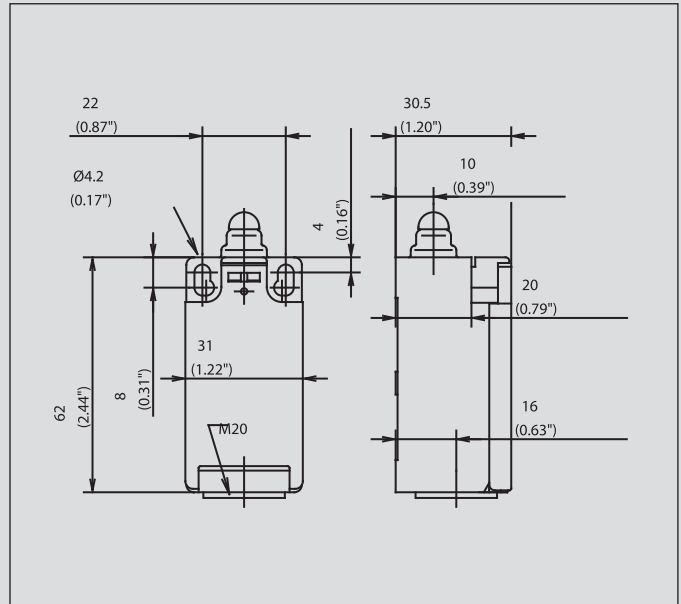


I88



### Recommended use

Thanks to its standard dimensions as well as its wide range of contacts and actuators, this switch can be used on safety facilities and for position monitoring in virtually any industrial application.

### Product advantages

- Standard switch conforming to DIN EN 50047
- Standard actuator conforming to DIN EN 50047 (see page 16)
- Protection class IP 65 to VDE 0470 T1
- Enclosure and cover PA 6, self-extinguishing (UL-94-V0)
- Actuator can be repositioned by 4 x 90°
- Cable entry M20 x 1.5
- Connection designation conforming to DIN EN 50013

### Options

- Available with M12 connector
- AS interface variants available
- Cable entry M16 x 1.5

### Design layout

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

### Mounting

- Two M4 screws (distance between centres 22 mm), adjustment with slots
- Two M5 screws for safety applications without additional fixing element (Fig. 1)
- Additionally secured by guide plate for lateral approach forces (Fig. 2 and page 69)
- Front mounting (depending on type, Fig. 3)

### Installation advantages

- Snap-on cover can be released with screwdriver
- Cover opening range 135° (cover can also be detached from hinge)
- Cover protects switching element during installation
- Screw connections with self-lifting clamping plates
- Easy-action cover lock (close and press)
- Cover additionally secured with screw

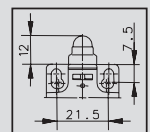


Fig. 1

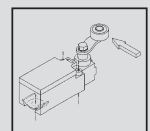


Fig. 2

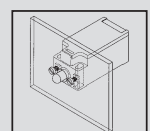


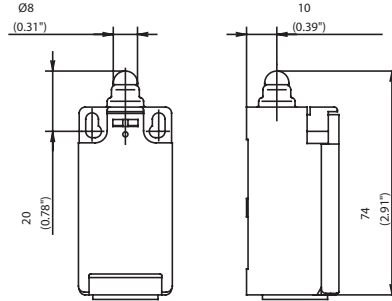
Fig. 3

### Technical data

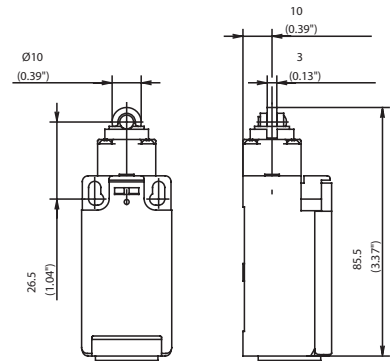
Electrical data	
Rated insulation voltage	U <sub>i</sub> max. 250 V AC
Conventional thermal current (up to) <sup>①</sup>	I <sub>the</sub> 10 A
Rated operating voltage	U <sub>e</sub> max. 240 V
Utilisation category (up to) <sup>①</sup>	AC-15, U <sub>e</sub> /I <sub>e</sub> 240 V/3 A
Short-circuit protection (up to) <sup>①</sup>	Fuse 10 A gL/gG
Protection class	II, Insulated
Mechanical data	
Enclosure material	Thermoplastic, glass fibre-reinforced (UL 94-V0)
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 Stranded wire with ferrule 0.5 – 1.5 mm <sup>2</sup>
Cable entry	1 x M20 x 1,5
Standards	
VDE 0660 T100, DIN EN 60947-1, IEC 60947-1	
VDE 0660 T200, DIN EN 60947-5-1, IEC 60947-5-1	

<sup>①</sup> Depending on switching system. See Table on Pages 70 – 73.

