

Metal-bodied limit switches

GC I

Slim design
Protection class IP 65
Very large range of actuators
Multiple pole contacts



CE



- Snap action or slow make & break contacts
- Galvanically separated contacts (type dependant)
- Forced disconnection of NC contacts
- Protection class IP 65
- Aluminum body and lid
- 4 x 90° actuator positions
- Adjustment of the AH lever arm position in 90° increments
- Single direction operation of contacts with AH actuator (user selectable)
- Cable entry M 20 x 1.5
- Terminals numbered in accordance with DIN EN 50013
- International approvals
- Model range GC II for additional switch functions (on request)

Mounting

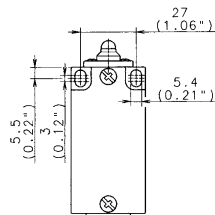
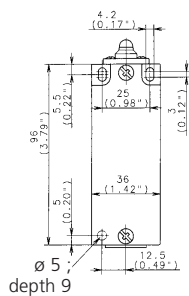
- Adjustable – two slots for M 4 screws

Benefits

- Screw terminals with self-lifting clamps for easy wiring
- Easily exchanged contact block with latch holding device
- Contact switch point adjustable with adjusting screw

Options

- Contact lock (button reset)
- Housing size I
Slots for M 5 fixing screws (27 mm pitch)
- EEx certificated versions available acc. ATEX 100 a guideline 94/9/EG
Ⓜ II 2 G EEx d II C T6
TÜV 03 ATEX 2043 X



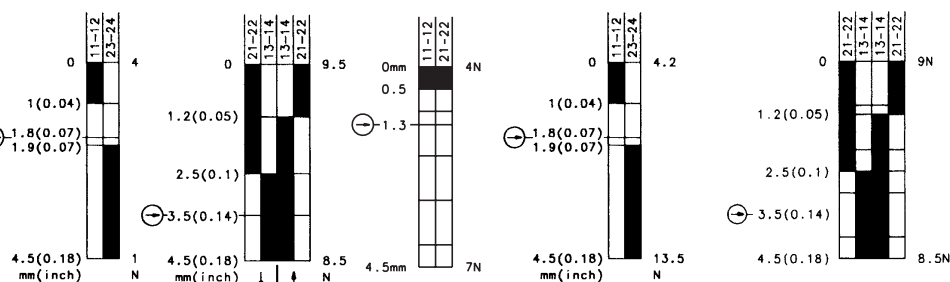
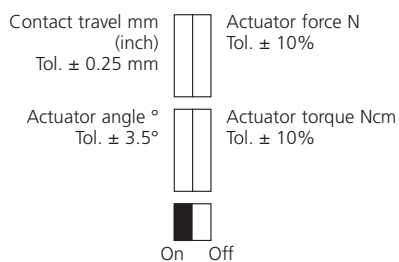
(For safety applications use 4 mm \varnothing dowel in pre-formed blind hole on underside of switch body or select body with M 5 round holes)

Contact configuration

| Contact type | Switch function | Switch contacts | Reference | Max. voltage | Max. constant current |
|-------------------|------------------------|-----------------|-----------|--------------|-----------------------|
| Slow make & break | Changeover | 1NC/1NO | U1/U1Z | 500 V | 10 A |
| Snap action | Changeover | 1NC/1NO | SU1/SU1Z | 500 V | 10 A |
| Slow make & break | NC | 2NC | A2Z | 400 V | 6 A |
| Slow make & break | NO | 2NO | E2 | 400 V | 6 A |
| Slow make & break | Changeover overlapping | 1NC/1NO | UV1Z | 500 V | 10 A |
| Slow make & break | Changeover | 2NC/1NO | U15Z | 400 V | 6 A |
| Slow make & break | Changeover | 1NC/2NO | U16Z | 400 V | 6 A |
| Slow make & break | Changeover overlapping | 2NC/1NO | UV15Z | 400 V | 6 A |
| Slow make & break | Changeover overlapping | 1NC/2NO | UV16Z | 400 V | 6 A |
| Slow make & break | Changeover | 2NC/2NO | U2Z | 400 V | 6 A |
| Snap action | Changeover | 2NC/2NO | SU2 | 250 V | 6 A |

