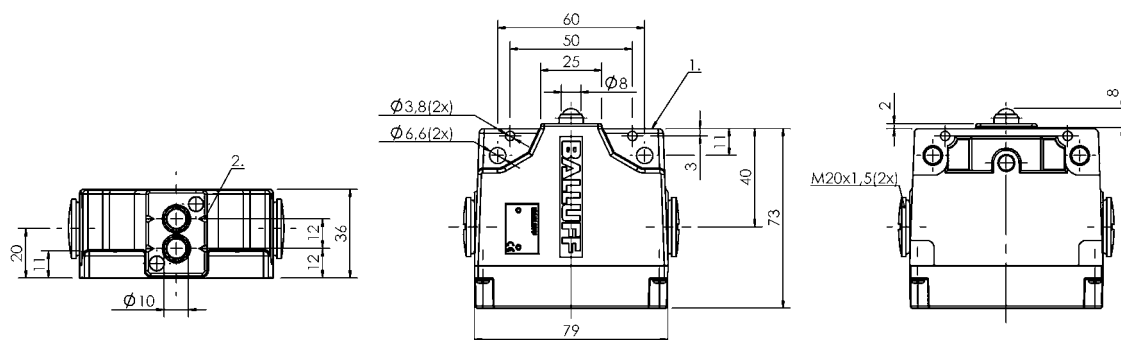




1) Reference edge, 2) Mark. Safety switch position



## Basic features

|                     |                                  |
|---------------------|----------------------------------|
| Approval/Conformity | CE<br>UKCA<br>CCC<br>WEEE        |
| Basic standard      | IEC 60947-5-1                    |
| Operating principle | 1-2. Switch position: Mechanical |
| Version             | Safety EN 60204-1                |

## Display/Operation

Function indicator 1-2. Switch position: None

## Electrical connection

Connection type 1-2. Switch position: Screw terminal

## Electrical data

|                                      |                                                                                                                                                     |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Continuous current</b>            | 1-2. Switch position: 6 A                                                                                                                           |
| <b>Rated operating voltage Ue</b>    | 1-2. Switch position: 250 V AC                                                                                                                      |
| <b>Switching function mechanical</b> | NC forced-opening per VDE<br>Double-interrupting<br>Normally open with snap funct.<br>galvanically isolated<br>One NO and one NC<br>Dual changeover |
| <b>Switching rate</b>                | 1-2. Switch position: 160/min                                                                                                                       |

## Environmental conditions

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

## Functional safety

B10d (EN ISO 13849-1) BSE 85: 1 mil. switching cycles

## Material

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

Mechanical Cam Switches  
BNS 813-B02-K12-61-A-22-02  
Order Code: BNS02F9



Mechanical data

|                               |                                                   |
|-------------------------------|---------------------------------------------------|
| Approach direction            | longitudinal, parallel to attachment surface      |
| Approach speed                | 1-2. Switch position: 10 m/min                    |
| Dimension                     | 79 x 36 x 73 mm                                   |
| Distance cam - reference edge | 1-2. Switch position: 4.50...5.00 mm              |
| Flange, feed-through          | None                                              |
| Installation                  | Vertical                                          |
| Life expectancy mechanical    | 1-2. Switch position: 1 mil. switching operations |

|                                     |                              |
|-------------------------------------|------------------------------|
| Number of switching positions       | 2x Ball Mechanical           |
| Plunger spacing 1st switch position | 12 mm                        |
| Plunger style                       | 1-2nd switch position: Ball  |
| Switch actuation force              | 1-2. Switch position: 30 N   |
| Switching element                   | 1-2. Switch position: BSE 85 |

Range/Distance

|                         |                                     |
|-------------------------|-------------------------------------|
| Reproducibility         | 1-2. Switch position: $\pm 0.02$ mm |
| Switch position spacing | 12 mm                               |

Wiring Diagrams

