | .024 (0.6) | .004 (0.1) | -- |
| DB3CB1LB | 0.1A 250VAC | 0.1A 125/250 VAC | 2.8 x 0.5mm QC | 60 | .157 (4.0) | .416 / .426 (10.57 / 10.83) | .079 (2.0) | .02 (0.5) | 0.189 (4.8) |
| DB3CC1AA | 0.1A 250VAC | 0.1A 125/250 VAC | .051" x .020" 1.3 x 0.5mm PCB | 150 | .039 (1.0) | .318 / .342 (8.1 / 8.7) | .024 (0.6) | .004 (0.1) | -- |

** Additional part numbers available. Contact factory for minimums and availability

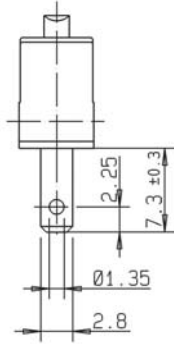
Auxiliary Actuator Options

| Actuator Code | Shape | Actuator Part number | Actuator Code | Shape | Actuator Part number |
|---------------|------------------|----------------------|---------------|--------|----------------------|
| -LB / -MB | Straight | 06141232 | -RB / -TB | Roller | 07140260 |
| -LC / -MC | Straight | 06141233 | -RC / -TC | Roller | 07140261 |
| -LD / -MD | Straight | 06141234 | -RD / -TD | Roller | 07140262 |
| -SB / -JB | Simulated Roller | 06141237 | | | |
| -SC / -JC | Simulated Roller | 06141238 | | | |
| -SD / -JD | Simulated Roller | 06141239 | | | |

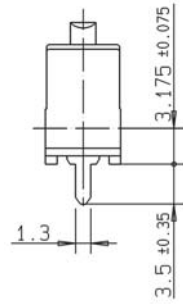
Terminal Options



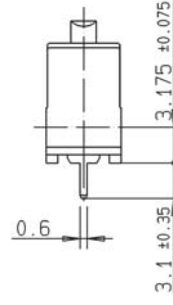
Short Solder Code A1



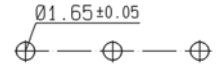
QC Code B1



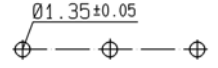
PCB .051" Code C1



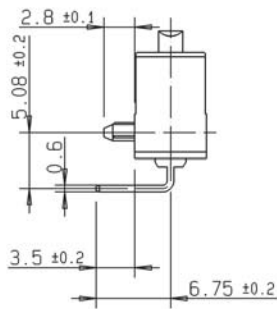
PCB .024" Code D1



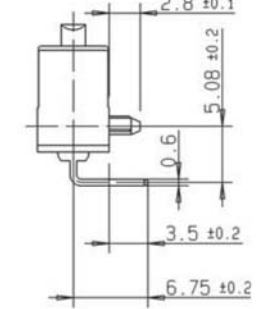
Hole pattern for .051" pcb



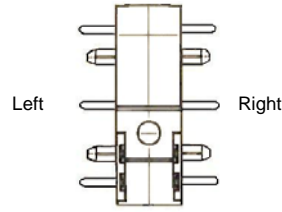
Hole pattern for .024" pcb



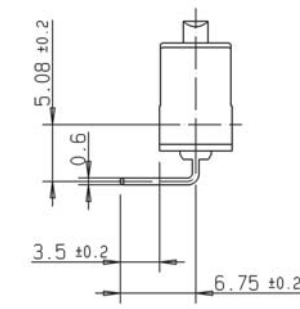
Left side pcb with location pins Code D3



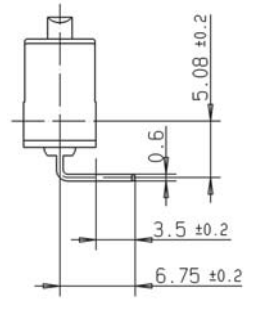
Right side pcb with location pins Code D2



