

# 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

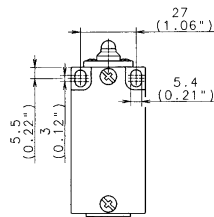
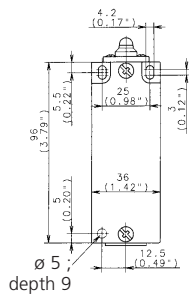
- Adjustable – two slots for M 4 screws

### 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



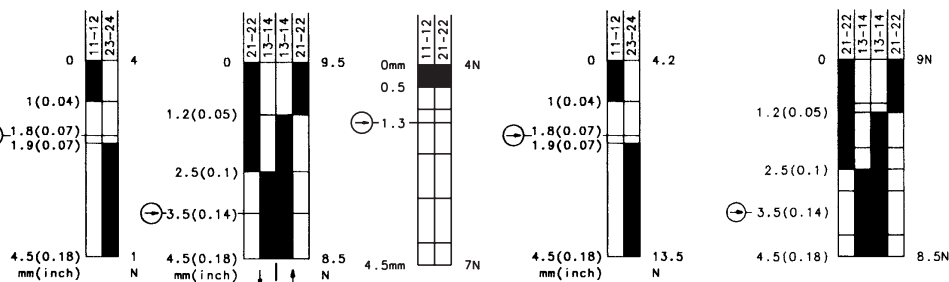
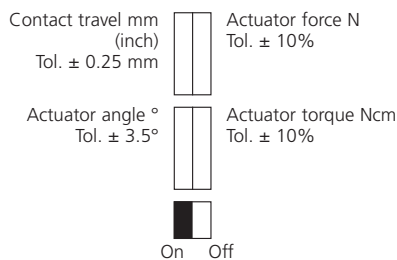
(For safety applications use 4 mm ø dowel in pre-formed blind hole on underside of switch body or select body with M 5 round holes)

## 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

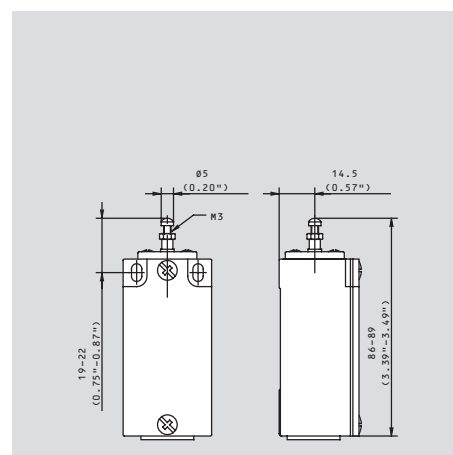
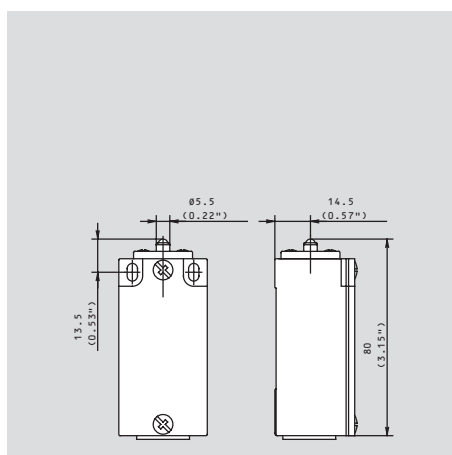
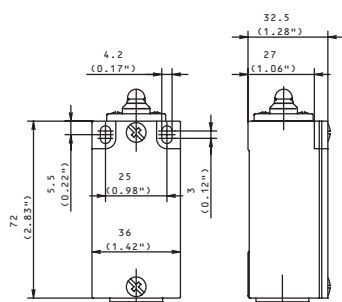


Designation	GC-U1Z iw	GC-SU1Z iw	GC-A2Z iw	GC-U1Z STiw	GC-SU1Z STiw
<b>Part number</b>	<b>602.1102.001</b>	<b>602.1352.620</b>	<b>602.1802.189</b>	<b>602.1105.015</b>	<b>602.1155.017</b>
Circuit diagram					
⊕ Forced disconnect to IEC 947-5-1 chapter 3					
Za: not galvanically separated contacts			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



