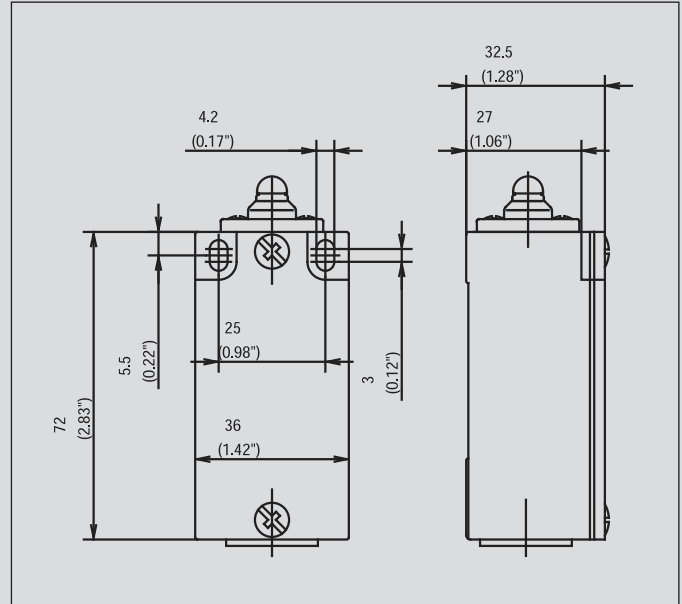


# Metal-Enclosed Limit Switches

## GC



### Recommended use

Thanks to its compact design, this metal-enclosed switch is ideally suited for virtually all safety and position monitoring applications.

### Product advantages

- Protection class IP 65 to VDE 0470 T1
- Enclosure: Aluminium pressure die-casting
- Cover: Sheet aluminium
- Actuator can be repositioned by 4 x 90°
- Cable entry M20 x 1.5
- Connection designation conforming to DIN EN 50013
- Metal actuators for high loads
- Graduated adjustment of AH lever
- Selectable direction-dependent contact-making of AH actuator (basic setting: contact-making both sides)

### Options

- AS interface versions on request
- 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, 2 NC, overlapping contacts
- All NC contacts with  $\ominus$  in the circuit diagram are positively opening contacts
- Type: Zb (galvanically isolated changeover contact)
- Latching function on request

### Mounting

- 2 adjustment slots for M4 screws (for safety applications with blind hole for  $\varnothing$  4.0 mm fitted pin in enclosure base or enclosure with holes for M5)

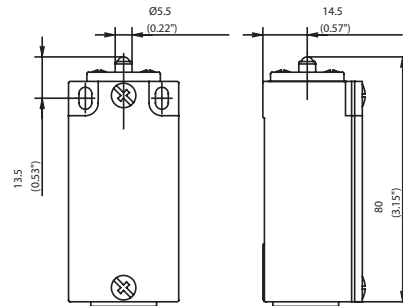
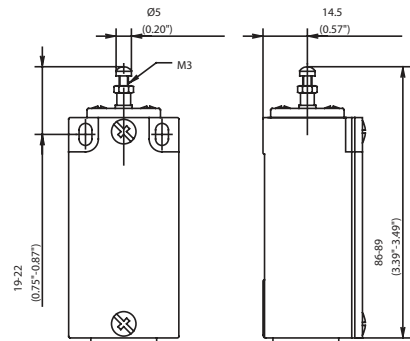
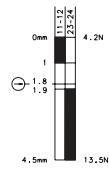
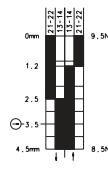
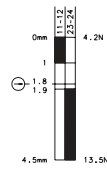
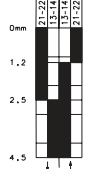
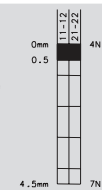
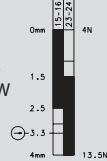
### Installation advantages

- Screw connections with self-lifting clamping plates
- Captive cover screws
- Easy-to-change switching system thanks to snap-in retainer
- Finely adjustable switching point with adjusting screw

### Technical data

Electrical data	
Rated insulation voltage (up to) <sup>①</sup>	U <sub>i</sub> max. 400 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
Utilization 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	I
Mechanical data	
Enclosure material	Aluminium pressure die-casting
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 Mill.
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
Protection class	IP 65 conforming to IEC/EN 60529
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.

