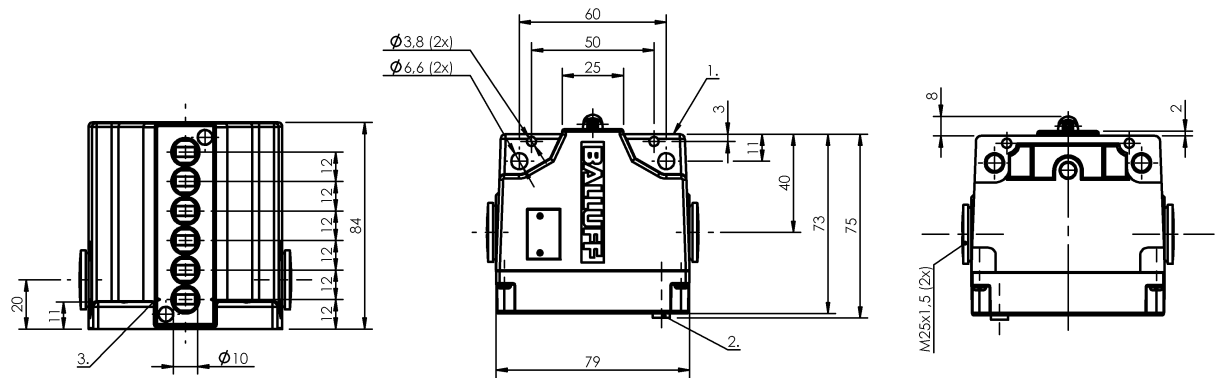




1) Reference edge, 2) Function indicator FC, 3) Mark. Safety switch position



**Display/Operation**

**Function indicator** 1-6. Switch position: FC - 6...24 V

**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. Switch position: 160/min  
2-6. 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 operations  
BSE 85: 1 mil. Switching operations

**General data**

**Approval/Conformity** CE  
WEEE  
**Basic standard** IEC 60947-5-1  
**Operating principle** 1-6. Switch position: Mechanical  
**Version** Safety EN 60204-1

**Material**

**Housing material** Aluminum  
**Housing material, surface protection** Anodized  
**Material contacts** 1. Switch position: Silver  
2-6. Switch position: Silver, gold plated  
**Plunger material** 1-6. Switch position: Stainless steel (1.4034)

Mechanical Cam Switches  
**BNS 813-B06-R12-61-A-20-01-FC**  
Order Code: BNS02PF

**BALLUFF**

**Mechanical data**

|                               |                                                                                                             |
|-------------------------------|-------------------------------------------------------------------------------------------------------------|
| Approach direction            | longitudinal, parallel to attachment surface                                                                |
| Approach speed                | 1-6. Switch position: 60 m/min                                                                              |
| Distance cam - reference edge | 1-6. Switch position: 4.50...5.00 mm                                                                        |
| Flange, feed-through          | None                                                                                                        |
| Installation                  | Vertical                                                                                                    |
| Life expectancy mechanical    | 1. Switch position: 1 million Switching operations<br>2-6. Switch position: 30 million Switching operations |

|                               |                                                              |
|-------------------------------|--------------------------------------------------------------|
| Number of switching positions | 6x Roller                                                    |
| Plunger style                 | 1-6th switch position: Roller                                |
| Switch actuation force        | 1. Switch position: 30 N<br>2-6. Switch position: 20 N       |
| Switching element             | 1. Switch position: BSE 85<br>2-6. Switch position: BSE 30.0 |

**Range/Distance**

|                 |                                                                          |
|-----------------|--------------------------------------------------------------------------|
| Reproducibility | 1. Switch position: $\pm 0.02$ mm<br>2-6. Switch position: $\pm 0.01$ mm |
|-----------------|--------------------------------------------------------------------------|

**Wiring Diagrams**