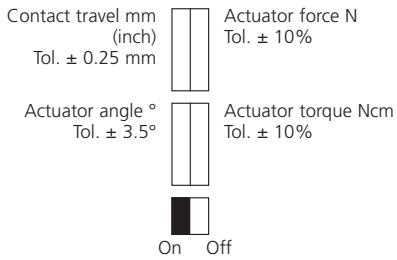
Voltage	max.	500 V AC	500 V AC	400 V AC	500 V AC	500 V AC
Permanent current	max.	10 A	10 A	6 A	10 A	10 A
In-rush current complies with standards		●	●	●	●	●
IEC 947-5-1 AC 15/DC 13						
Switching frequency	max.	100/min.	100/min.	100/min.	100/min.	100/min.
Mechanical life – number of switching actions		10 x 10 <sup>6</sup>	10 x 10 <sup>6</sup>	3 x 10 <sup>5</sup>	10 x 10 <sup>6</sup>	10 x 10 <sup>6</sup>
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)



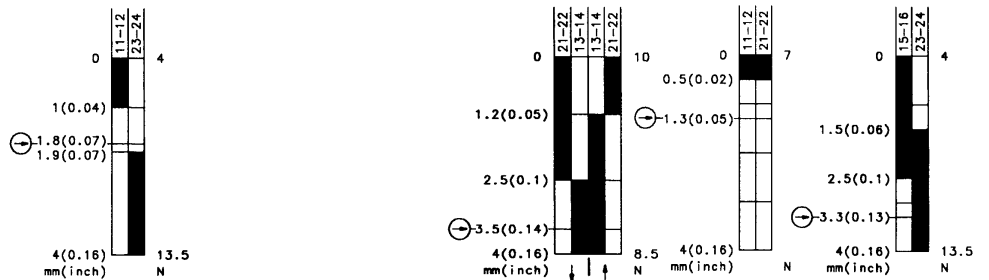


Designation  
**Part number**  
 Circuit diagram  
 ⊕ Forced disconnect to IEC 947-5-1 chapter 3  
 Za: not galvanically separated contacts  
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 Slow make & break/snap-action  
 Internal seal (iw)/external seal (w)



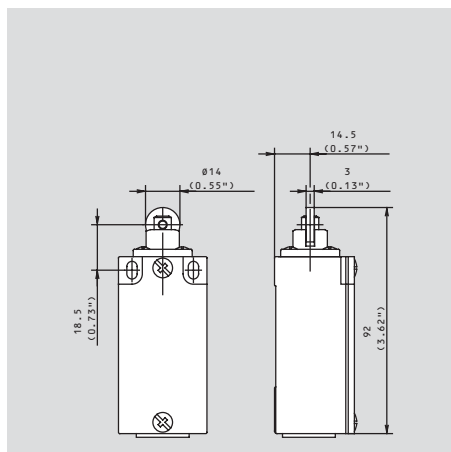
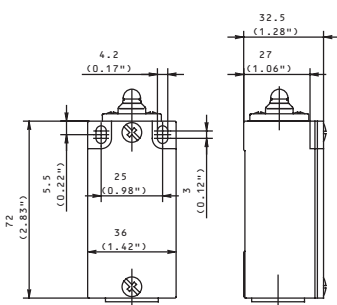
Voltage	max.
Permanent current	max.
In-rush current complies with standards	
IEC 947-5-1 AC 15/DC 13	
Switching frequency	max.
Mechanical life – number of switching actions	
Operating temperature	min./max.
Approvals	
Weight	
Delivery: ex-stock/built to order	

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



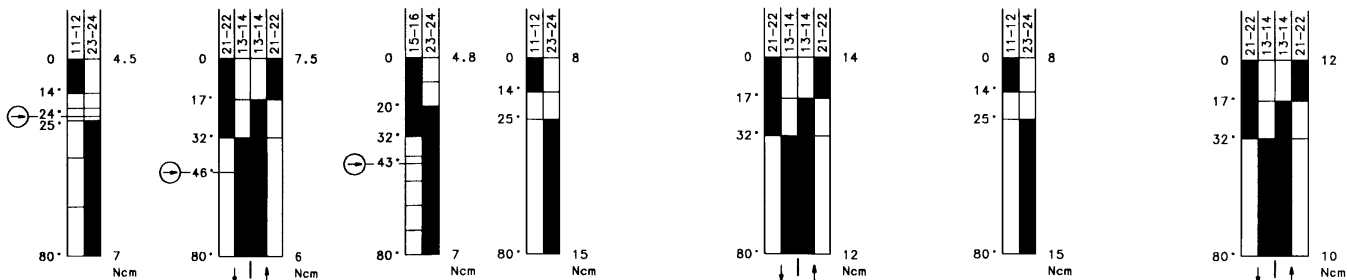
500 V AC	500 V AC	400 V AC	500 V AC
10 A	10 A	6 A	10 A
●	●	●	●
100/min.	100/min.	100/min.	100/min.
10 x 10 <sup>6</sup>	10 x 10 <sup>6</sup>	3 x 10 <sup>6</sup>	10 x 10 <sup>6</sup>
-30 °C/+80 °C	-30 °C/+80 °C	-30 °C/+80 °C	-30 °C/+80 °C
-22 °F/+176 °F	-22 °F/+176 °F	-22 °F/+176 °F	-22 °F/+176 °F
UL, 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)

