

1) Reference edge 2) Active surface

- Mech. multiple position
- Snap contact
- Chisel



**General attributes**

Additional features: None  
 Approvals / Conformity: CE, CCC  
 Basic standard: IEC 60947-5-1, IEC 60947-5-2  
 DIN switch: No  
 Enclosure Type per IEC 60529: IP67  
 Function indicator: 1st pos.: fiberoptic, 2nd pos.: none, 3rd pos.: none  
 MTTF (40°C): BES 517-110: 490 years  
 B10d: BSE 30.0: 30 mil. swit. cycles

**Electrical attributes**

Continuous current: 1st pos.: 0.2 A, 2nd pos.: 6 A, 3rd pos.: 6 A  
 Effective operating voltage Ue: 1st pos.: 24 V DC  
 Switching function mech.: Dual output function, Galvanically isolated, One NO and one NC, Double-interrupting

**Mechanical attributes**

Ambient temperature Ta max.: 70 °C  
 Ambient temperature Ta min.: -5 °C  
 Approach direction: Lengthwise, par. to mtg. surf.  
 Approach speed: 3rd pos.: 40 m/min, 2nd pos.: 40 m/min  
 Assured operating distance Sa: 1st pos.: 0 - 1.6 mm  
 Connection: 3. screw terminal, 2. screw terminal, 1. screw terminal  
 Connector: None  
 Contact material: 2nd pos.: silver, gold plated, 3rd pos.: silver, gold plated  
 Depth: 77.5 mm  
 Diameter of active surface: 10.0 mm  
 Dist. cam to reference edge: 2nd pos.: 5 - 0.5 mm, 3rd pos.: 5 - 0.5 mm  
 Flange feedthrough: None

Height (H): 48.0 mm  
 Housing finish: Eloxal  
 Housing material: Aluminum  
 Mech. installation condition: Vertical  
 Mechanical life expectancy: 3rd pos.: 30 mil. operations, 2nd pos.: 30 mil. operations, 3 ST, 3rd pos.: mechanical, 2nd pos.: mechanical, 1st pos.: inductive  
 No. of switch positions: 3  
 Operating principle: 3rd pos.: mechanical, 2nd pos.: mechanical, 1st pos.: inductive  
 Plgr. dist. 1st switch pos.: 12 mm  
 Plunger block: No  
 Plunger diameter: 10.0 mm  
 Plunger material: 3rd pos.: stainless steel, 2nd pos.: stainless steel, 3rd pos.: Chisel, 2nd pos.: Chisel  
 Plunger style: 1st pos.: 2.0 mm  
 Rated operating distance Sn [mm]: 12 mm  
 Spacing (T): 61  
 Style: 3rd pos.: BSE 30.0, 2nd pos.: BSE 30.0, 1st pos.: BES 517-110  
 Switching element: 2nd pos.: min. 20 N, 3rd pos.: min. 20 N, 3rd pos.: max. 300/min, 2nd pos.: max. 300/min, Mech. multiple position, Snap contact, 79 mm  
 Switching operation force: 2nd pos.: min. 20 N, 3rd pos.: min. 20 N, 3rd pos.: max. 300/min, 2nd pos.: max. 300/min, Mech. multiple position, Snap contact, 79 mm  
 Switching rate: 2nd pos.: min. 20 N, 3rd pos.: min. 20 N, 3rd pos.: max. 300/min, 2nd pos.: max. 300/min, Mech. multiple position, Snap contact, 79 mm  
 Type: Mech. multiple position  
 Version: Snap contact  
 Width: 79 mm

**Remarks**

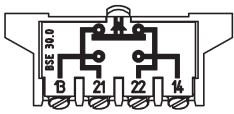
Specification of the MTTF value and the B10d value do not represent any binding quality and/or life expectancy guarantees.

Note that the products listed here are not themselves safety components according to the Machine Directive 2006/42/EG Article 2 c. It is however possible to create corresponding structures with a high Performance Level per EN 13849-1 by means of two-channel utilization.

Mechanical position switch

**BNS 819-B03-D12-61-12-55-1127**  
**BNS028L**

BSE 30.0



PA

