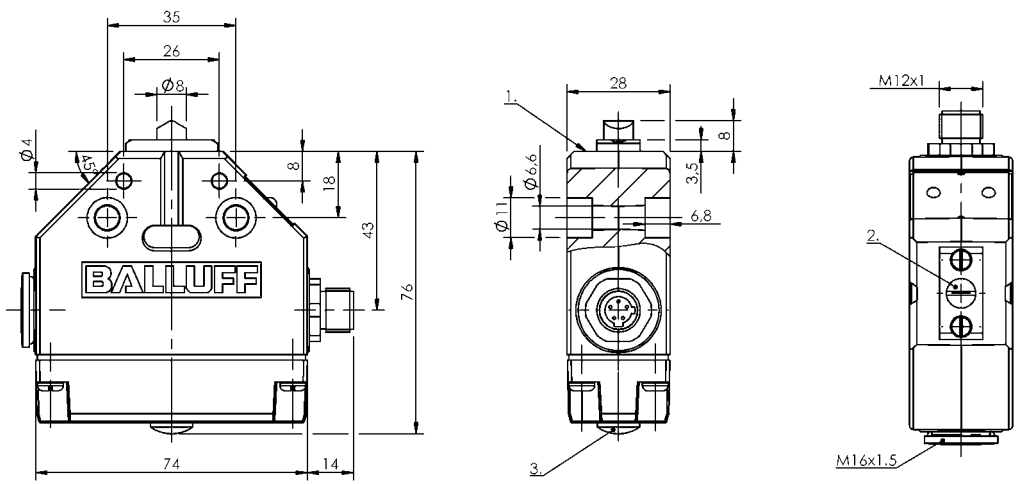
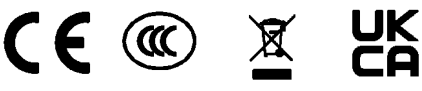


Mechanical Cam Switches  
BNS 819-FE-60-101-FD-S80R  
Order Code: BNS000R



1) Reference edge, 2) Anti-crystallization plunger, 3) Function indicator FD/FE/LL



Basic features

|                     |                                |
|---------------------|--------------------------------|
| DIN switch          | DIN 43693                      |
| Operating principle | 1. Switch position: Mechanical |

Display/Operation

|                    |                                   |
|--------------------|-----------------------------------|
| Function indicator | 1. Switch position: FD - 6...60 V |
|--------------------|-----------------------------------|

Electrical connection

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

Electrical data

|                            |                              |
|----------------------------|------------------------------|
| Continuous current         | 1. Switch position: 4 A      |
| Rated operating voltage Ue | 1. Switch position: 6...60 V |
| Switching rate             | 1. Switch position: 300/min  |

Environmental conditions

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

Material

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

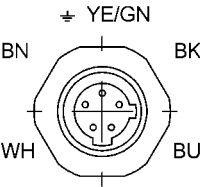
Mechanical data

|                                     |                                                                |
|-------------------------------------|----------------------------------------------------------------|
| Approach direction                  | lateral or at right angles to mounting surface                 |
| Approach speed                      | 1. Switch position: 30 m/min                                   |
| Dimension                           | 74 x 28 x 76.5 mm                                              |
| Distance cam - reference edge       | 1. Switch position: 4.50...5.00 mm                             |
| Flange, feed-through                | None                                                           |
| Installation                        | any                                                            |
| Life expectancy mechanical          | 1. Switch position: 30 mil. switching operations               |
| Number of switching positions       | E-chisel Mechanical                                            |
| Plunger spacing 1st switch position | 14 mm                                                          |
| Plunger style                       | 1st switch position: E-Chisel<br>1st switch position: E-Chisel |
| Switch actuation force              | 1. Switch position: 20 N                                       |
| Switching element                   | 1. Switch position: BSE 30.0                                   |

Range/Distance

|                 |                               |
|-----------------|-------------------------------|
| Reproducibility | 1. Switch position: ±0.002 mm |
|-----------------|-------------------------------|

Connector Drawings



View of connector side

Wiring Diagrams

