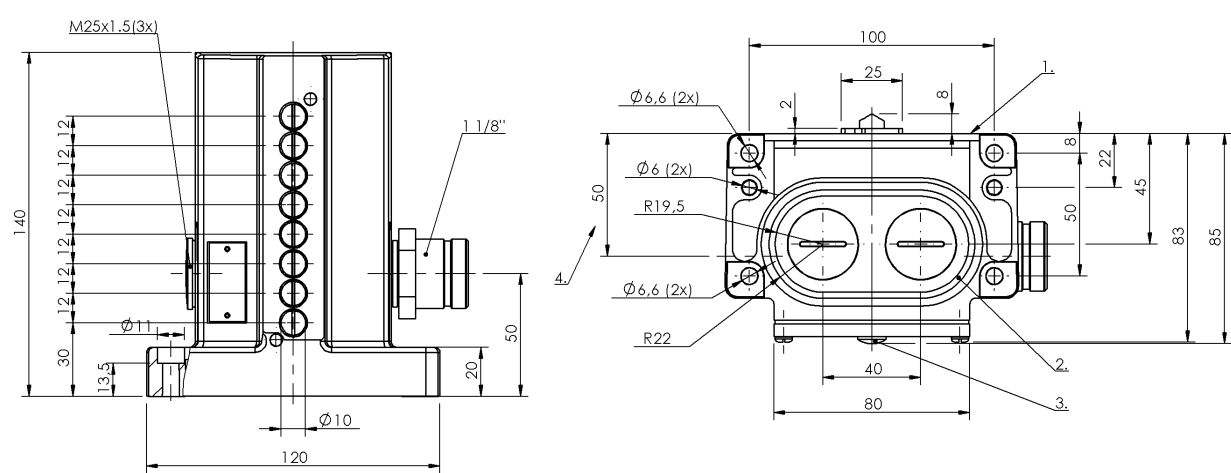
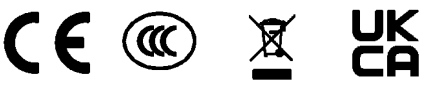


Mechanical Cam Switches  
BNS 819-D08-D12-100-10-FD-S90R  
Order Code: BNS00M2



1) Reference edge, 2) Sealing ring, 3) Function indicator FD/FE/LL, 4) Cable passage



Basic features

|                     |                                  |
|---------------------|----------------------------------|
| Approval/Conformity | CE<br>UKCA<br>CCC<br>WEEE        |
| Basic standard      | IEC 60947-5-1                    |
| DIN switch          | DIN 43697                        |
| Operating principle | 1-8. Switch position: Mechanical |
| Version             | Snap contact                     |

Display/Operation

|                    |                                     |
|--------------------|-------------------------------------|
| Function indicator | 1-8. Switch position: FD - 6...60 V |
|--------------------|-------------------------------------|

Electrical connection

|                 |                               |
|-----------------|-------------------------------|
| Connection      | 1 1/8"-Flange male, 12-pin    |
| Connection type | 1. Switch position: Connector |

Electrical data

|                               |                                                                                                         |
|-------------------------------|---------------------------------------------------------------------------------------------------------|
| Continuous current            | 1-8. Switch position: 5 A                                                                               |
| Rated operating voltage Ue    | 1-3. Switch position: 6...60 V<br>4. Switch position: 30 V AC/36 V DC<br>5-8. Switch position: 6...60 V |
| Switching function mechanical | galvanically isolated<br>One NO and one NC<br>Dual changeover<br>Double-interrupting                    |
| Switching rate                | 1-8. 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 cycles |
|-----------------------|------------------------------------|

Material

|                                      |                                              |
|--------------------------------------|----------------------------------------------|
| Housing material                     | Aluminium, Anodized                          |
| Housing material, surface protection | Anodized                                     |
| Material contacts                    | 1-8. Switch position: Silver, gold plated    |
| Plunger material                     | 1-8. Switch position: 1.4034 stainless steel |

Mechanical Cam Switches  
BNS 819-D08-D12-100-10-FD-S90R  
Order Code: BNS00M2



Mechanical data

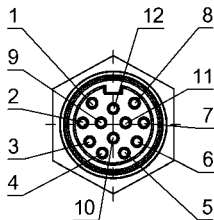
|                               |                                                    |
|-------------------------------|----------------------------------------------------|
| Approach direction            | longitudinal, parallel to attachment surface       |
| Approach speed                | 1-8. Switch position: 40 m/min                     |
| Dimension                     | 120 x 140 x 85 mm                                  |
| Distance cam - reference edge | 1-8. Switch position: 4.50...5.00 mm               |
| Flange, feed-through          | 2 threaded exit M25                                |
| Installation                  | Vertical                                           |
| Life expectancy mechanical    | 1-8. Switch position: 30 mil. switching operations |

|                                     |                                |
|-------------------------------------|--------------------------------|
| Number of switching positions       | 8x Chisel Mechanical           |
| Plunger spacing 1st switch position | 30 mm                          |
| Plunger style                       | 1-8th switch position: Chisel  |
| Switch actuation force              | 1-8. Switch position: 20 N     |
| Switching element                   | 1-8. Switch position: BSE 30.0 |

Range/Distance

|                         |                                      |
|-------------------------|--------------------------------------|
| Reproducibility         | 1-8. Switch position: $\pm 0.002$ mm |
| Switch position spacing | 12 mm                                |

Connector Drawings



View of connector side

Mechanical Cam Switches  
BNS 819-D08-D12-100-10-FD-S90R  
Order Code: BNS00M2



Wiring Diagrams