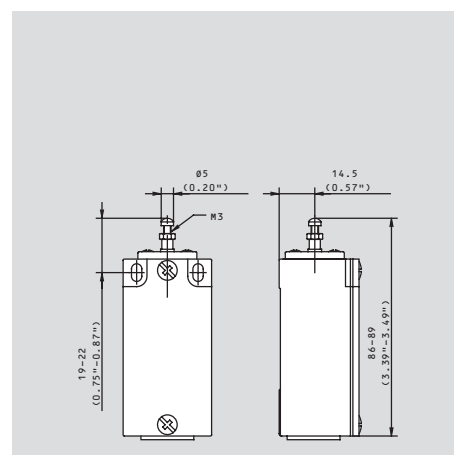
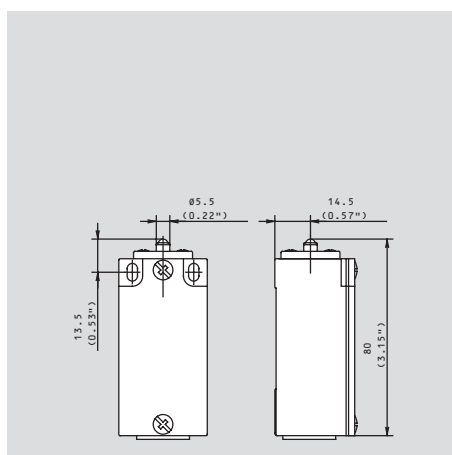
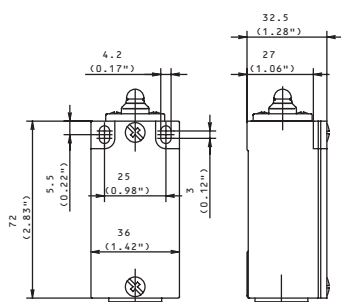


| Designation | GC-U1Z iw | GC-SU1Z iw | GC-A2Z iw | GC-U1Z STiw | GC-SU1Z STiw |
|--|---------------------|---------------------|---------------------|---------------------|---------------------|
| Part number | 602.1102.001 | 602.1352.620 | 602.1802.189 | 602.1105.015 | 602.1155.017 |
| Circuit diagram | | | | | |
| ⊕ Forced disconnect to IEC 947-5-1 chapter 3 | | | | | |
| Za: not galvanically separated contacts | | | | | |
| Zb: galvanically separated contacts | | | | | |
| Slow make & break/snap-action | | | | | |
| Internal seal (iw)/external seal (w) | iw | iw | iw | iw | iw |



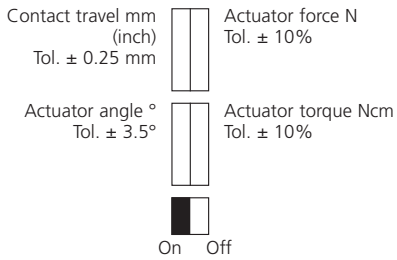
| | | | | | | |
|---|-----------|----------------------|----------------------|---------------------|----------------------|----------------------|
| Voltage | max. | 500 V AC | 500 V AC | 400 V AC | 500 V AC | 500 V AC |
| Permanent current | max. | 10 A | 10 A | 6 A | 10 A | 10 A |
| In-rush current complies with standards | | ● | ● | ● | ● | ● |
| IEC 947-5-1 AC 15/DC 13 | | | | | | |
| Switching frequency | max. | 100/min. | 100/min. | 100/min. | 100/min. | 100/min. |
| Mechanical life – number of switching actions | | 10 x 10 ⁶ | 10 x 10 ⁶ | 3 x 10 ⁵ | 10 x 10 ⁶ | 10 x 10 ⁶ |
| Operating temperature | min./max. | -30 °C/+80 °C | -30 °C/+80 °C | -30 °C/+80 °C | -30 °C/+80 °C | -30 °C/+80 °C |
| | | -22 °F/+176 °F | -22 °F/+176 °F | -22 °F/+176 °F | -22 °F/+176 °F | -22 °F/+176 °F |
| Approvals | | UL, CSA | UL, CSA | UL, CSA | UL, CSA | UL, CSA |
| Weight | | 0.14 kg/0.31 lb | 0.14 kg/0.31 lb | 0.14 kg/0.31 lb | 0.14 kg/0.31 lb | 0.14 kg/0.31 lb |
| Delivery: ex-stock/built to order | | ●/- | ●/- | -/● | ●/- | ●/- |