W (Form B)



RIWK (Form C)



Switching operation

Slow-action

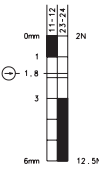
Snap-action

Slow-action

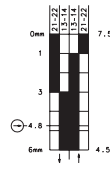
Snap-action

1 NC / 1 NO contact

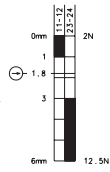
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I88-U1Z W



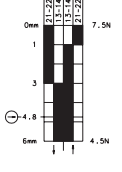
6086153012  
I88-SU1Z W



6086117017  
I88-U1Z RIWK

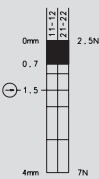


6086167018  
I88-SU1Z  
RIWK

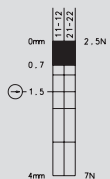


2 NC contacts

6086803013  
I88-A2Z W

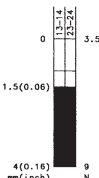


6086817087  
I88-A2Z RIWK

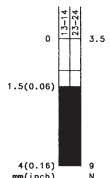


2 NO contacts

6086803014  
I88-E2 W

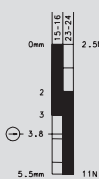


6086817071  
I88-E2 RIWK



1 NC / 1 NO contact  
Overlapping

6086303011  
I88-UV1Z W



Approvals



Replacement actuator: -

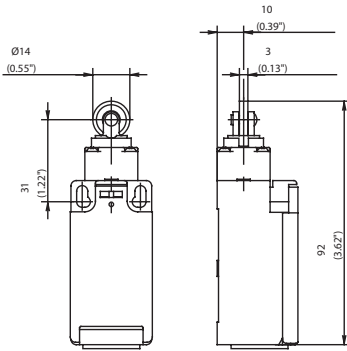
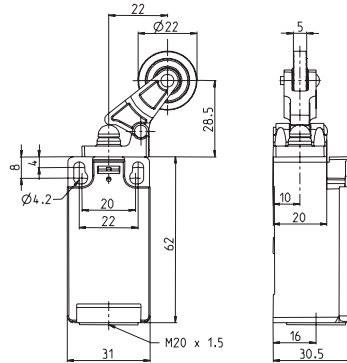
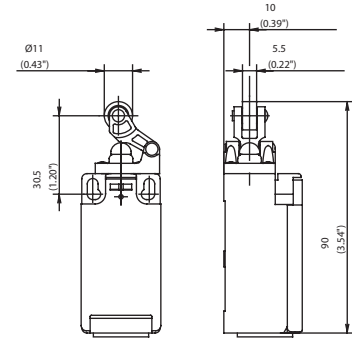
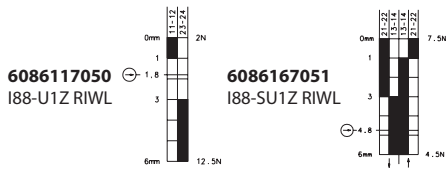
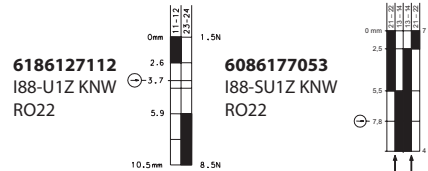
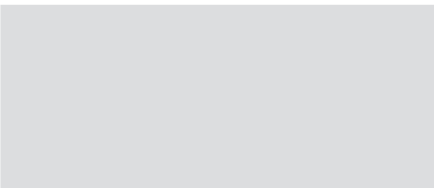
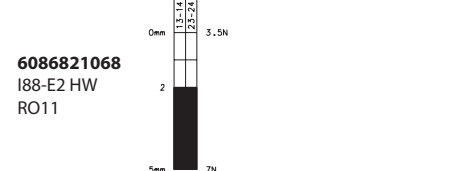
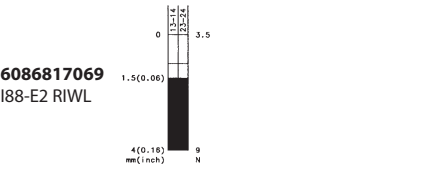
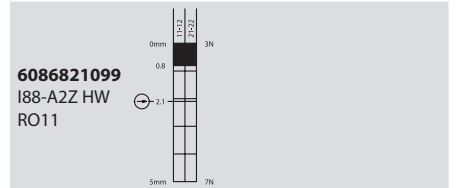
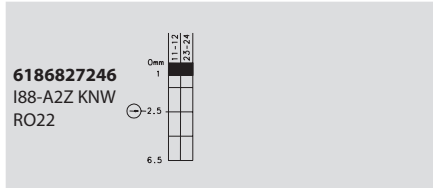
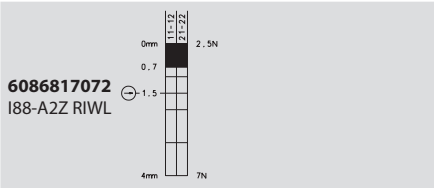
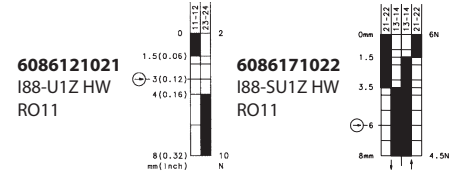
Replacement actuator: 3918161672

