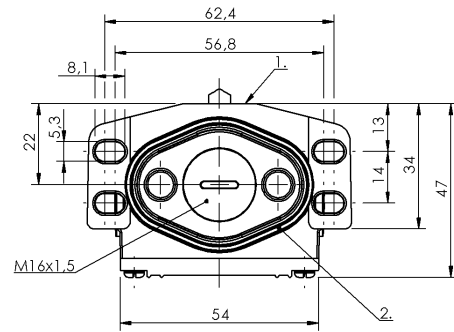
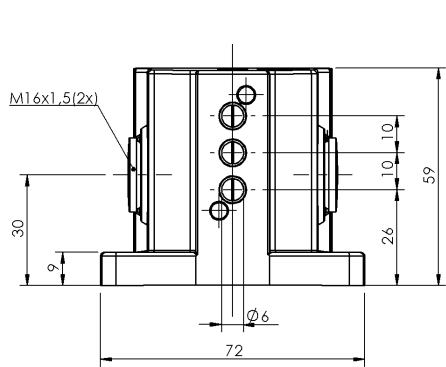


Mechanical Cam Switches  
BNS 819-B03-D10-46-10  
Order Code: BNS01TC

**BALLUFF**



1) Reference edge, 2) Sealing ring



Basic features

|                     |                                  |
|---------------------|----------------------------------|
| Approval/Conformity | CE<br>UKCA<br>CCC<br>WEEE        |
| Basic standard      | IEC 60947-5-1                    |
| Operating principle | 1-3. Switch position: Mechanical |
| Version             | Snap contact                     |

Display/Operation

|                    |                            |
|--------------------|----------------------------|
| Function indicator | 1-3. Switch position: None |
|--------------------|----------------------------|

Electrical connection

|                 |                                         |
|-----------------|-----------------------------------------|
| Connection type | 1-3. Switch position: Solder connection |
|-----------------|-----------------------------------------|

Electrical data

|                               |                                |
|-------------------------------|--------------------------------|
| Continuous current            | 1-3. Switch position: 5 A      |
| Rated operating voltage Ue    | 1-3. Switch position: 250 V AC |
| Switching function mechanical | Single-pin changeover          |
| Switching rate                | 1-3. Switch position: 200/min  |

Environmental conditions

|                     |            |
|---------------------|------------|
| Ambient temperature | -5...85 °C |
| IP rating           | IP67       |

Functional safety

|                       |                                    |
|-----------------------|------------------------------------|
| B10d (EN ISO 13849-1) | BSE 69.1: 10 mil. switching cycles |
|-----------------------|------------------------------------|

Material

|                                      |                                              |
|--------------------------------------|----------------------------------------------|
| Housing material                     | Aluminium, Anodized                          |
| Housing material, surface protection | Anodized                                     |
| Material contacts                    | 1-3. Switch position: Silver                 |
| Plunger material                     | 1-3. Switch position: 1.4034 stainless steel |

Mechanical data

|                                     |                                                    |
|-------------------------------------|----------------------------------------------------|
| Approach direction                  | longitudinal, parallel to attachment surface       |
| Approach speed                      | 1-3. Switch position: 20 m/min                     |
| Dimension                           | 72 x 59 x 47 mm                                    |
| Distance cam - reference edge       | 1-3. Switch position: 2.30...2.80 mm               |
| Flange, feed-through                | 1 threaded exit M16                                |
| Installation                        | Vertical                                           |
| Life expectancy mechanical          | 1-3. Switch position: 10 mil. switching operations |
| Number of switching positions       | 3x Chisel Mechanical                               |
| Plunger spacing 1st switch position | 26 mm                                              |
| Plunger style                       | 1-3rd switch position: Chisel                      |
| Switch actuation force              | 1-3. Switch position: 8 N                          |
| Switching element                   | 1-3. Switch position: BSE 69.1                     |

Range/Distance

|                         |                                |
|-------------------------|--------------------------------|
| Reproducibility         | 1-3. Switch position: ±0.02 mm |
| Switch position spacing | 10 mm                          |

Wiring Diagrams