All dimensions in mm (inch)



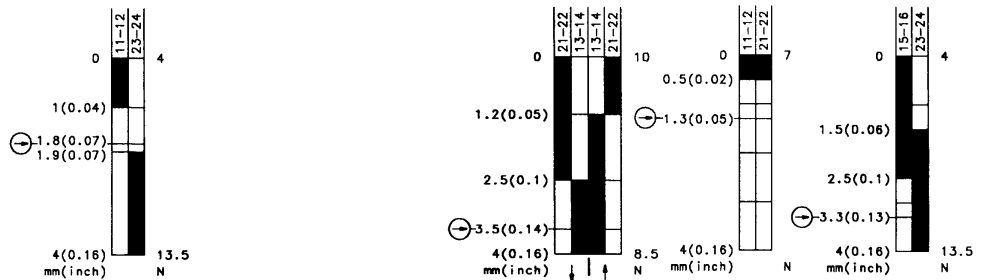


Designation
Part number
 Circuit diagram
 ⊕ Forced disconnect to IEC 947-5-1 chapter 3
 Za: not galvanically separated contacts
 Zb: galvanically separated contacts
Slow make & break/snap-action
 Internal seal (iw)/external seal (w)



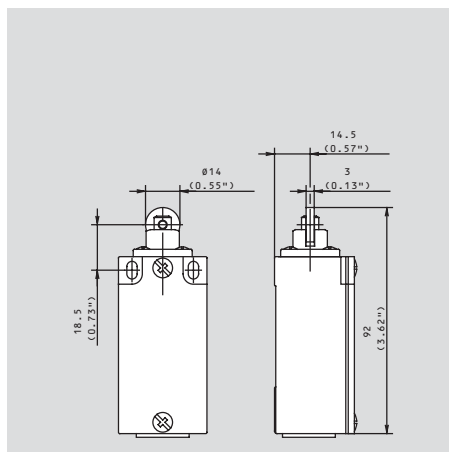
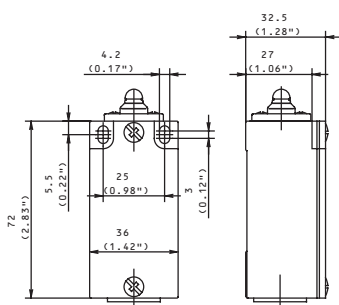
| | |
|---|-----------|
| Voltage | max. |
| Permanent current | max. |
| In-rush current complies with standards | |
| IEC 947-5-1 AC 15/DC 13 | |
| Switching frequency | max. |
| Mechanical life – number of switching actions | |
| Operating temperature | min./max. |
| Approvals | |
| Weight | |
| Delivery: ex-stock/built to order | |

| GC-U1Z Riw | GC-SU1Z Riw | GC-A2Z Riw | GC-UV1Z Riw |
|---------------------|---------------------|---------------------|---------------------|
| 602.1117.029 | 602.1367.626 | 602.1817.172 | 602.1317.030 |
| | | | |
| ⊕ Zb | ⊕ Zb | ⊕ Za | ⊕ Zb |
| ●/- | -/● | ●/- | ●/- |
| iw | iw | iw | iw |



