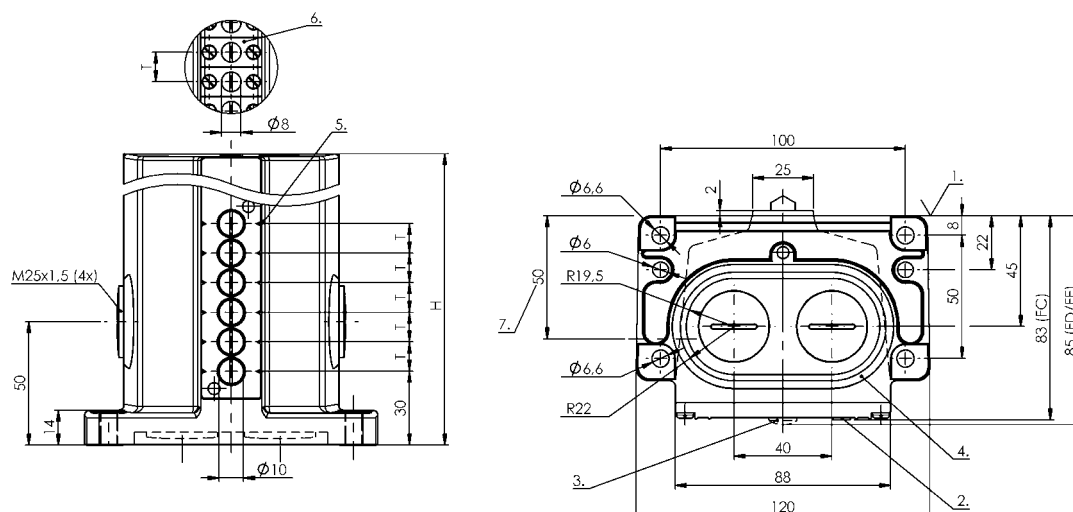




- 1) Reference edge, 2) Function indicator FC, 3) Function indicator FD/FE/LL, 4) Sealing ring, 5) Mark. Safety switch position, 6) Anti-crystallization plunger, 7) Cable passage



## Basic features

|                     |                                  |
|---------------------|----------------------------------|
| DIN switch          | DIN 43697                        |
| Operating principle | 1-4. Switch position: Mechanical |
| Version             | Safety EN 60204-1                |

## Display/Operation

|                    |                                     |
|--------------------|-------------------------------------|
| Function indicator | 1-4. Switch position: FD - 6...60 V |
|--------------------|-------------------------------------|

## Electrical connection

**Connection type** 1-4. Switch position: Screw terminal

## Electrical data

|                            |                                                                |
|----------------------------|----------------------------------------------------------------|
| Continuous current         | 1-4. Switch position: 6 A                                      |
| Rated operating voltage Ue | 1-4. Switch position: 250 V AC                                 |
| Switching rate             | 1-2. Switch position: 160/min<br>3-4. Switch position: 300/min |

### Environmental conditions

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

## Material

|                                             |                                                                           |
|---------------------------------------------|---------------------------------------------------------------------------|
| <b>Housing material</b>                     | Aluminium, Anodized                                                       |
| <b>Housing material, surface protection</b> | Anodized                                                                  |
| <b>Material contacts</b>                    | 1-2. Switch position: Silver<br>3-4. Switch position: Silver, gold plated |
| <b>Plunger material</b>                     | 1-4. Switch position: 1.4034 stainless steel                              |

Mechanical Cam Switches  
BNS 813-D04-D12-100-20-02-FD  
Order Code: BNS00Y6



Mechanical data

|                               |                                                                                                         |
|-------------------------------|---------------------------------------------------------------------------------------------------------|
| Approach direction            | longitudinal, parallel to attachment surface                                                            |
| Approach speed                | 1-2. Switch position: 12 m/min<br>3-4. Switch position: 40 m/min                                        |
| Dimension                     | 120 x 90 x 85 mm                                                                                        |
| Distance cam - reference edge | 1-4. Switch position: 4.50...5.00 mm                                                                    |
| Flange, feed-through          | 2 threaded exit M25                                                                                     |
| Installation                  | Vertical                                                                                                |
| Life expectancy mechanical    | 1-2. Switch position: 1 mil. switching operations<br>3-4. Switch position: 30 mil. switching operations |

|                                     |                                                                |
|-------------------------------------|----------------------------------------------------------------|
| Number of switching positions       | 4x Chisel Mechanical                                           |
| Plunger spacing 1st switch position | 30 mm                                                          |
| Plunger style                       | 1-4th switch position: Chisel                                  |
| Switch actuation force              | 1-2. Switch position: 30 N<br>3-4. Switch position: 20 N       |
| Switching element                   | 1-2. Switch position: BSE 85<br>3-4. Switch position: BSE 30.0 |

Range/Distance

|                         |                                                                             |
|-------------------------|-----------------------------------------------------------------------------|
| Reproducibility         | 1-2. Switch position: $\pm 0.02$ mm<br>3-4. Switch position: $\pm 0.002$ mm |
| Switch position spacing | 12 mm                                                                       |

Wiring Diagrams

