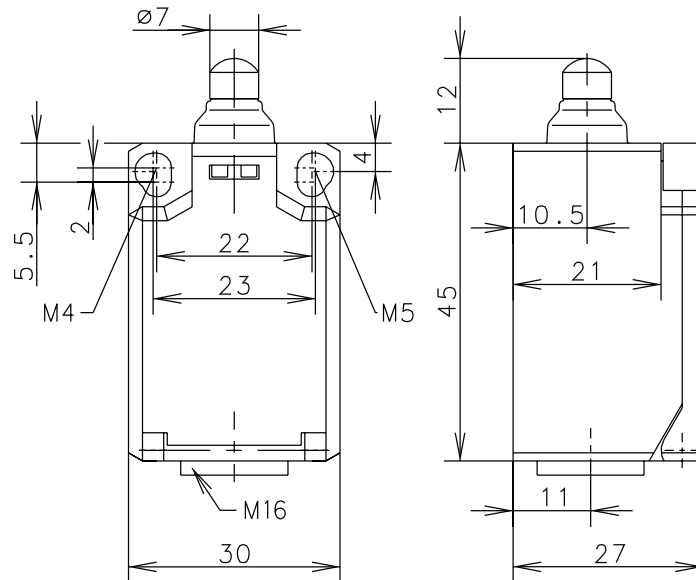


## Ti2 Series



### Recommended use

Ideal for safety applications and position monitoring in confined spaces with an IP65 protection rating.

### Product advantages

- Compact IP65 switch for safety applications
- Optimized size with a tried-and-tested connection system
- Two-channel safety monitoring possible
- With captive snap-on cover
- 2 mm contact opening width of slow-action system conforming to EN 81-1 for lift construction
- Small hysteresis in snap action system
- Actuator can be repositioned by 4 x 90°

### Options

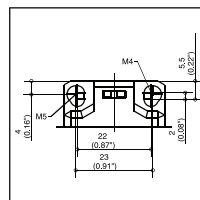
- Available with M12 connector
- AS interface variants available
- Preassembled with customer-specific cables and connectors on request

### Design layout

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

### Mounting

- Mounting dimensions conforming to DIN EN 50047
- 2 slots for adjustment with M4 screws (distance between centers 22 mm)



- Fixed positioning for safety applications with two M5 screws (distance between centers 23 mm)

### Installation advantages

- Snap-on cover can be released with screwdriver
- Cover protects switching element during installation
- Screw connections with clamping plates
- Transparent cover for adjustment and visual inspection
- Easy to install cover lock (close and press)

### Technical data

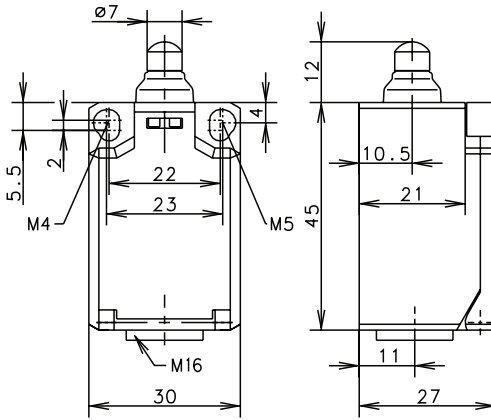
Electrical data		
Rated insulation voltage	$U_i$ max.	240 V AC
Conventional thermal current	$I_{the}$	10 A
Rated operating voltage	$U_e$ max.	240 V
Utilization category	$U_e/I_e$	AC-15, $U_e/I_e$ 240 V/3 A; DC-13, $U_e/I_e$ 240 V/0,27 A
Short-circuit protection		Fuse 6 A gL/gG
Protection class		II, Insulated
Mechanical data		
Enclosure material		Thermoplastic, glass fibre-reinforced (UL 94-V0)
Ambient temperature		-30 °C to +80 °C
Mechanical service life		3 x 10 <sup>6</sup> switching cycles
B10d		6 Mio.
Switching frequency		≤ 100/min.
Type of connection		Screw connections
Conductor cross sections		Single-wire 0.5 - 1.5 mm <sup>2</sup> or Stranded wire with ferrule 0.5 - 1.5 mm <sup>2</sup>
Cable entry		1 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 60947-1VDE 0660 T200, DIN EN 60947-5-1, IEC 60947-5-1		

Drawing dimensions in mm

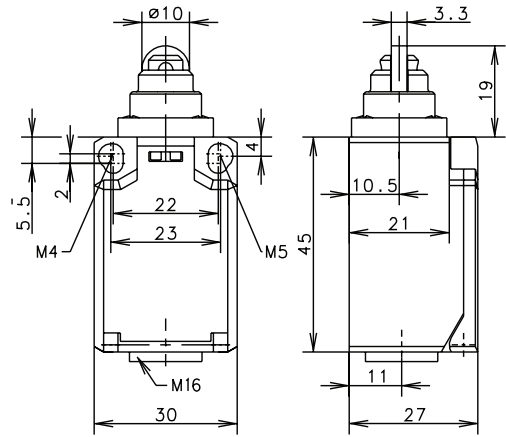
**Ti2 Series**

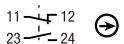
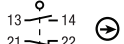
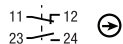
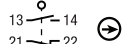
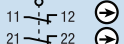
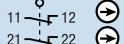
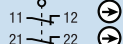
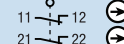
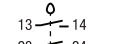
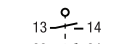