Special features / variants  
(on request)

- Available with black enclosure
- With latching function and following contacts:  
2 NC / 1 NO contact  
1 NC / 2 NO contact
- Both with and without overlap

Special features / variants  
(on request)

- Available with black enclosure
- With latching function
- With steel roller and following contacts:  
2 NC / 1 NO contact  
1 NC / 2 NO contact
- Both with overlap

**RIWL**

**KNW RO22**

**HW RO11 (Form E)**

**Slow-action**
**Snap-action**

**Slow-action**
**Snap-action**

**Slow-action**
**Snap-action**

**Replacement actuator: 3918161673**
**Replacement actuator: 3918252223**
**Replacement actuator: 3918191547**
**Special features / variants**

(on request)

- Available with black enclosure
- With latching function
- Available with different actuating directions
- With steel roller

**Special features / variants**

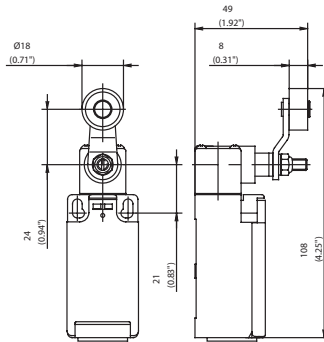
(on request)

**Special features / variants**

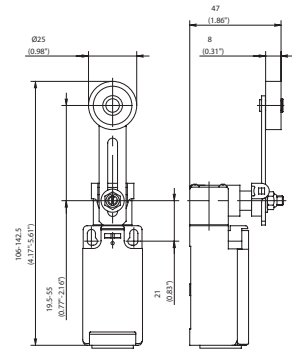
(on request)

