



1) Reference edge, 2) 1st pos., 3) Sensing surface, 4) Function indicator FD/FE/LL



### Basic features

Approval/Conformity	CE UKCA WEEE
Basic standard	IEC 60947-5-1 IEC 60947-5-2
Operating principle	1. Switch position: Inductive 2. Switch position: Mechanical
Version	Snap contact

### Display/Operation

Function indicator	1. Switch position: Optical fiber 2. Switch position: None
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### Electrical connection

Connection type	1-2. Switch position: Screw terminal
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### Electrical data

Continuous current	1. Switch position: 0.13 A 2. Switch position: 5 A
Rated operating voltage Ue	1. Switch position: 24 V DC
Switching function mechanical	Single-pin changeover
Switching rate	2. Switch position: 200/min

### Environmental conditions

Ambient temperature	-5...70 °C
IP rating	IP67

### Functional safety

B10d (EN ISO 13849-1)	BSE 70.1: 10 mil. switching cycles
MTTF (40 °C)	BES 517-312-Y: 1620 a

### Material

Housing material	Aluminium, Anodized
Housing material, surface protection	Anodized
Material contacts	2. Switch position: Fine silver
Plunger material	2. Switch position: 1.4034 stainless steel

### Mechanical data

Approach direction	longitudinal, parallel to attachment surface
Approach speed	2. Switch position: 20 m/min
Distance cam - reference edge	2. Switch position: 2.30...2.80 mm
Flange, feed-through	None
Installation	parallel
Life expectancy mechanical	2. Switch position: 10 mil. switching operations
Plunger style	2nd switch position: Chisel
Switch actuation force	2. Switch position: 8 N
Switching element	1. Switch position: BES 517-312-Y 2. Switch position: BSE 70.1

Mechanical Cam Switches  
**BNS 819-B02-D08-40-55-0856**  
Order Code: BNS01NZ

# BALLUFF

**Range/Distance**

Assured operating distance Sa 1. Switch position: 0.9 mm

**Range**

1.1 mm

**Rated operating distance Sn**

1. Switch position: 1.1 mm

**Reproducibility**

2. Switch position:  $\pm 0.02$  mm

## Wiring Diagrams

