



1) Reference edge, 2) Mark. Safety switch position



Basic features

Approval/Conformity	CE CCC WEEE
Basic standard	IEC 60947-5-1
Operating principle	1-3. Switch position: Mechanical
Version	Safety EN 60204-1

Display/Operation

Function indicator	1-3. Switch position: None
---------------------------	----------------------------

Electrical connection

Connection type	1-3. Switch position: Screw terminal
------------------------	--------------------------------------

Electrical data

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

Environmental conditions

Ambient temperature	-5...85 °C
Protection degree	IP67

Functional safety

B10d (EN ISO 13849-1)	BSE 30.0: 30 mil. Switching operations BSE 85: 1 mil. Switching operations
------------------------------	-------------------------------------------------------------------------------

Material

Housing material	Aluminum, Anodized
Housing material, surface protection	Anodized
Material contacts	1. Switch position: Silver 2-3. Switch position: Silver, gold plated
Plunger material	1-3. Switch position: Stainless steel (1.4034)

Mechanical Cam Switches
BNS 813-B03-D12-61-A-20-01
Order Code: BNS02HL

BALLUFF

Mechanical data

Approach direction	longitudinal, parallel to attachment surface
Approach speed	1-3. Switch position: 40 m/min
Dimension	79 x 48 x 73 mm
Distance cam - reference edge	1-3. Switch position: 4.50...5.00 mm
Flange, feed-through	None
Installation	Vertical
Life expectancy mechanical	1. Switch position: 1 million Switching operations 2-3. Switch position: 30 million Switching operations

Number of switching positions	3x Chisel
Plunger spacing 1st switch position	12 mm
Plunger style	1-3rd switch position: Chisel
Switch actuation force	1. Switch position: 30 N 2-3. Switch position: 20 N
Switching element	1. Switch position: BSE 85 2-3. Switch position: BSE 30.0

Range/Distance

Reproducibility	1. Switch position: ±0.02 mm 2-3. Switch position: ±0.002 mm
Switch position spacing	12 mm

Wiring Diagrams