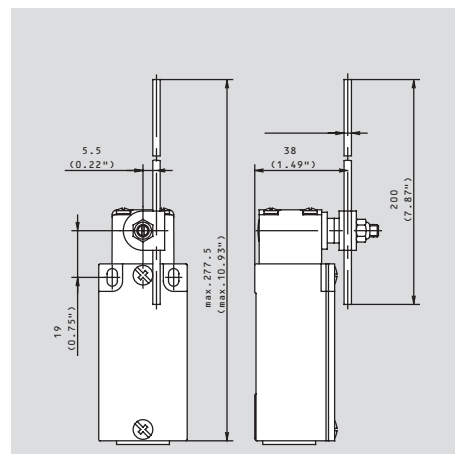
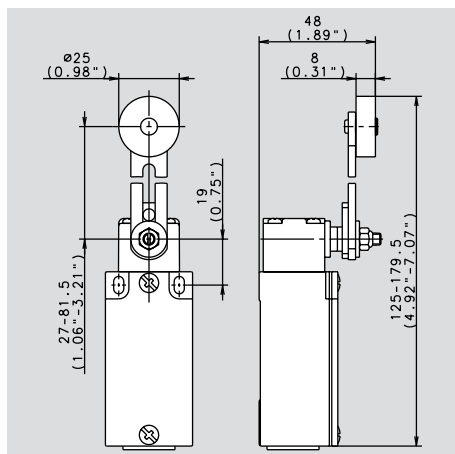
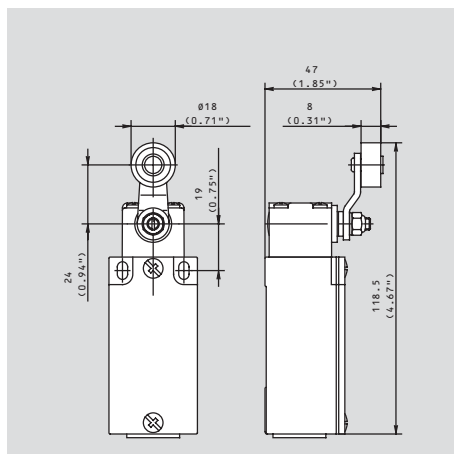




GC-U1Z AH 602.1135.102	GC-SU1Z AH 602.1385.634	GC-UV1Z AH 602.1335.133	GC-U1 AV 602.1136.104	GC-SU1 AV 602.1186.118	GC-U1 AD 602.1137.103	GC-SU1 AD 602.1187.125
⊕ Zb	⊕ Zb	⊕ Zb	Zb	Zb	Zb	Zb
●/-	●/-	●/-	●/-	-/●	●/-	-/●
iw	iw	iw	iw	iw	iw	iw



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 <sup>6</sup>	10 x 10 <sup>6</sup>	10 x 10 <sup>6</sup>	10 x 10 <sup>6</sup>	10 x 10 <sup>6</sup>	10 x 10 <sup>6</sup>	10 x 10 <sup>6</sup>
-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
●/-	●/-	●/-	●/-	●/-	●/-	●/-