**W (Form B)**



**RIW (Form C)**



Switching Operation	Slow Action	Snap Action	Slow Action	Snap Action
<b>1 NC / 1 NO Contacts</b>	<b>608.8103.001</b> TI2-U1Z W 	<b>608.8153.002</b> TI2-SU1Z W 	<b>608.8117.007</b> TI2-U1Z RIW 	<b>608.8167.008</b> TI2-SU1Z RIW 
<b>2 NC Contacts</b>	<b>608.8803.003</b> TI2-A2Z W 	<b>608.8853.004</b> TI2-SA2Z W 	<b>608.8817.009</b> TI2-A2Z RIW 	<b>608.8867.010</b> TI2-SA2Z RIW 
<b>2 NO Contacts</b>	<b>608.8803.005</b> TI2-E2 W 	-	<b>608.8867.012</b> TI2-SE2 RIW 	-
<b>1 NC / 1 NO Contacts Overlapping</b>	-	-	-	-

**Technical Information**

	Slow Action	Snap Action	Slow Action	Snap Action
Maximum Switching Voltage	240V	240V	240V	240V
Maximum Switching Amperage	10A	10A	10A	10A
B10d	6 Million	6 Million	6 Million	6 Million
Mechanical Service Life	3 x 10 <sup>6</sup>	3 x 10 <sup>6</sup>	3 x 10 <sup>6</sup>	3 x 10 <sup>6</sup>
Switching Frequency	≤ 100/min	≤ 100/min	≤ 100/min	≤ 100/min
Operating Temperature	-30 °C to +80 °C	-30 °C to +80 °C	-30 °C to +80 °C	-30 °C to +80 °C
Protection Rating	IP65	IP65	IP65	IP65
Utilization Category	AC-15, Ue/Ue 240V 3A	AC-15, Ue/Ue 240V 3A	AC-15, Ue/Ue 240V 3A	AC-15, Ue/Ue 240V 3A
Rate Insulation Voltage	240VAC	240VAC	240VAC	240VAC

Approvals



**Special features / variants**

- Available with greater switching force

**Special features / variants**

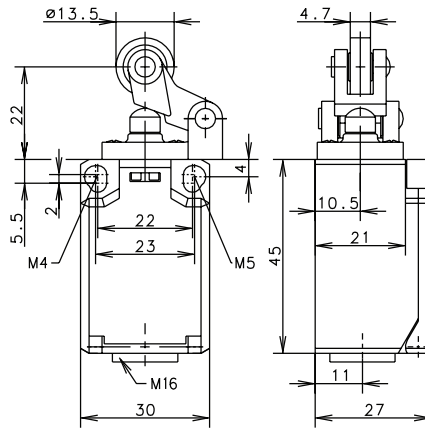
- Available with greater switching force
- Available different actuator direction
- Activation direction can not be rotated by user

*Drawing dimensions in mm*

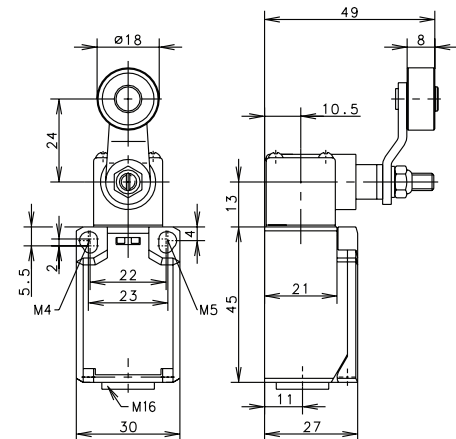
**Ti2 Series**



**HW (Form E)**



**AH (Form A)**



Switching Operation	HW (Form E)		AH (Form A)	
	Slow Action	Snap Action	Slow Action	Snap Action
<b>1 NC / 1 NO Contacts</b>	<b>608.8121.015</b> TI2-U1Z HW 	<b>608.8171.016</b> TI2-SU1Z HW 	<b>608.8135.021</b> TI2-U1Z AH 	<b>608.8185.022</b> TI2-SU1Z AH 
<b>2 NC Contacts</b>	<b>608.8821.017</b> TI2-A2Z HW 	<b>608.8871.018</b> TI2-SA2Z HW 	<b>608.8835.023</b> TI2-A2Z AH 	<b>608.8885.024</b> TI2-SA2Z AH 
<b>2 NO Contacts</b>	-	<b>608.8871.020</b> TI2-SE2 HW 	-	-
<b>1 NC / 1 NO Contacts Overlapping</b>	-	-	-	-
<b>Replacement actuator:</b>	<b>391.8191.547</b>		<b>391.8351.166</b>	

