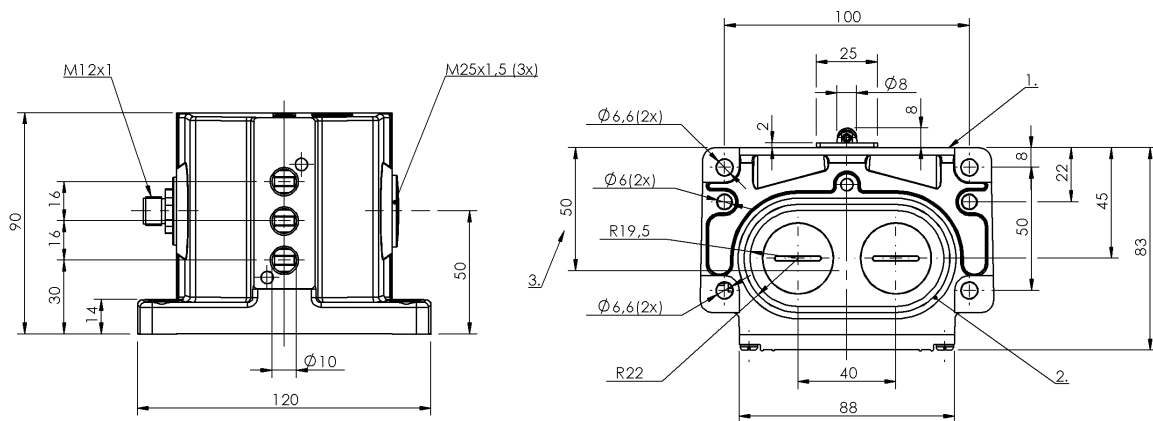


Mechanical Cam Switches
BNS 819-D03-L16-100-10-S80L
 Order Code: BNS04P1

BALLUFF



1) Reference edge, 2) Sealing ring, 3) Cable passage

Basic features

Approval/Conformity	CE CCC WEEE
Basic standard	IEC 60947-5-1
DIN switch	DIN 43697
Operating principle	1-3. Switch position: Mechanical
Version	Snap contact

Display/Operation

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

Connection	M12x1-Flange male, 5-pin
Connection type	1. Switch position: Connector

Electrical data

Continuous current	1-3. Switch position: 4 A
Rated operating voltage Ue	1-3. Switch position: 250 V AC
Switching function mechanical	galvanically isolated One NO and one NC Dual changeover Double-interrupting
Switching rate	1-3. 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
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Material

Housing material	Aluminium, Anodized
Housing material, surface protection	Anodized
Material contacts	1-3. Switch position: Silver, gold plated
Plunger material	1-3. Switch position: 1.4034 stainless steel

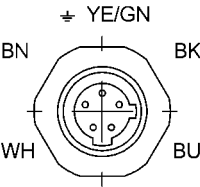
Mechanical data

Approach direction	longitudinal, parallel to attachment surface
Approach speed	1-3. Switch position: 120 m/min
Distance cam - reference edge	1-3. Switch position: 4.50...5.00 mm
Flange, feed-through	2 threaded exit M25
Installation	Vertical
Life expectancy mechanical	1-3. Switch position: 30 mil. switching operations
Number of switching positions	3x Roller bearing Mechanical
Plunger style	1-3rd switch position: Roller bearing
Switch actuation force	1-3. Switch position: 20 N
Switching element	1-3. Switch position: BSE 30.0

Range/Distance

Reproducibility	1-3. Switch position: null0.01 mm
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Connector Drawings



View of connector side

Wiring Diagrams

