

Basic features

Additional features	Function indicator: LED red/green
Approval/Conformity	TÜV NRTL TÜV CE RoHS WEEE
Component	Type 2
Guard locking, principle	yes, magnetic force (power to lock)
Operating principle	mechanical - force, contact
Principle of operation	Safety Switches
Scope of delivery	1 pc.
Series	BID F10...
Use	Locking mechanism with interlock which prevents execution of hazardous machine functions under specified conditions and holds a separating protection device in the closed position while hazardous machine functions are being performed.
Version	Guard locking device

Electrical connection

Connection	M12x1-Male, 8-pin
Short-circuit protection	0.2 fast-action

Electrical data

Contacts solenoid (number, type)	2 positively driven contacts
Duty cycle solenoid	100 %
Operating voltage solenoid Us	24 V (+10%/-15%) DC
Operating voltage, LED	24 V (+10%/-15%)
Power consumption solenoid	10 W
Protection class	III
Rated continuous current	4.0 A
Rated insulation voltage Ui	24 V DC
Rated operating current Ie	0.5 A
Rated operating current Ie AC	1 A
Rated operating voltage Ue AC	24 V
Rated operating voltage Ue DC	24 V
Rated surge voltage Uimp	500 V
Switching current	5 mA
Switching principle	Snap switch
Switching voltage	min. 5V DC (at 10 mA)
Utilization category	AC-15 DC-13

Safety Guard Locking Devices
BID F101-2M1E3R-M02AZ0-S115
Order Code: BID0001

BALLUFF

Environmental conditions

Ambient temperature	0...40 °C
Protection degree	IP65
Storage temperature	0...60 °C

Functional safety

Axillary release	no
B10d (EN ISO 13849-1)	5 million Switching operations
Coding level (EN ISO 14119)	low
Escape release	yes
No of contacts	2x positive opening

Material

Housing material	Aluminum
Material contacts	Silver

Mechanical data

Actuator overtravel max.	3 mm
Actuator retention force	10 N
Adjustable actuator head	in 90° increments
Approach direction	laterally + above
Approach speed	20 m/min
Dimension	40 x 247.7 x 61.3 mm
Holding force F1 max.	3250 N
Holding force FZH	2500 N
Insertion depth min.	24 mm
Insertion tolerances	± 3 mm
Installation	any
Length, tolerance	+80 mm
Life expectancy mechanical	1 mil. switching operations
Mounting	Screw M5
Mounting holes, number	2
Switch actuation force	5 N
Tightening torque	2.5 Nm
Weight	0.96 kg
Weight	0.96 kg

Remarks

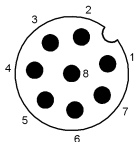
Order actuator separately.

The safety switch may not be used as a stop!

Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values do not extend the limitation period for claims arising from defects or influence them in any other way.

We call you attention to the fact that the product listed here alone are not considered safety components according to Machine Directive 2006/42/EC Article 2c. It is however possible to construct structures per EN 13849-1 having a high performance level using the products with two channels.

Connector Drawings



- PIN 1: 11 (solenoid monitoring)
- PIN 2: 31 (door monitor)
- PIN 3: 22 (solenoid monitoring)
- PIN 4: 12 (magnet monitoring)
- PIN 5: 34 (door monitoring)
- PIN 6: 21 (solenoid monitoring)
- PIN 7: A2
- PIN 8: A1

Wiring Diagrams