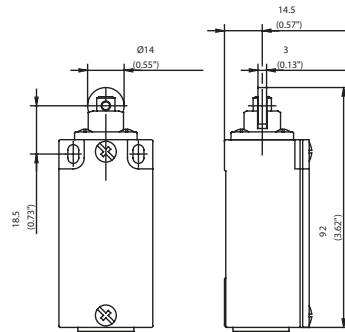
**IW**

**STIW**

**Switching operation**
**1 NC / 1 NO contact**
**Slow-action**
**Snap-action**
**6021102001**  
GC-U1Z IW

**6021352620**  
GC-SU1Z IW

**Slow-action**
**Snap-action**
**6021105015**  
GC-U1Z STIW

**6021155017**  
GC-SU1Z STIW

**2 NC contacts**
**6021802189**  
GC-A2Z IW

**2 NO contacts**
**1 NC / 1 NO contact  
Overlapping**
**6021305016**  
GC-UV1Z STIW

**Approvals**

**Replacement actuator: 3912030546**
**Replacement actuator: 3912050523**
**Special features / variants**  
(on request)

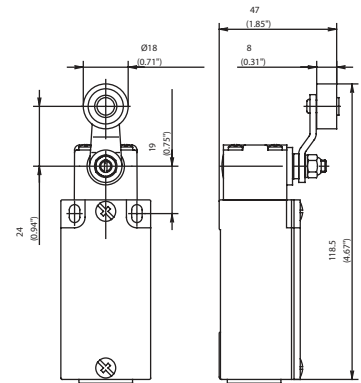
**Special features / variants**

- Actuator length adjustable with adjusting screw

RIW



AH



Switching operation

Slow-action

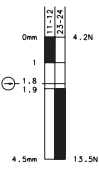
Snap-action

Slow-action

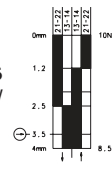
Snap-action

1 NC / 1 NO contact

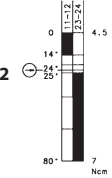
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GC-U1Z RIW



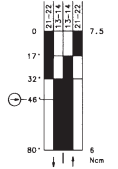
6021367626  
GC-SU1Z RIW



6021135102  
GC-U1Z AH



6021385634  
GC-SU1Z AH



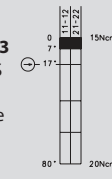
2 NC contacts

6021817172  
GC-A2Z RIW



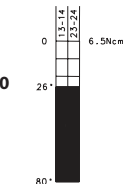
6121835833  
GC-A2Z AHS

See separate datasheet



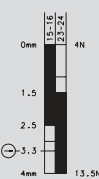
2 NO contacts

6021835160  
GC-E2 AH



1 NC / 1 NO contact  
Overlapping

6021317030  
GC-UV1Z RIW



6021335133  
GC-UV1Z AH



Approvals



Replacement actuator: 3912170518

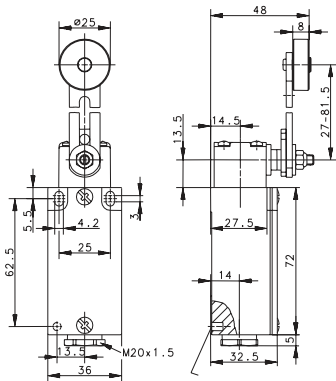
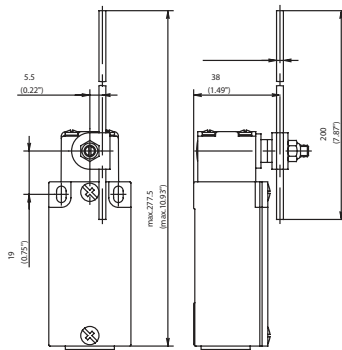
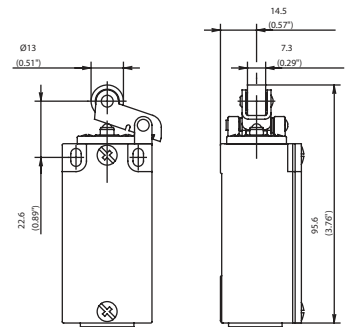
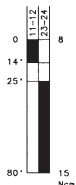
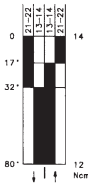
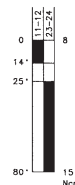
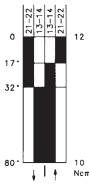
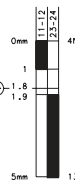
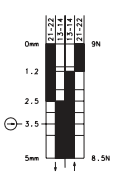
Replacement actuator: 3912350722

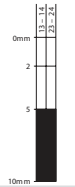
Special features / variants  
(on request)

- Available for high temperature range and following contacts:
  - 2 NC / 1 NO contact
  - 2 NC / 2 NO contact (larger enclosure)

Special features / variants  
(on request)

- Available with various roller diameters, cranked or straight lever and with various lever lengths
- With roller over switch and with following contacts:
  - 2 NC / 2 NO contact (larger enclosure)

**AV**

**AD**

**HIW**

**Slow-action**
**Snap-action**
**6021136104**  
GC-U1 AV

**6021186118**  
GC-SU1 AV

**Slow-action**
**Snap-action**
**6021137103**  
GC-U1 AD

**6021187125**  
GC-SU1 AD

**Slow-action**
**Snap-action**
**6021120057**  
GC-U1Z HIW

**6021370629**  
GC-SU1Z HIW

**6021820175**  
GC-A2Z HIW

**6021820157**  
GC-E2 HIW

**6021320058**  
GC-UV1Z HIW

**Replacement actuator: 3912360723**
**Replacement actuator: 3912370724**
**Replacement actuator: 3912200552**
**Special features / variants**  
(on request)

