



1) Reference edge, 2) Sealing ring



### Basic features

|                            |                                  |
|----------------------------|----------------------------------|
| <b>Approval/Conformity</b> | CE<br>CCC<br>WEEE<br>EAC         |
| <b>Basic standard</b>      | IEC 60947-5-1                    |
| <b>Operating principle</b> | 1-4. Switch position: Mechanical |
| <b>Version</b>             | Snap contact                     |

### Display/Operation

|                           |                            |
|---------------------------|----------------------------|
| <b>Function indicator</b> | 1-4. Switch position: None |
|---------------------------|----------------------------|

### Electrical connection

|                        |                                      |
|------------------------|--------------------------------------|
| <b>Connection type</b> | 1-4. Switch position: Screw terminal |
|------------------------|--------------------------------------|

### Electrical data

|                                      |   |
|--------------------------------------|---|
| <b>Continuous current</b>            | 1-4. Switch position: 6 A   |
| <b>Rated operating voltage Ue</b>    | 1-4. Switch position: 250 V AC  |
| <b>Switching function mechanical</b> | Double-interrupting galvanically isolated<br>One NO and one NC<br>Dual changeover |
| <b>Switching rate</b>                | 1-4. Switch position: 300/min   |

### Environmental conditions

|                            |            |
|----------------------------|------------|
| <b>Ambient temperature</b> | -5...85 °C |
| <b>IP rating</b>           | IP67       |

### Functional safety

|                              |  |
|------------------------------|--|
| <b>B10d (EN ISO 13849-1)</b> | BSE 30.0: 30 mil. Switching operations |
|------------------------------|--|

### Material

|   |  |
|---|--|
| <b>Housing material</b>                     | Aluminum, Anodized                             |
| <b>Housing material, surface protection</b> | Anodized                                       |
| <b>Material contacts</b>                    | 1-4. Switch position: Silver, gold plated      |
| <b>Plunger material</b>                     | 1-4. Switch position: Stainless steel (1.4034) |

### Mechanical data

|  |   |
|--|---|
| <b>Approach direction</b>                  | longitudinal, parallel to attachment surface          |
| <b>Approach speed</b>                      | 1-4. Switch position: 120 m/min                       |
| <b>Dimension</b>                           | 120 x 84 x 62 mm                                      |
| <b>Distance cam - reference edge</b>       | 1-4. Switch position: 4.50...5.00 mm                  |
| <b>Flange, feed-through</b>                | 2 threaded exit M20                                   |
| <b>Installation</b>                        | Vertical  |
| <b>Life expectancy mechanical</b>          | 1-4. Switch position: 30 million Switching operations |
| <b>Number of switching positions</b>       | 4x Roller bearing                                     |
| <b>Plunger spacing 1st switch position</b> | 30 mm   |
| <b>Plunger style</b>                       | 1-4th switch position: Roller bearing                 |
| <b>Switch actuation force</b>              | 1-4. Switch position: 20 N                            |
| <b>Switching element</b>                   | 1-4. Switch position: BSE 30.0                        |

Range/Distance

---

Reproducibility  
Switch position spacing

1-4. Switch position:  $\pm 0.01$  mm  
12 mm

## Wiring Diagrams

BSE 30.0

