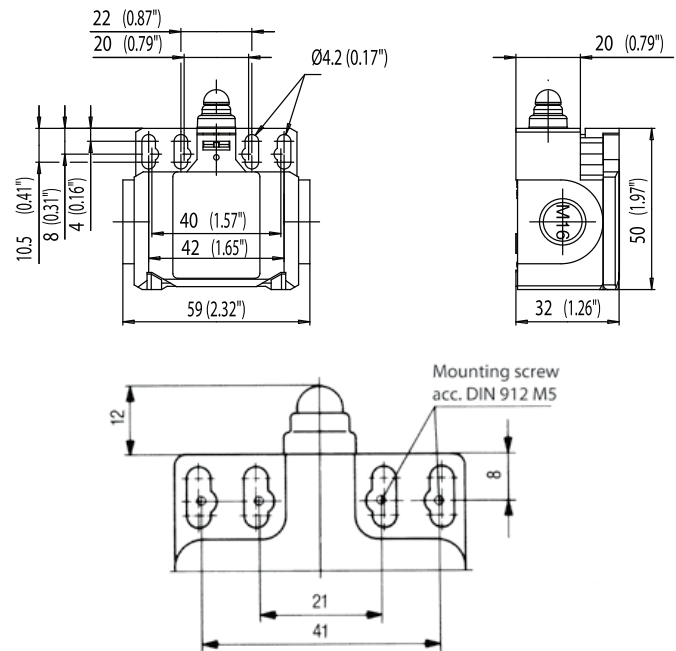


## Bi2 Series



### Recommended use

Multiple slotted mounting holes allow this series to be used as a replacement in a variety of applications. These switches can be adjusted vertically when mounted with M4 bolts. M5 bolts can be used for fixed mounting for Safety applications. Thanks to its two cable entries, this switch is ideal for use in series-connections.

### Product advantages

- Protection class IP65 to VDE 0470 T1
- Enclosure and cover PA 6, self-extinguishing (UL-94 V0)
- Actuator can be repositioned by 4 x 90°
- Cable entry 2x M16 x 1.5
- Connection designation conforming to DIN EN 50013

### Options

- Available with M12 connector
- AS interface variants available
- Preassembled with customer-specific cables and connectors on request

### Design layout

- Slow-action and snap-action contacts
- Versions: 1 NC/1NO, 2 NC
- All NC contacts with  in the circuit diagram are positively opening contacts
- Type: Zb (galvanically isolated changeover contact)

### Mounting

- Two M4 adjustment slots (distance between centers 22 mm)
- Two M4 adjustment slots (distance between centers 42 mm)
- Two M5 holes (distance between centers 21 mm) for safety applications
- Two M5 holes (distance between centers 41 mm) for safety applications without additional securing element

### Installation advantages

- Cover opening range 135° (cover can also be detached from hinge)
- Screw connections with self-lifting clamping plates
- Easy-action cover lock (close and press)
- Cover additionally secured with screw
- 2 cable entries for through-wiring

### Technical data

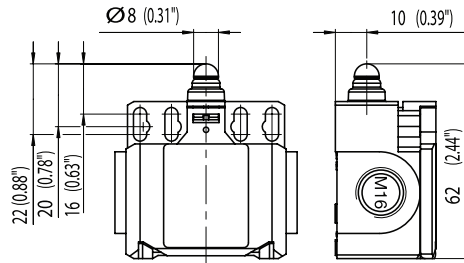
| Electrical data                                                                              |                                                                                                  |          |
|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|----------|
| Rated insulation voltage                                                                     | U <sub>i</sub> max.                                                                              | 400 V AC |
| Conventional thermal current <sup>1</sup>                                                    | I <sub>the</sub>                                                                                 | 10 A     |
| Rated operating voltage                                                                      | U <sub>e</sub> max.                                                                              | 240 V AC |
| Utilization category                                                                         | AC15, U <sub>e</sub> /I <sub>e</sub> 240 V/3 A                                                   |          |
| Short-circuit protection (up to) <sup>1</sup>                                                | Fuse 10 A gL/gG                                                                                  |          |
| Protection class                                                                             | II, Insulated                                                                                    |          |
| Mechanical data                                                                              |                                                                                                  |          |
| Enclosure material                                                                           | Thermoplastic, glass fibre-reinforced                                                            |          |
| Ambient temperature                                                                          | -30 °C to +80 °C                                                                                 |          |
| Mechanical service life (up to) <sup>1</sup>                                                 | 10 x 10 <sup>6</sup> switching cycles                                                            |          |
| B10d (up to) <sup>1</sup>                                                                    | 20 Mio.                                                                                          |          |
| Switching frequency                                                                          | ≤ 100/min.                                                                                       |          |
| Type of connection                                                                           | Screw connections                                                                                |          |
| Conductor cross sections                                                                     | Single-wire 0.5 - 1.5 mm <sup>2</sup> or<br>Stranded wire with ferrule 0.5 – 1.5 mm <sup>2</sup> |          |
| Cable entry                                                                                  | 2 x M16 x 1,5                                                                                    |          |
| Protection class                                                                             | IP65 conforming to EN 60529; DIN VDE 0470 T1                                                     |          |
| Standards                                                                                    |                                                                                                  |          |
| VDE 0660 T100, DIN EN 60947-1, IEC 60947-1<br>VDE 0660 T200, DIN EN 60947-5-1, IEC 60947-5-1 |                                                                                                  |          |

