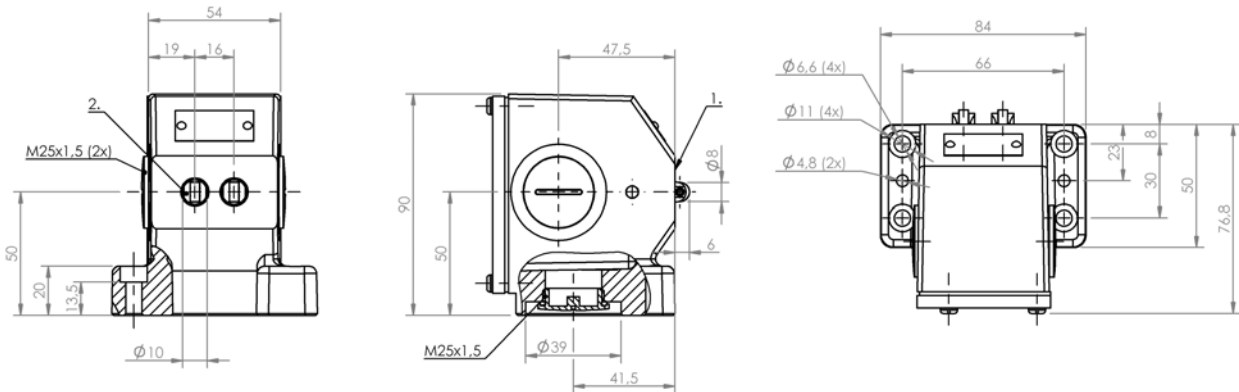


Mechanical Cam Switches  
BNS 819-B02-R16-72-10  
Order Code: BNS04A5

**BALLUFF**



1) Reference edge, 2) 1st pos.



Basic features

|                     |                                  |
|---------------------|----------------------------------|
| Approval/Conformity | CE<br>UKCA<br>CCC<br>WEEE        |
| Basic standard      | IEC 60947-5-1                    |
| Operating principle | 1-2. Switch position: Mechanical |
| Version             | Snap contact                     |

Display/Operation

|                    |                            |
|--------------------|----------------------------|
| Function indicator | 1-2. Switch position: None |
|--------------------|----------------------------|

Electrical connection

|                 |                                      |
|-----------------|--------------------------------------|
| Connection type | 1-2. Switch position: Screw terminal |
|-----------------|--------------------------------------|

Electrical data

|                                        |                                                                                      |
|----------------------------------------|--------------------------------------------------------------------------------------|
| Continuous current                     | 1-2. Switch position: 6 A                                                            |
| Rated operating voltage U <sub>e</sub> | 1-2. Switch position: 250 V AC                                                       |
| Switching function mechanical          | Double-interrupting<br>galvanically isolated<br>One NO and one NC<br>Dual changeover |
| Switching rate                         | 1-2. Switch position: 300/min                                                        |

Environmental conditions

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

Functional safety

|                       |                                    |
|-----------------------|------------------------------------|
| B10d (EN ISO 13849-1) | BSE 30.0: 30 mil. switching cycles |
|-----------------------|------------------------------------|

Material

|                                      |                                              |
|--------------------------------------|----------------------------------------------|
| Housing material                     | Aluminium, Anodized                          |
| Housing material, surface protection | Anodized                                     |
| Material contacts                    | 1-2. Switch position: Silver, gold plated    |
| Plunger material                     | 1-2. Switch position: 1.4034 stainless steel |

Mechanical data

|                               |                                                    |
|-------------------------------|----------------------------------------------------|
| Approach direction            | Vertical to mounting surface                       |
| Approach speed                | 1-2. Switch position: 60 m/min                     |
| Distance cam - reference edge | 1-2. Switch position: 2.50...3.00 mm               |
| Flange, feed-through          | 1 threaded exit M25                                |
| Installation                  | Vertical                                           |
| Life expectancy mechanical    | 1-2. Switch position: 30 mil. switching operations |
| Number of switching positions | 2x Roller Mechanical                               |
| Plunger style                 | 1-2nd switch position: Roller                      |
| Switch actuation force        | 1-2. Switch position: 20 N                         |
| Switching element             | 1-2. Switch position: BSE 30.0                     |

Range/Distance

|                 |                                |
|-----------------|--------------------------------|
| Reproducibility | 1-2. Switch position: ±0.01 mm |
|-----------------|--------------------------------|

Wiring Diagrams

BSE 30.0

