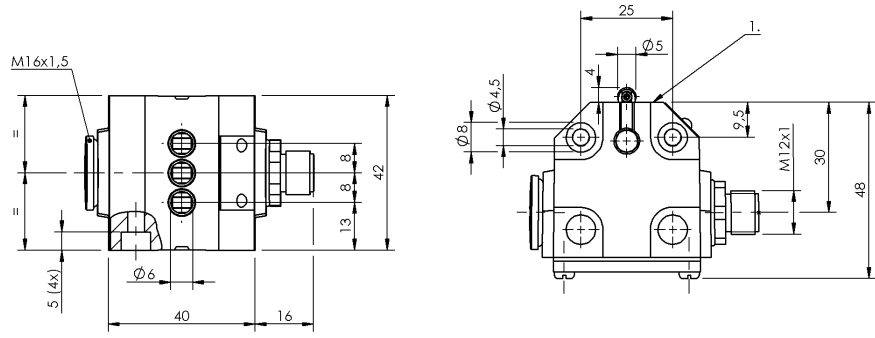
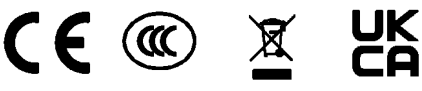


Mechanical Cam Switches  
BNS 819-B03-R08-40-10-S80R  
Order Code: BNS04YZ



1) Reference edge



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      | M12x1-Flange male, 5-pin      |
| Connection type | 1. Switch position: Connector |

Electrical data

|                               |                                |
|-------------------------------|--------------------------------|
| Continuous current            | 1-3. Switch position: 4 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 |

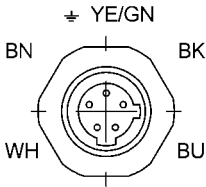
Mechanical data

|                               |                                                    |
|-------------------------------|----------------------------------------------------|
| Approach direction            | longitudinal, parallel to attachment surface       |
| Approach speed                | 1-3. Switch position: 60 m/min                     |
| Distance cam - reference edge | 1-3. Switch position: 2.30...2.80 mm               |
| Flange, feed-through          | None                                               |
| Installation                  | Vertical                                           |
| Life expectancy mechanical    | 1-3. Switch position: 10 mil. switching operations |
| Number of switching positions | 3x Roller Mechanical                               |
| Plunger style                 | 1-3rd switch position: Roller                      |
| 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: ±0.05 mm |
|-----------------|--------------------------------|

Connector Drawings



View of connector side

Wiring Diagrams