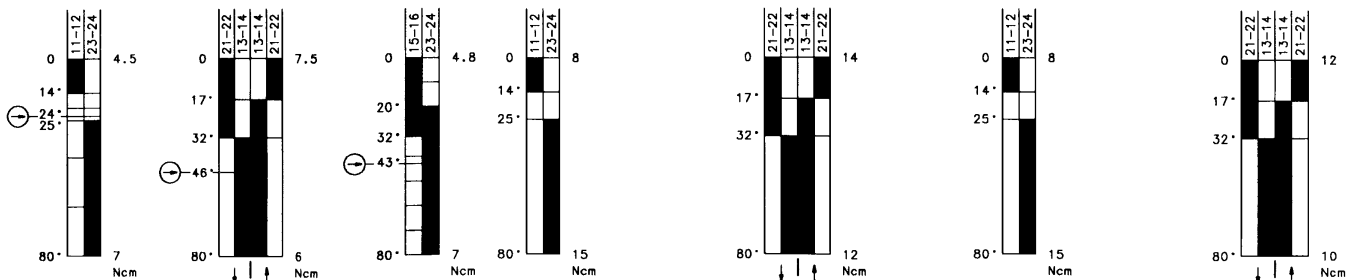
| | | | |
|----------------------|----------------------|---------------------|----------------------|
| 500 V AC | 500 V AC | 400 V AC | 500 V AC |
| 10 A | 10 A | 6 A | 10 A |
| ● | ● | ● | ● |
| 100/min. | 100/min. | 100/min. | 100/min. |
| 10 x 10 ⁶ | 10 x 10 ⁶ | 3 x 10 ⁶ | 10 x 10 ⁶ |
| -30 °C/+80 °C | -30 °C/+80 °C | -30 °C/+80 °C | -30 °C/+80 °C |
| -22 °F/+176 °F | -22 °F/+176 °F | -22 °F/+176 °F | -22 °F/+176 °F |
| UL, CSA | UL, CSA | - | UL, CSA |
| 0.15 kg/0.33 lb | 0.15 kg/0.33 lb | 0.15 kg/0.33 lb | 0.15 kg/0.33 lb |
| ●/- | ●/- | ●/- | ●/- |

All dimensions in mm (inch)

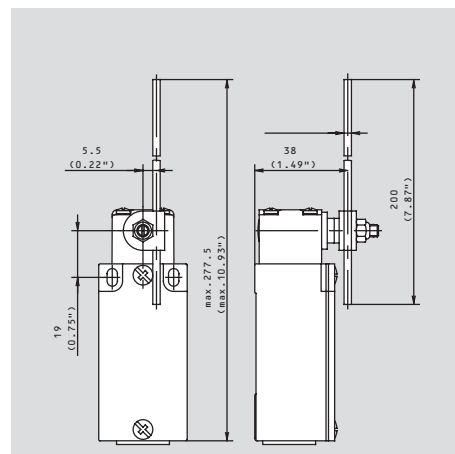
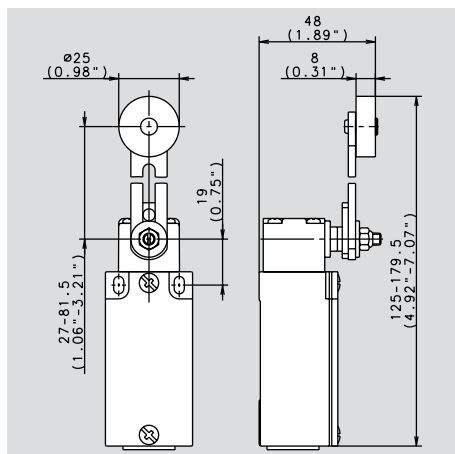
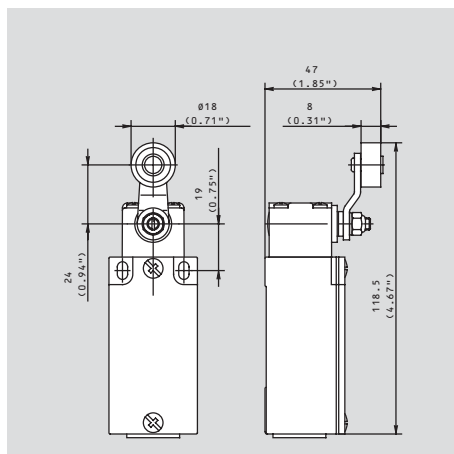




| | | | | | | |
|---------------------------|----------------------------|----------------------------|--------------------------|---------------------------|--------------------------|---------------------------|
| GC-U1Z AH 602.1135.102 | GC-SU1Z AH 602.1385.634 | GC-UV1Z AH 602.1335.133 | GC-U1 AV 602.1136.104 | GC-SU1 AV 602.1186.118 | GC-U1 AD 602.1137.103 | GC-SU1 AD 602.1187.125 |
| | | | | | | |
| ●/- | ●/- | ●/- | ●/- | -/● | ●/- | -/● |
| iw | iw | iw | iw | iw | iw | iw |



