

# DH ULTRAMINIATURE SWITCH

## DH ultraminiature switch

- Dimensions only 8.2 mm × 2.7 mm × 6.2 mm
- Designed for low switching currents and voltages
- Available with or without auxiliary actuator
- Solder connection or use lying or standing on a circuit board



## Technical specifications

|                                    |  |
|------------------------------------|--|
| <b>Series</b>                      | DH ❶                                       |
| <b>Contact configuration</b>       | S.P.D.T.                                   |
| <b>Contact gap</b>                 | < 3 mm                                     |
| <b>Switching voltage max.</b>      | 30 VDC                                     |
| <b>Switching current</b>           | 5 to 500 mA DC                             |
| <b>Operating voltage</b>           | Max. 90 cN                                 |
| <b>Total travel</b>                | Approx. 0.85 mm without auxiliary actuator |
| <b>Mechanical life</b>             | > 50,000 operations                        |
| <b>Electrical life (max. load)</b> | > 30,000 operations                        |
| <b>Ambient temperature</b>         | -25°C to +70°C                             |

## Materials

|                             |                            |
|-----------------------------|----------------------------|
| <b>Housing</b>              | PPS (UL 94V-0)             |
| <b>Cover</b>                | PBT (UL 94V-0)             |
| <b>Auxiliary actuator</b>   | PBT (UL 94V-0)             |
| <b>Terminals</b>            | CuZn striped silver-plated |
| <b>Contacts</b>             | AgNi, gal. Au              |
| <b>Degree of protection</b> | IP40                       |
| <b>Switch interior</b>      |                            |

## Electrical rating and operating life ❷

| Electrical rating | Operating life  |            |      |
|-------------------|-----------------|------------|------|
|                   | at nominal load | mechanical | Code |
| 5–500 mA 30 VDC   | 30,000          | 50,000     | 2    |

## Circuitry ❸

| Model    | Code |
|----------|------|
| S.P.D.T. | C    |

## Terminal type ❹

| Model                                   | Code |
|---|------|
| Solder terminal, straight, 1.3 x 3.1 mm | B1   |
| PCB terminal, straight, 0.64 x 3.1 mm   | C4   |
| PCB terminal, RH side, 0.64 x 3.1 mm    | C5   |
| PCB terminal, LH side, 0.64 x 3.1 mm    | C6   |

Generation of order code (example)  
The order code consists of 5 parameters:

| ❶                             | ❷                        | ❸               | ❹   | ❺                               |
|-------------------------------|--------------------------|-----------------|---|---------------------------------|
| Series                        | Electrical rating        | Circuitry       | Terminal type                               | Auxiliary actuator              |
| DH<br>= Ultraminiature switch | 2<br>= 5–500 mA, 30 V DC | C<br>= S.P.D.T. | B1<br>= Solder terminal, straight 1.3 x 3.1 | PA<br>= with auxiliary actuator |

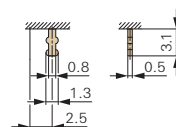
- Not every configurable variant is available for order. Please contact us.
- The final two digits of article numbers on commercial documents refer to the index of the respective drawing.

## Auxiliary actuator ❺

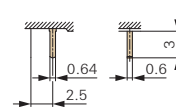
| Auxiliary actuator Ausführung | Operating force max.(cN) | Max. pretravel (mm) | Min. overtravel (mm) | Differential travel max. (mm) | Max. rest position (mm) | Operating point (mm) | Code |
|-------------------------------|--------------------------|---------------------|----------------------|-------------------------------|-------------------------|----------------------|------|
| Without auxiliary actuator    | 90                       | –                   | 0.1                  | 0.07                          | 6.2                     | 5.4 ± 0.15           | AA   |
| With auxiliary actuator       | 50                       | –                   | 0.3                  | 0.6                           | 8.5                     | 6.7 ± 0.5            | PA   |

## Terminals

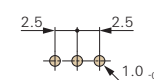
### Solder terminal



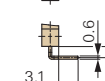
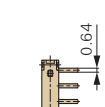
### PCB terminal, straight



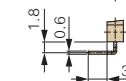
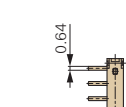
### Drilling pattern



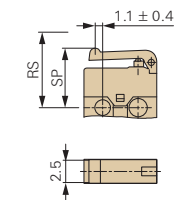
### PCB terminal RH side



### LH side



## Auxiliary actuator (Plastic)



Dimensions in mm