<sup>1</sup> Depending on switching system. See Table in Electrical Data

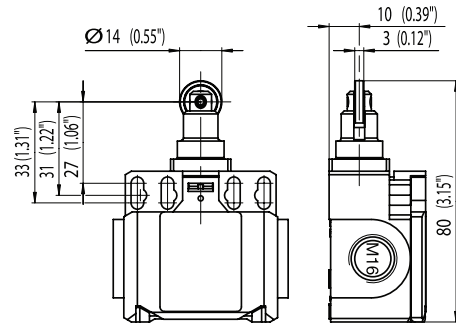
Drawing dimensions in mm

## Bi2 Series

### W



### RIW

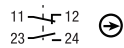


#### Switching Operation

##### 1 NC / 1 NO Contacts

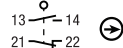
#### Slow Action

**608.5103.100**  
BI2-U1Z W



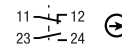
#### Snap Action

**608.5153.107**  
BI2-SU1Z W



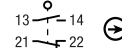
#### Slow Action

**608.5117.101**  
BI2-U1Z RIW



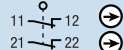
#### Snap Action

**608.5167.108**  
BI2-SU1Z RIW



##### 2 NC Contacts

**608.5803.116**  
BI2-A2Z W



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##### 2 NO Contacts

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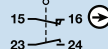
-

