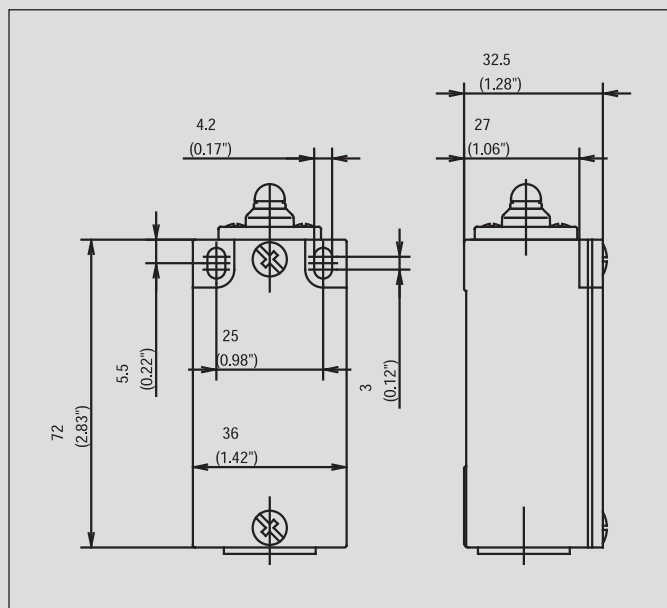


# Metal-Enclosed Limit Switches

## 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 / 1 NO, 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

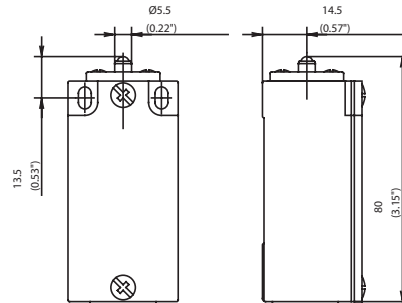
- Screw connections with self-lifting clamping plates
- Captive cover screws
- Easy-to-change switching system thanks to snap-in retainer
- Finely adjustable switching point with adjusting screw

### Technical data

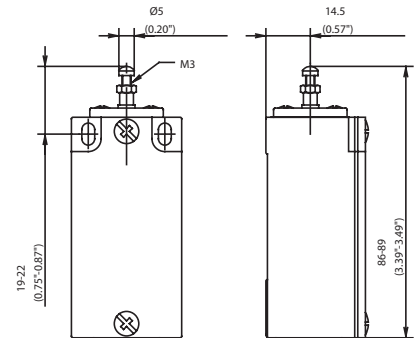
Electrical data	
Rated insulation voltage (up to) <sup>①</sup>	U <sub>i</sub> max. 400 V AC
Conventional thermal current (up to) <sup>①</sup>	I <sub>the</sub> 10 A
Rated operating voltage	U <sub>e</sub> max. 240 V
Utilization category (up to) <sup>①</sup>	AC-15, U <sub>e</sub> /I <sub>e</sub> 240 V/3 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



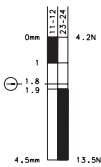
### Switching operation

1 NC / 1 NO contact

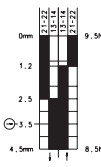
### Slow-action

### Snap-action

6021102001  
GC-U1Z IW



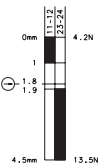
6021352620  
GC-SU1Z IW



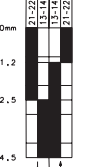
### Slow-action

### Snap-action

6021105015  
GC-U1Z STIW

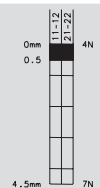


6021155017  
GC-SU1Z STIW



2 NC contacts

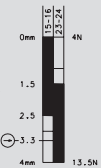
6021802189  
GC-A2Z IW



2 NO contacts

1 NC / 1 NO contact  
Overlapping

6021305016  
GC-UV1Z STIW



### Approvals



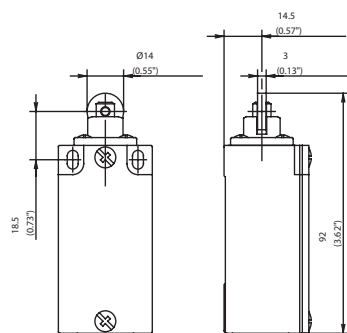
Replacement actuator: 3912030546

Replacement actuator: 3912050523

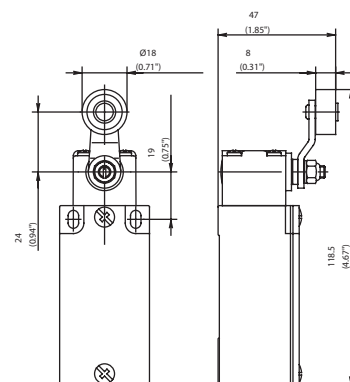
**Special features / variants**  
(on request)