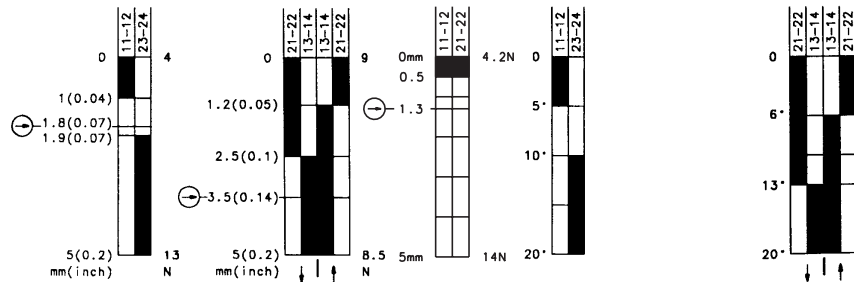




Designation  
**Part number**  
 Circuit diagram  
 ⊕ Forced disconnect to IEC 947-5-1 chapter 3  
 Za: not galvanically separated contacts  
 Zb: galvanically separated contacts  
 Slow make & break/snap-action  
 Internal seal (iw)/external seal (w)

GC-U1Z Hiw	GC-SU1Z Hiw	GC-A2Z Hiw	GC-U1 FF	GC-SU1 FF
<b>602.1120.057</b>	<b>602.1370.629</b>	<b>602.1820.175</b>	<b>602.1140.476</b>	<b>602.1190.100</b>
⊕ 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



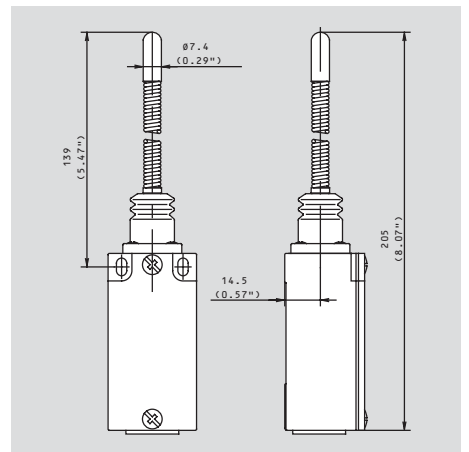
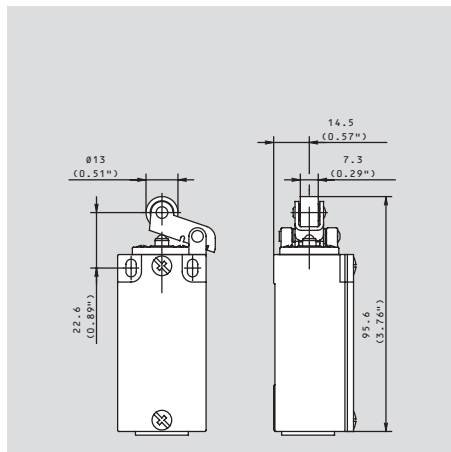
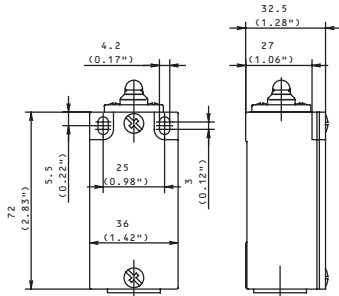
Voltage max.  
 Permanent current max.  
 In-rush current complies with standards  
 IEC 947-5-1 AC 15/DC 13  
 Switching frequency max.  
 Mechanical life – number of switching actions  
 Operating temperature min./max.

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 <sup>6</sup>	10 x 10 <sup>6</sup>	3 x 10 <sup>6</sup>	10 x 10 <sup>6</sup>	10 x 10 <sup>6</sup>
-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)

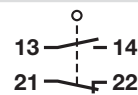
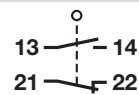
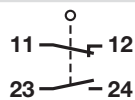




GC-U1 AF  
602.1139.106

GC-SU1 AF  
602.1189.128

GC-SU1 DR  
602.1191.099



Zb

Zb

Zb

●/-

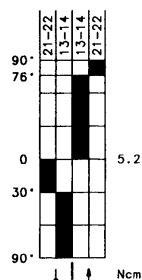
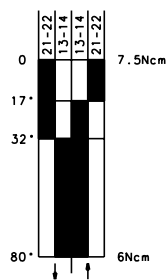
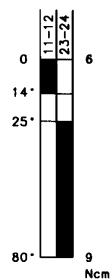
-/●

-/●

iv

iv

iv



500 V AC

500 V AC

500 V AC

10 A

10 A

10 A

●

●

●

100/min.

100/min.

100/min.

10 x 10<sup>6</sup>

10 x 10<sup>6</sup>

10 x 10<sup>6</sup>

-30 °C/+80 °C

-30 °C/+80 °C

-30 °C/+80 °C

-22 °F/+176 °F

-22 °F/+176 °F

-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

●/-

●/-

●/-