-

-

##### 1 NC / 1 NO Contacts Overlapping

**608.5303.115**  
BI2-UV1Z W



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### Technical Information

#### Slow Action

#### Snap Action

Maximum Switching Voltage

240V

240V

Max. Switching Amps (up to)\*

10A

10A

B10d (up to)\*

20 Million

20 Million

Mechanical Service Life (up to)\*

10 x 10<sup>6</sup>

10 x 10<sup>6</sup>

Switching Frequency

≤ 100/min

≤ 100/min

Operating Temperature

-30 °C to +80 °C

-30 °C to +80 °C

Protection Rating

IP65

IP65

Utilization Category (up to)\*

AC-15, Ue/Ue 240V 3A

AC-15, Ue/Ue 240V 3A

Rate Insulation Voltage

400VAC

400VAC

Approvals

\* Depending on switching system - see technical information for details



#### Special features/variants (on request)

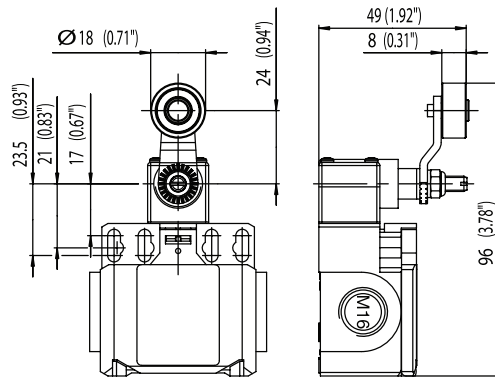
- Steel Roller Available

Drawing dimensions in mm

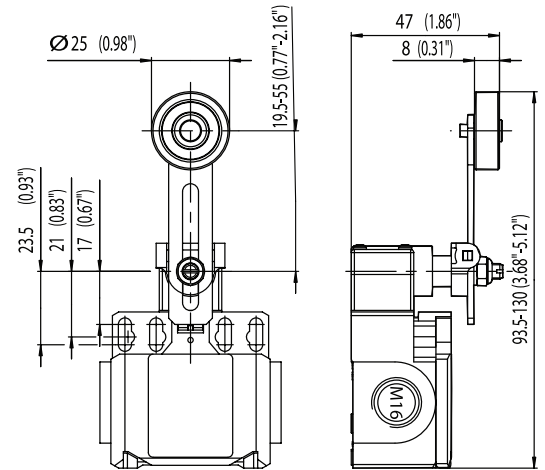
## Bi2 Series



### AH



### AV

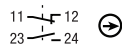


#### Switching Operation

##### 1 NC / 1 NO Contacts

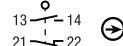
#### Slow Action

608.5135.104  
BI2-U1Z AH



#### Snap Action

608.5185.111  
BI2-SU1Z AH

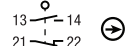


#### Slow Action

-

#### Snap Action

608.5186.112  
BI2-SU1 AV



##### 2 NC Contacts

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##### 2 NO Contacts

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##### 1 NC / 1 NO Contacts Overlapping

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#### Replacement actuator:

391.8351.166

391.8360.984

#### Technical Information

Maximum Switching Voltage

240V

240V

Max. Switching Amps (up to)\*

10A

10A

B10d (up to)\*

20 Million

20 Million

Mechanical Service Life (up to)\*

3 x 10<sup>6</sup>

10 x 10<sup>6</sup>

Switching Frequency

≤ 100/min

≤ 100/min

Operating Temperature

-30 °C to +80 °C

-30 °C to +80 °C

Protection Rating

IP65

IP65

Utilization Category (up to)\*

AC-15, Ue/Ue 240V 3A

AC-15, Ue/Ue 240V 3A

Rate Insulation Voltage

400VAC

400VAC

Approvals

\* Depending on switching system - see technical information for details



#### Special features/variants (on request)

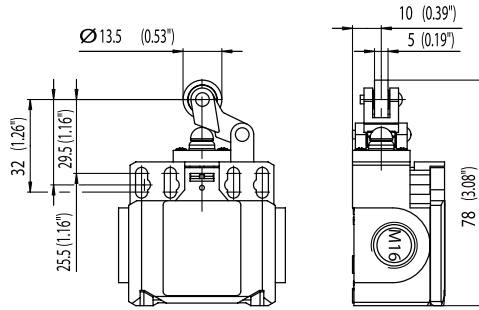
- Available with different actuator directions
- With steel roller and different roller diameters
- Different lever lengths; straight or bent

Drawing dimensions in mm

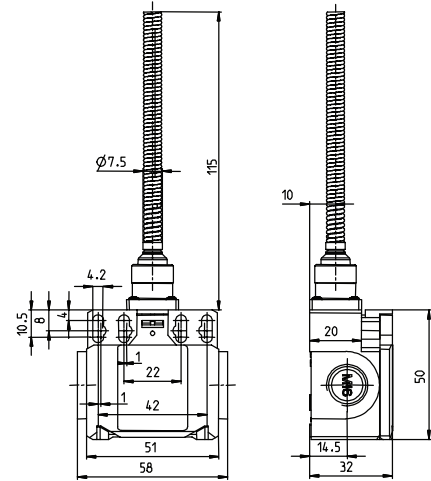
## Bi2 Series



### HW RO13.5



### FF



#### Switching Operation

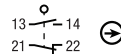
**1 NC / 1 NO Contacts**

#### Slow Action

-

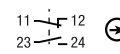
#### Snap Action

**608.5171.109**  
BI2-SU1Z HW RO13.5



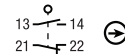
#### Slow Action

**618.5140.104**  
BI2-U1 FF



#### Snap Action

**608.5190.114**  
BI2-SU1 FF



**2 NC Contacts**

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**2 NO Contacts**

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**1 NC / 1 NO Contacts  
Overlapping**

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#### Replacement actuator:

**391.1890.681**

#### Technical Information

#### Slow Action

#### Snap Action

Maximum Switching Voltage

240V

240V

Max. Switching Amps (up to)\*

10A

10A

B10d (up to)\*

20 Million

20 Million

Mechanical Service Life (up to)\*

10 x 10<sup>6</sup>

10 x 10<sup>6</sup>

Switching Frequency

≤ 100/min

≤ 100/min

Operating Temperature

-30 °C to +80 °C

-30 °C to +80 °C

Protection Rating

IP65

IP65

Utilization Category (up to)\*

AC-15, Ue/Ue 240V 3A

AC-15, Ue/Ue 240V 3A

Rate Insulation Voltage

400VAC

400VAC

Approvals

\* Depending on switching system - see technical information for details



#### Special features/variants (on request)

- Available with different spring lengths
- Spring rod
- Various spring versions

*Drawing dimensions in mm*

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