

1) Reference edge 2) Mark. Safety switch position 3) Function indicator FD/FE/LL



## Display/Operation

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

## Electrical connection

Connection	M12x1-Male, 5-pole
Connection type	1. Switch position: Connector

## Electrical data

Continuous current	1. Switch position: 4 A
Rated operating voltage Ue	1. Switch position: 6...60 V
Switching function mechanical	NC forced-opening per VDE Double-interrupting
Switching rate	1. Switch position: 300/min

## Environmental conditions

Ambient temperature	-5...85 °C
Protection type IEC 60529	IP67

## Functional safety

B10d	BSE 61: 30 mil. switching cycles
------	----------------------------------

## General data

Approval/Conformity	CCC CE
Basic standard	IEC 60947-5-1
DIN switch	DIN 43693
Operating principle	1. Switch position: mechanical

Internet [www.balluff.com](http://www.balluff.com)  
 Balluff Germany +49 (0) 7158 173-0, 173-370  
 Balluff USA 1-800-543-8390  
 Balluff China +86 (0) 21-50 644131

## Version

Safety EN 60204-1

## Material

Housing material	Aluminum
Housing material, surface protection	anodized
Material contacts	1. Switch position: Fine silver
Plunger material	1. Switch position: Stainless steel (1.4034)

## Mechanical data

Approach direction	longitudinal, parallel to attachment surface
Approach speed	1. Switch position: 40 m/min
Dimension	74 x 28 x 76.5 mm
Distance cam - reference edge	1. Switch position: 4.50...5.00 mm
Flange, feed-through	None
Installation	any
Life expectancy mechanical	1. Switch position: 30 mil. switching operations
Number of switching positions	1x Chisel
Plunger spacing 1st switch position	14 mm
Plunger style	1. Switch position: Chisel
Switch actuation force	1. Switch position: 15 N
Switching element	1. Switch position: BSE 61

## Range/Distance

Reproducibility	1. Switch position: ±0.002 mm
-----------------	-------------------------------

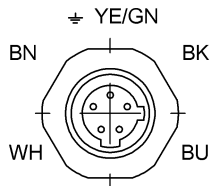
Specification of the MTTF value and the B10d value do not represent any binding quality and/or life expectancy guarantees.

Note that the products listed here are not themselves safety components

according to the Machine Directive 2006/42/EG Article 2 c. It is however possible to create corresponding structures with a high Performance Level per EN

13849-1 by means of two-channel utilization.

Connector view



View of connector side

Wiring Diagram