| | | | | | | |
|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| 500 V AC | 500 V AC | 500 V AC | 500 V AC | 500 V AC | 500 V AC | 500 V AC |
| 10 A | 10 A | 10 A | 10 A | 10 A | 10 A | 10 A |
| ● | ● | ● | ● | ● | ● | ● |
| 100/min. | 100/min. | 100/min. | 100/min. | 100/min. | 100/min. | 100/min. |
| 10 x 10 ⁶ | 10 x 10 ⁶ | 10 x 10 ⁶ | 10 x 10 ⁶ | 10 x 10 ⁶ | 10 x 10 ⁶ | 10 x 10 ⁶ |
| -30 °C/+80 °C | -30 °C/+80 °C | -30 °C/+80 °C | -30 °C/+80 °C | -30 °C/+80 °C | -30 °C/+80 °C | -30 °C/+80 °C |
| -22 °F/+176 °F | -22 °F/+176 °F | -22 °F/+176 °F | -22 °F/+176 °F | -22 °F/+176 °F | -22 °F/+176 °F | -22 °F/+176 °F |
| UL, CSA | UL, CSA | UL, CSA | UL, CSA | UL, CSA | UL, CSA | UL, CSA |
| 0.20 kg/0.44 lb | 0.20 kg/0.44 lb | 0.20 kg/0.44 lb | 0.23 kg/0.51 lb | 0.23 kg/0.51 lb | 0.22 kg/0.49 lb | 0.22 kg/0.49 lb |
| ●/- | ●/- | ●/- | ●/- | ●/- | ●/- | ●/- |

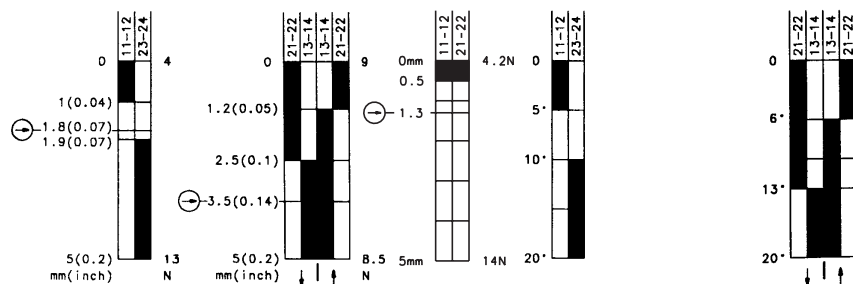




Designation
Part number
 Circuit diagram
 ⊕ Forced disconnect to IEC 947-5-1 chapter 3
 Za: not galvanically separated contacts
 Zb: galvanically separated contacts
 Slow make & break/snap-action
 Internal seal (iw)/external seal (w)

| GC-U1Z Hiw | GC-SU1Z Hiw | GC-A2Z Hiw | GC-U1 FF | GC-SU1 FF |
|---------------------|---------------------|---------------------|---------------------|---------------------|
| 602.1120.057 | 602.1370.629 | 602.1820.175 | 602.1140.476 | 602.1190.100 |
| | | | | |
| ⊕ Zb | ⊕ Zb | ⊕ Zb | Zb | Zb |
| ●/- | -/● | ●/- | ●/- | -/● |
| iw | iw | iw | w | w |

Contact travel mm
 Tol. ± 0.25 mm
 Actuator force N
 Tol. ± 10%
 Actuator angle °
 Tol. ± 3.5°
 Actuator torque Ncm
 Tol. ± 10%
 On Off



