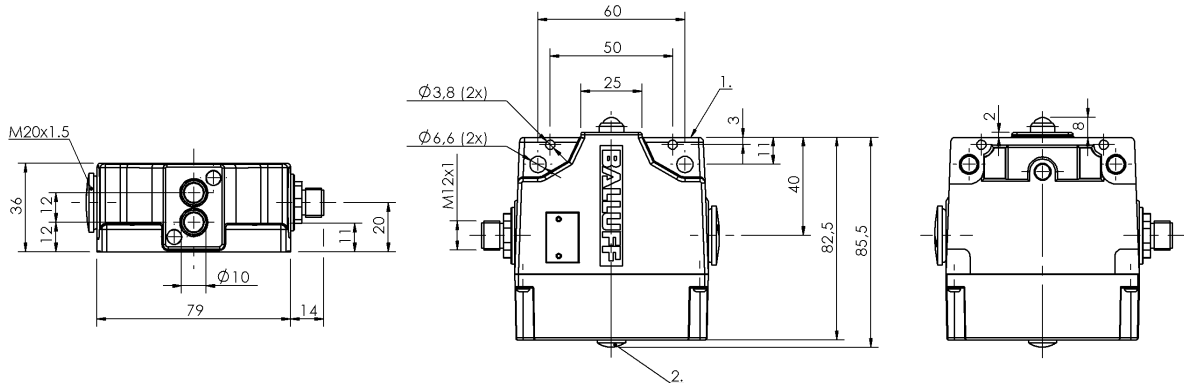


Mechanical Cam Switches

BNS 819-B02-K12-61-12-10-FD-S80R

Order Code: BNS027K

BALLUFF



1) Reference edge, 2) Function indicator FD/FE/LL



Basic features

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

Display/Operation

Function indicator	1-2. Switch position: FD - 6...60 V
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Electrical connection

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

Electrical data

Continuous current	1-2. Switch position: 4 A
Rated operating voltage Ue	1-2. Switch position: 6...60 V
Switching function mechanical	galvanically isolated One NO and one NC Dual changeover Double-interrupting
Switching rate	1-2. 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	1-2. Switch position: Silver, gold plated
Plunger material	1-2. Switch position: 1.4034 stainless steel

Mechanical data

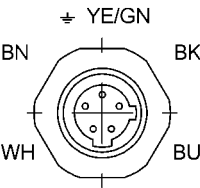
Approach direction	longitudinal, parallel to attachment surface
Approach speed	1-2. Switch position: 10 m/min
Dimension	79 x 36 x 85.5 mm
Distance cam - reference edge	1-2. Switch position: 4.50...5.00 mm
Flange, feed-through	None
Installation	Vertical
Life expectancy mechanical	1-2. Switch position: 30 mil. switching operations
Number of switching positions	2x Ball Mechanical
Plunger spacing 1st switch position	12 mm
Plunger style	1-2nd switch position: Ball
Switch actuation force	1-2. Switch position: 20 N
Switching element	1-2. Switch position: BSE 30.0

Range/Distance

Reproducibility
Switch position spacing

1-2. Switch position: ± 0.002 mm
12 mm

Connector Drawings



View of connector side

Wiring Diagrams