- Various roller diameters
- Different lever lengths
- With roller over switch and with following contacts:  
2 NC / 2 NO contact

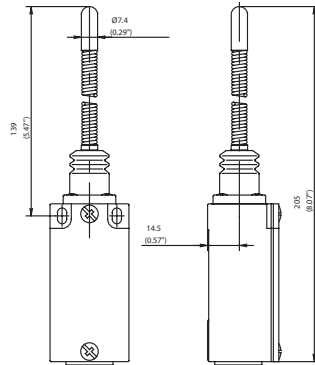
**Special features / variants**  
(on request)

- Available with various actuator lengths and actuator directions
- With following contacts:  
2 NC / 1 NO with overlap  
(larger enclosure)

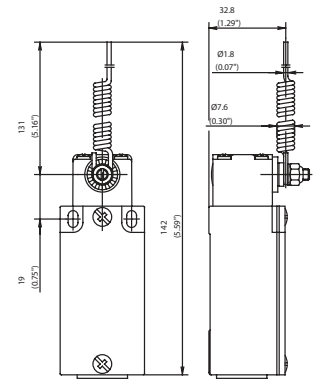
**Special features / variants**  
(on request)

- Available with different actuating directions
- Available with steel roller
- With following contacts:  
2 NC / 2 NO contact  
1 NC / 2 NO with overlap  
(larger enclosure)

FF



AF



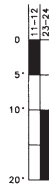
Switching operation

1 NC / 1 NO contact

Slow-action

Snap-action

6021140476  
GC-U1 FF



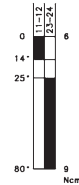
6021190100  
GC-SU1 FF



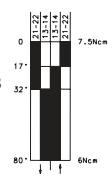
Slow-action

Snap-action

6021139106  
GC-U1 AF



6021189128  
GC-SU1 AF



2 NC contacts

2 NO contacts

1 NC / 1 NO contact  
Overlapping

Approvals



Replacement actuator: 3912400510

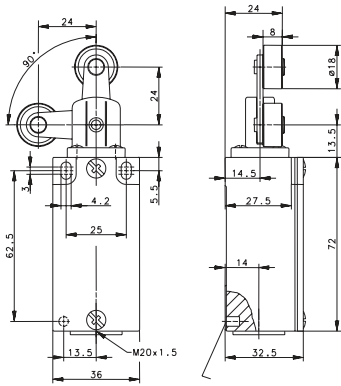
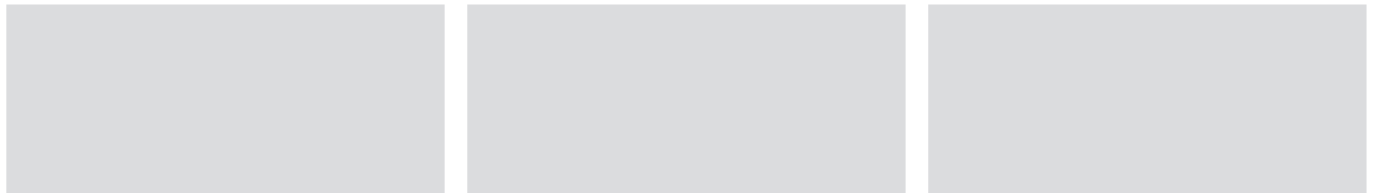
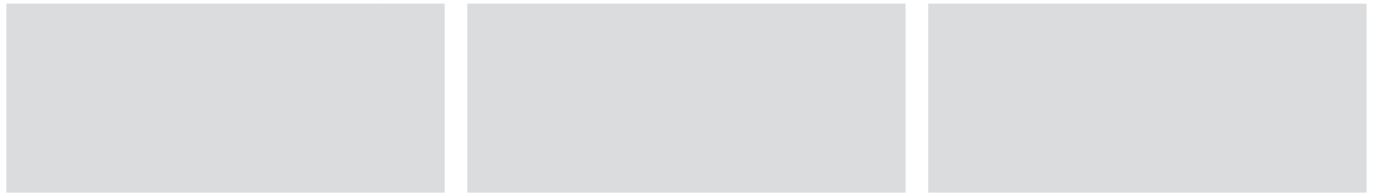
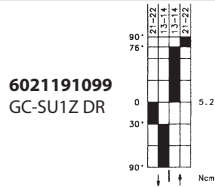
Replacement actuator: 3912390725

Special features / variants  
(on request)

- Different spring lengths
- Different spring versions or spring rod

Special features / variants  
(on request)

- Available with various actuator lengths and actuator directions

**DR**

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

**Replacement actuator: 3912410593**
**Special features / variants**  
(on request)