- Available with black enclosure
- With steel roller
- Various roller diameters

**AH (Form A)**



**AV**



**Switching operation**

**1 NC / 1 NO contact**

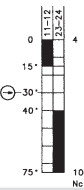
**Slow-action**

**Snap-action**

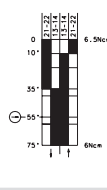
**Slow-action**

**Snap-action**

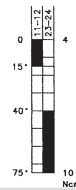
**6086135033**  
I88-U1Z AH



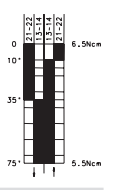
**6086185034**  
I88-SU1Z AH



**6086136037**  
I88-U1 AV



**6086186038**  
I88-SU1 AV

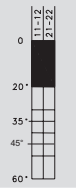


**2 NC contacts**

**6086835059**  
I88-A2Z AH



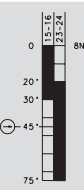
**6086836131**  
I88-A2 AV



**2 NO contacts**

**1 NC / 1 NO contact  
Overlapping**

**6186335628**  
I88-UV1Z AH



**Approvals**



**Replacement actuator: 3918351166**

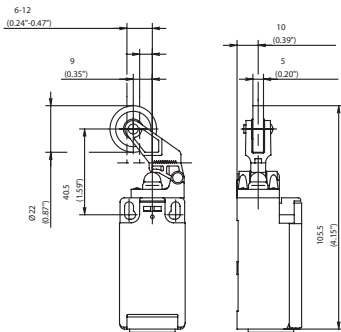
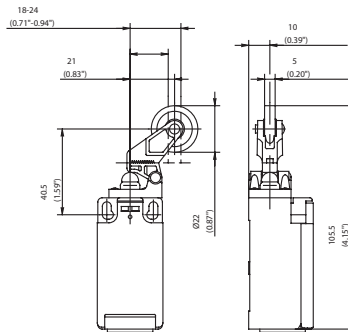
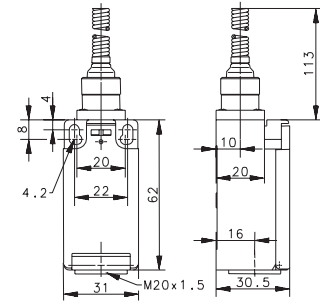
**Replacement actuator: 3918360984**

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

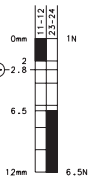
- Available with black enclosure
- Available with different actuating directions
- With steel roller
- Various roller diameters
- Cranked or straight lever
- Various lever lengths

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

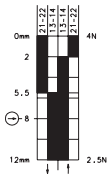
- Available with black enclosure
- Various actuating directions
- Various roller diameters
- Cranked or straight lever
- Various lever lengths
- With roller over switch

**DGHW RO22**

**DGKW RO22**

**FF**

**Slow-action**
**Snap-action**

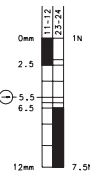
**6086121029**  
I88-U1Z DGHW  
RO22



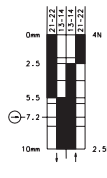
**6086171030**  
I88-SU1Z  
DGHW RO22


**Slow-action**
**Snap-action**

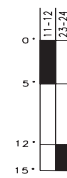
**6086127025**  
I88-U1Z DGKW  
RO22



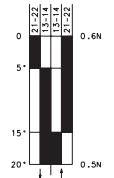
**6086177026**  
I88-SU1Z  
DGKW RO22


**Slow-action**
**Snap-action**

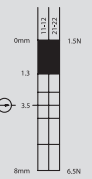
**6186140217**  
I88-U1 FF



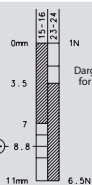
**6086190078**  
I88-SU1 FF



**6086821120**  
I88-A2Z DGHW  
RO22



**6186321244**  
I88-UV1Z  
DGHW RO22



Replacement actuator: 3918211529

Replacement actuator: 3918271528

Replacement actuator: 3918401031

**Special features / variants**

(on request)

- Available with black enclosure
- Available with different actuating directions
- Various roller diameters

**Special features / variants**

(on request)

- With latching function
- Various roller diameters and with following contacts:  
2 NC / 1 NO contact  
1 NC / 2 NO contact  
Both with overlap

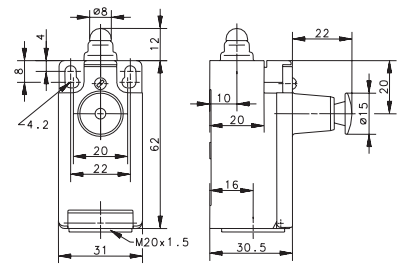
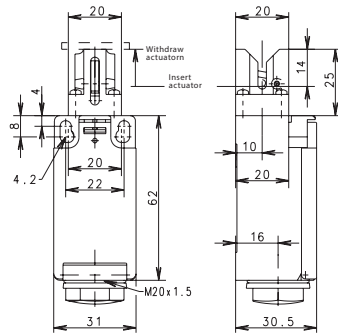
**Special features / variants**

(on request)

- Available with black enclosure
- Various spring lengths
- Different spring versions or spring rod

**KS**

**W RAST**

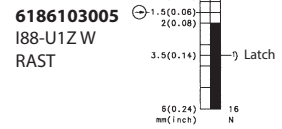
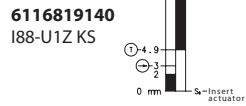


**Switching operation**

**Slow-action      Snap-action**

**Slow-action**

1 NC / 1 NO contact



2 NC contacts



2 NO contacts

1 NC / 1 NO contact  
Overlapping

Approvals



Replacement actuator: -

Replacement actuator: -

Special features / variants  
(on request)

Special features / variants  
(on request)