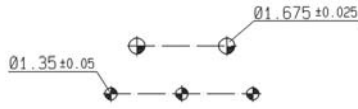
Top Down View of Lateral Terminals



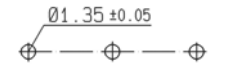
Left side pcb terminals Code D5



Right side pcb terminals Code D4



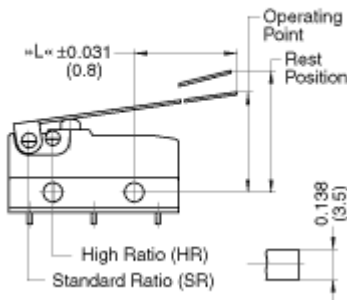
Hole pattern for pcb terminals with location pins



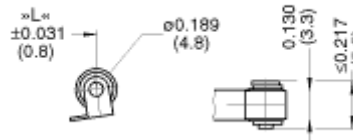
Hole pattern for pcb terminals without location pins

Auxiliary Actuators

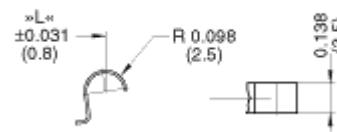
Straight Stainless Steel



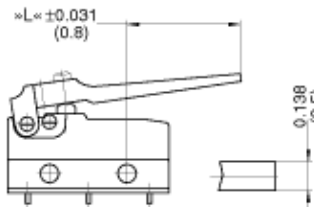
Roller Stainless Steel



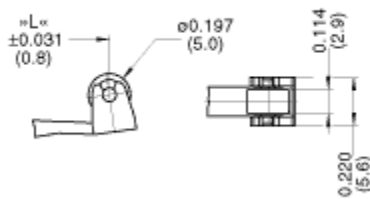
Simulated Roller Stainless Steel



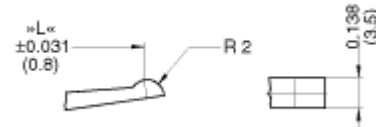
Straight Plastic



Roller Plastic



Simulated Roller Plastic



Ordering Information

| | | |
|-------------|-----------------------------|--------------------------------|
| DB | 3 | C |
| Series | | |
| | | Code |
| | | Contact Configuration |
| | | +85C Operating Temperature |
| | | E SPST NO |
| | | F SPST NC |
| | | G SPDT |
| | | +120C Operating Temperature |
| | | A SPST NO |
| | | B SPST NC |
| | | C SPDT |
| Code | EN 61058 Rating | UL1054 Rating |
| 1 | 6A 250VAC, 0.1A 80VDC | 5A 125/250VAC, 1A 48VDC |
| 2 | 10(1.5)A 250VAC, 0.1A 80VDC | 10.1A 125/250VAC, 1/4HP 125VAC |
| 3 | 0.1A 250VAC, 0.1A 80VDC | 0.1A 125/250VAC |
| 5* | 1A 250VAC | 1A 125/250VAC, 1A 48VDC |
| 6* | 6A 250VAC | 5A 125/250VAC |
| 7* | 10(1.5)A 250VAC | 10.1A 125/250VAC, 1/4HP 125VAC |

* Only 85C rated

| | |
|-------------|--|
| B1 | |
| Code | Terminal Type |
| A1 | Short Solder |
| B1 | 0.110 x 0.020 (2.8 x 0.5) QC Straight |
| C1 | 0.051 x 0.020 (1.3 x 0.5) PCB Straight |
| D1 | 0.024 x 0.020 (0.6 x 0.5) PCB Straight |
| D2 | 0.024 x 0.020 (0.6 x 0.5) PCB RH Side with location pins |
| D3 | 0.024 x 0.020 (0.6 x 0.5) PCB LH Side with location pins |
| D4 | 0.024 x 0.020 (0.6 x 0.5) PCB RH Side |
| D5 | 0.024 x 0.020 (0.6 x 0.5) PCB LH Side |

| | |
|-------------|-----------------------|
| AA | |
| Code | Actuator Type |
| AA | Spherical Head button |
| LB | Short straight lever |
| | 0.189 (4.8) |

* For additional actuator options see Commonly Stocked Items or contact factory

** Do not use plastic levers with 120C rated switches

Contact

Call, fax or visit our Website for more information.

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Technical data relates to product specifications only. Features may differ from those described. Only drawings combined with product specifications shall be deemed binding.

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