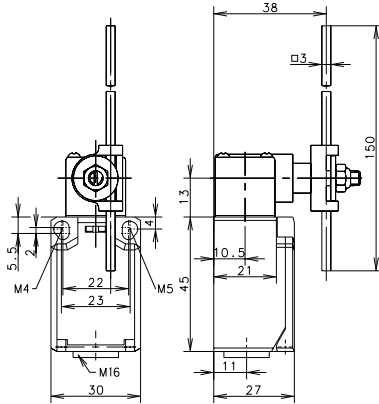
Technical Information	HW (Form E)		AH (Form A)	
	Slow Action	Snap Action	Slow Action	Snap Action
Maximum Switching Voltage	240V	240V	240V	240V
Maximum Switching Amperage	10A	10A	10A	10A
B10d	6 Million	6 Million	6 Million	6 Million
Mechanical Service Life	3 x 10 <sup>6</sup>	3 x 10 <sup>6</sup>	3 x 10 <sup>6</sup>	3 x 10 <sup>6</sup>
Switching Frequency	≤ 100/min	≤ 100/min	≤ 100/min	≤ 100/min
Operating Temperature	-30 °C to +80 °C	-30 °C to +80 °C	-30 °C to +80 °C	-30 °C to +80 °C
Protection Rating	IP65	IP65	IP65	IP65
Utilization Category	AC-15, Ue/Ue 240V 3A	AC-15, Ue/Ue 240V 3A	AC-15, Ue/Ue 240V 3A	AC-15, Ue/Ue 240V 3A
Rate Insulation Voltage	240VAC	240VAC	240VAC	240VAC
Approvals				

- Special features/variants** (on request)
- Available with different actuating directions
  - With steel roller
  - Various roller diameters
  - Available with different actuating directions
  - Various roller diameters
  - Various roller diameters
  - Offset or straight lever
  - Various lever lengths
  - With roller over switch

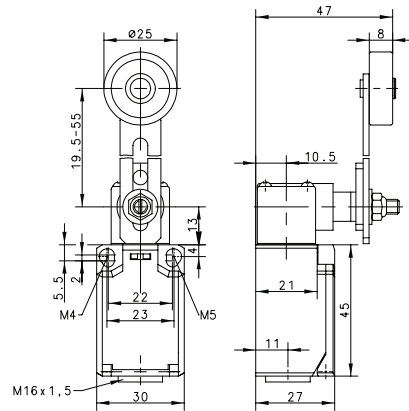
Drawing dimensions in mm

**Ti2 Series**

**AD**



**AV**



Switching Operation	Slow Action	Snap Action	Slow Action	Snap Action
<b>1 NC / 1 NO Contacts</b>	<b>608.8137.027</b> TI2-U1 AD 	<b>608.8187.028</b> TI2-SU1 AD 	<b>608.8136.033</b> TI2-U1 AV 	<b>608.8186.034</b> TI2-SU1 AV 
<b>2 NC Contacts</b>	<b>608.8837.029</b> TI2-A2 AD 	<b>608.8887.030</b> TI2-SA2 AD 	-	<b>608.8886.036</b> TI2-SA2 AV 
<b>2 NO Contacts</b>	-	<b>608.8887.032</b> TI2-SE2 AD 	<b>608.8836.037</b> TI2-E2 AV 	<b>608.8886.038</b> TI2-SE2 AV 
<b>1 NC / 1 NO Contacts Overlapping</b>	-	-	-	-

Replacement actuator: **391.8370.986** **391.8360.984**

Technical Information	AD		AV	
	Slow Action	Snap Action	Slow Action	Snap Action
Maximum Switching Voltage	240V	240V	240V	240V
Maximum Switching Amperage	10A	10A	10A	10A
B10d	6 Million	6 Million	6 Million	6 Million
Mechanical Service Life	3 x 10 <sup>6</sup>	3 x 10 <sup>6</sup>	3 x 10 <sup>6</sup>	3 x 10 <sup>6</sup>
Switching Frequency	≤ 100/min	≤ 100/min	≤ 100/min	≤ 100/min
Operating Temperature	-30 °C to +80 °C	-30 °C to +80 °C	-30 °C to +80 °C	-30 °C to +80 °C
Protection Rating	IP65	IP65	IP65	IP65
Utilization Category	AC-15, Ue/Ue 240V 3A	AC-15, Ue/Ue 240V 3A	AC-15, Ue/Ue 240V 3A	AC-15, Ue/Ue 240V 3A
Rate Insulation Voltage	240VAC	240VAC	240VAC	240VAC



**Special features/variants**

(on request)

- Available with different actuator directions
- With various actuator lengths
- Available with increased switch force

**Special features/variants**

(on request)

- Available with different actuator directions
- Various roller diameters & lever lengths
- With roller over switch

*Drawing dimensions in mm*