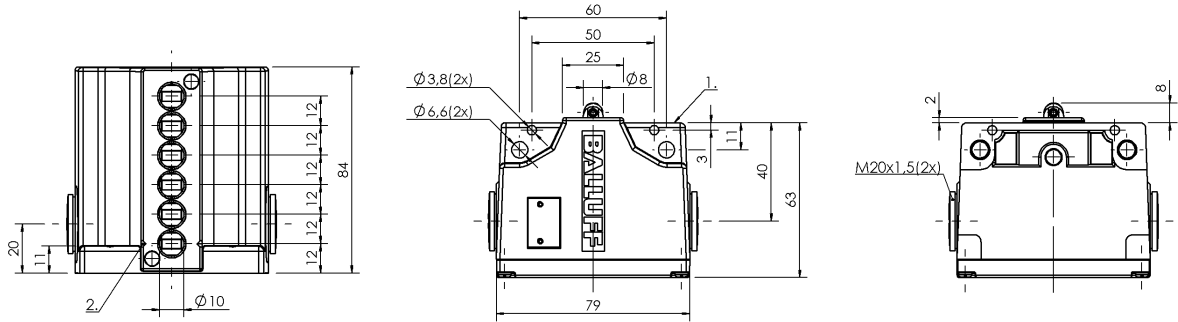


# Mechanical Cam Switches

BNS 813-B06-R12-61-A-10-01

Order Code: BNS02PC

**BALLUFF**



1) Reference edge, 2) Mark. Safety switch position



## Basic features

|                     |                                  |
|---------------------|----------------------------------|
| Approval/Conformity | CE<br>UKCA<br>CCC<br>WEEE        |
| Basic standard      | IEC 60947-5-1                    |
| Operating principle | 1-6. Switch position: Mechanical |
| Version             | Safety EN 60204-1                |

## Material

|                                      |                                                                         |
|--------------------------------------|-------------------------------------------------------------------------|
| Housing material                     | Aluminium, Anodized                                                     |
| Housing material, surface protection | Anodized                                                                |
| Material contacts                    | 1. Switch position: Silver<br>2-6. Switch position: Silver, gold plated |
| Plunger material                     | 1-6. Switch position: 1.4034 stainless steel                            |

## Display/Operation

|                    |                            |
|--------------------|----------------------------|
| Function indicator | 1-6. Switch position: None |
|--------------------|----------------------------|

## Electrical connection

|                 |                                      |
|-----------------|--------------------------------------|
| Connection type | 1-6. Switch position: Screw terminal |
|-----------------|--------------------------------------|

## Electrical data

|                            |                                |
|----------------------------|--------------------------------|
| Continuous current         | 1-6. Switch position: 6 A      |
| Rated operating voltage Ue | 1-6. Switch position: 250 V AC |
| Switching rate             | 1-6. 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<br>BSE 61: 30 mil. switching cycles |
|-----------------------|------------------------------------------------------------------------|

## Mechanical data

|                                     |                                                              |
|-------------------------------------|--------------------------------------------------------------|
| Approach direction                  | longitudinal, parallel to attachment surface                 |
| Approach speed                      | 1-6. Switch position: 60 m/min                               |
| Dimension                           | 79 x 84 x 63 mm                                              |
| Distance cam - reference edge       | 1-6. Switch position: 4.50...5.00 mm                         |
| Flange, feed-through                | None                                                         |
| Installation                        | Vertical                                                     |
| Life expectancy mechanical          | 1-6. Switch position: 30 mil. switching operations           |
| Number of switching positions       | 6x Roller Mechanical                                         |
| Plunger spacing 1st switch position | 12 mm                                                        |
| Plunger style                       | 1-6th switch position: Roller                                |
| Switch actuation force              | 1. Switch position: 15 N<br>2-6. Switch position: 20 N       |
| Switching element                   | 1. Switch position: BSE 61<br>2-6. Switch position: BSE 30.0 |

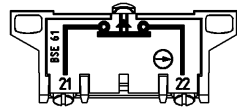
Range/Distance

Reproducibility  
Switch position spacing

1-6. Switch position:  $\pm 0.01$  mm  
12 mm

Wiring Diagrams

BSE 61



BSE 30.0