**Special features / variants**  
● Actuator length adjustable  
with adjusting screw

## RIW



## AH



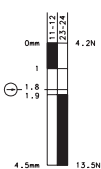
## Switching operation

## 1 NC / 1 NO contact

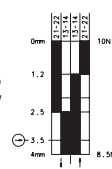
## Slow-action

## Snap-action

6021117029  
GC-U1Z RIW



6021367626  
GC-SU1Z RIW



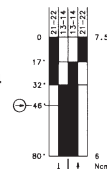
## Slow-action

## Snap-action

6021135102  
GC-U1Z AH

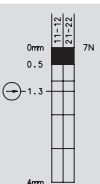


6021385634  
GC-SU1Z AH

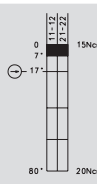


## 2 NC contacts

6021817172  
GC-A2Z RIW



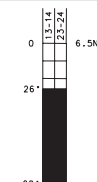
6121835833  
GC-A2Z AH



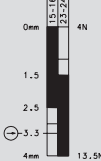
See separate  
datasheet

## 2 NO contacts

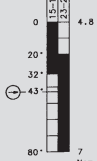
6021835160  
GC-E2 AH

1 NC / 1 NO contact  
Overlapping

6021317030  
GC-UV1Z RIW



6021335133  
GC-UV1Z AH



## Approvals



## Replacement actuator: 3912170518

## Replacement actuator: 3912350722

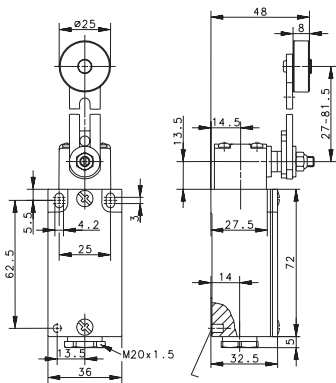
Special features / variants  
(on request)

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

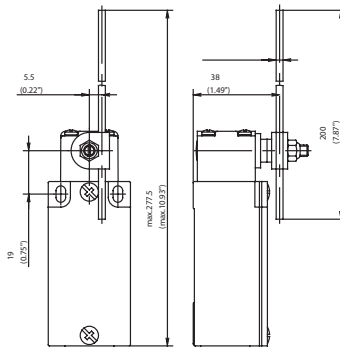
Special features / variants  
(on request)

- 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)

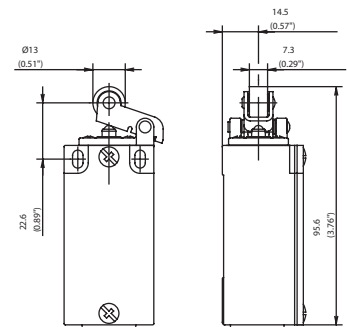
## AV



## AD



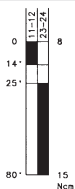
## HIW



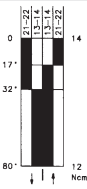
### Slow-action

### Snap-action

6021136104  
GC-U1 AV



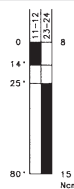
6021186118  
GC-SU1 AV



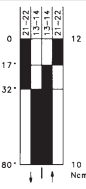
### Slow-action

### Snap-action

6021137103  
GC-U1 AD



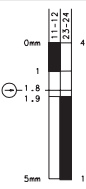
6021187125  
GC-SU1 AD



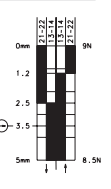
### Slow-action

### Snap-action

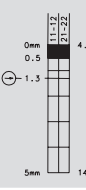
6021120057  
GC-U1Z HIW



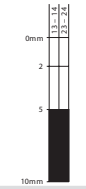
6021370629  
GC-SU1Z HIW



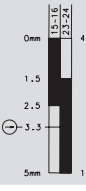
6021820175  
GC-A2Z HIW



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

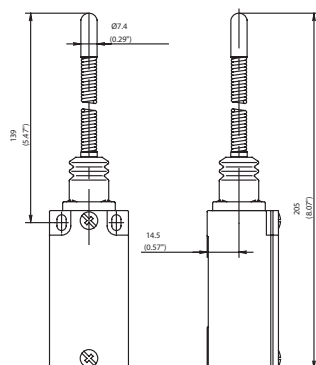
### Special features / variants (on request)

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

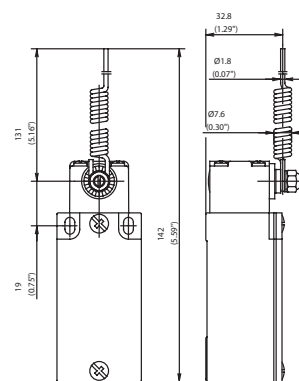
### Special features / variants (on request)

- 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

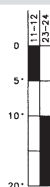
2 NC contacts

2 NO contacts

1 NC / 1 NO contact  
Overlapping

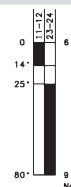
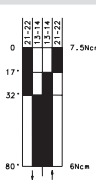
## Slow-action

## Snap-action

6021140476  
GC-U1 FF6021190100  
GC-SU1 FF

## Slow-action

## Snap-action

6021139106  
GC-U1 AF6021189128  
GC-SU1 AF

## Approvals



Replacement actuator: 3912400510

Replacement actuator: 3912390725

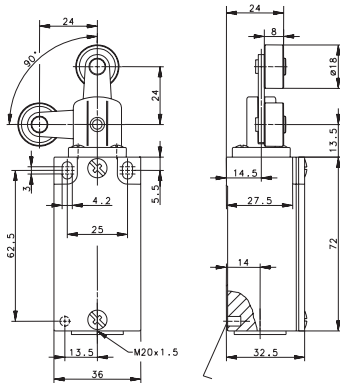
Special features / variants  
(on request)

- Different spring lengths
- Different spring versions or spring rod

Special features / variants  
(on request)

- Available with various actuator lengths and actuator directions

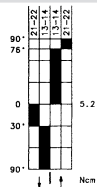
DR



Slow-action

Snap-action

6021191099  
GC-SU1Z DR



Replacement actuator: 3912410593

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