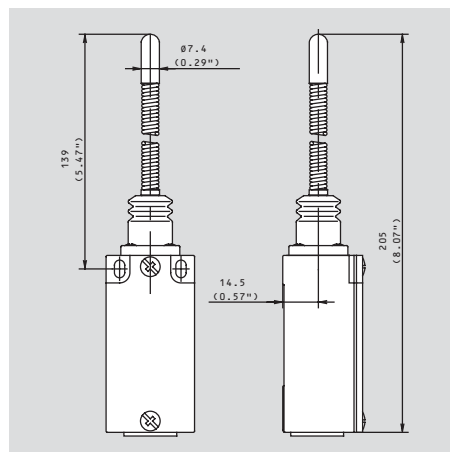
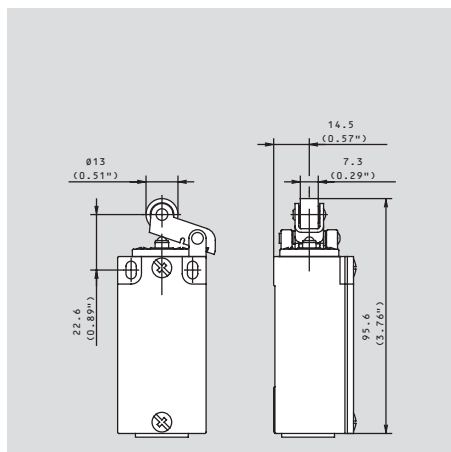
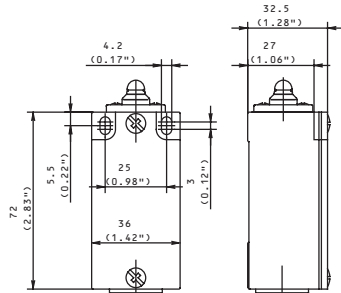
Voltage max.
 Permanent current max.
 In-rush current complies with standards
 IEC 947-5-1 AC 15/DC 13
 Switching frequency max.
 Mechanical life – number of switching actions
 Operating temperature min./max.

| | | | | |
|----------------------|----------------------|---------------------|----------------------|----------------------|
| 500 V AC | 500 V AC | 400 V AC | 500 V AC | 500 V AC |
| 10 A | 10 A | 6 A | 10 A | 10 A |
| ● | ● | ● | ● | ● |
| 100/min. | 100/min. | 100/min. | 100/min. | 100/min. |
| 10 x 10 ⁶ | 10 x 10 ⁶ | 3 x 10 ⁶ | 10 x 10 ⁶ | 10 x 10 ⁶ |
| -30 °C/+80 °C | -30 °C/+80 °C | -30 °C/+80 °C | -30 °C/+80 °C | -30 °C/+80 °C |
| -22 °F/+176 °F | -22 °F/+176 °F | -22 °F/+176 °F | -22 °F/+176 °F | -22 °F/+176 °F |

Approvals
 Weight
 Delivery: ex-stock/built to order

| | | | | |
|-----------------|-----------------|-----------------|-----------------|-----------------|
| UL, CSA | UL, CSA | - | UL, CSA | UL, CSA |
| 0.16 kg/0.35 lb | 0.16 kg/0.35 lb | 0.16 kg/0.35 lb | 0.17 kg/0.37 lb | 0.17 kg/0.37 lb |
| ●/- | ●/- | -/● | ●/- | ●/- |

All dimensions in mm (inch)

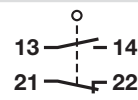
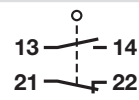
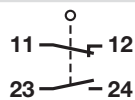




GC-U1 AF
602.1139.106

GC-SU1 AF
602.1189.128

GC-SU1 DR
602.1191.099



Zb
●/-

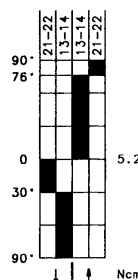
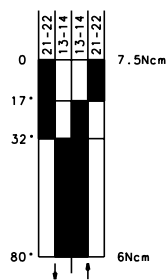
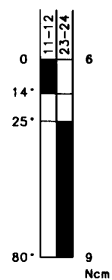
Zb
-/●

Zb
-/●

iv

iv

iv



500 V AC
10 A

500 V AC
10 A

500 V AC
10 A

100/min.
10 x 10⁶
-30 °C/+80 °C
-22 °F/+176 °F

100/min.
10 x 10⁶
-30 °C/+80 °C
-22 °F/+176 °F

100/min.
10 x 10⁶
-30 °C/+80 °C
-22 °F/+176 °F

UL, CSA

UL, CSA

UL, CSA

0.21 kg/0.46 lb

0.21 kg/0.46 lb

0.18 kg/0.40 lb

●/-

●/-

●/-

