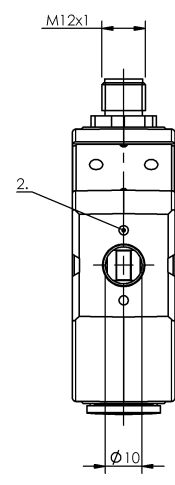
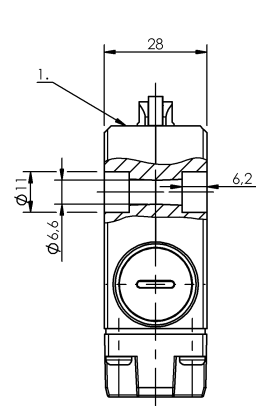
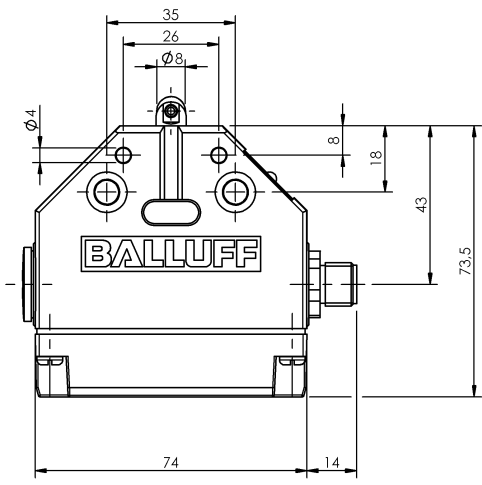
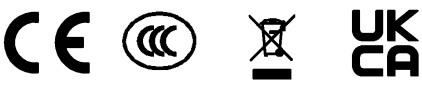


Mechanical Cam Switches
BNS 813-FR-60-186-S4R
Order Code: BNS0032

BALLUFF



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



Basic features

DIN switch	DIN 43693
Operating principle	1. Switch position: Mechanical
Version	Safety EN 60204-1

Display/Operation

Function indicator	1. Switch position: None
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Electrical connection

Connection	M12x1-Flange male, 4-pin, A-coded
Connection type	1. Switch position: Connector

Electrical data

Continuous current	1. Switch position: 4 A
Rated operating voltage Ue	1. Switch position: 25 V AC/60 V DC
Switching rate	1. Switch position: 160/min

Environmental conditions

Ambient temperature	-5...85 °C
IP rating	IP67

Material

Housing material	Aluminium, Anodized
Housing material, surface protection	Anodized
Material contacts	1. Switch position: Fine silver
Plunger material	1. Switch position: 1.4034 stainless steel

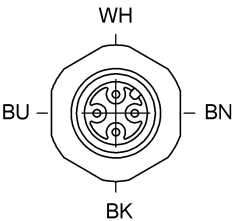
Mechanical data

Approach direction	longitudinal, parallel to attachment surface
Approach speed	1. Switch position: 60 m/min
Distance cam - reference edge	1. Switch position: 4.50...5.00 mm
Flange, feed-through	None
Installation	any
Life expectancy mechanical	1. Switch position: 1 mil. switching operations
Number of switching positions	Roller Mechanical
Plunger style	1st switch position: Roller
Switch actuation force	1. Switch position: 30 N
Switching element	1. Switch position: BSE 85

Range/Distance

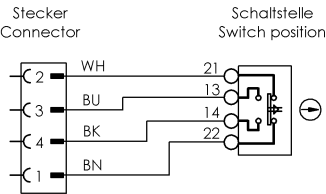
Reproducibility	1. Switch position: ±0.02 mm
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Connector Drawings



View of connector side

Wiring Diagrams



ACHTUNG: Stecker ohne Schutzleiter!
Schutzklasse III (VDE 0160)

Attention: No groundwire!
Protection Class III (VDE 0160)