

Metal-bodied limit switches

SN 2

Versatile mounting options
Protection class IP 65



CE



- Large range of actuators
- Snap action/slow make & break contacts
- Galvanically separated contacts
- Forced disconnection of NC contacts (type dependant)
- Protection class IP 65
- Aluminum body and lid
- 4 x 90° actuator positions
- Single direction operation of contacts with AH actuator (user selectable)
- Three cable entries M 20 x 1.5
- Adjustment of the AH lever arm position in 90° increments
- Terminals numbered in accordance with DIN EN 50013
- International approvals

Mounting

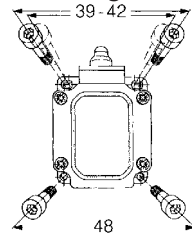


Fig. 1

- a) Adjustable – two slots for M 4 screws
- b) Fixed – two holes for M 5 screws for safety applications

Benefits

- Three cable entries allow "through wiring"

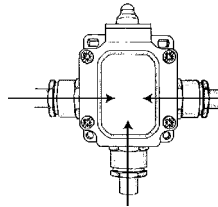


Fig. 2

- Two earth connection points

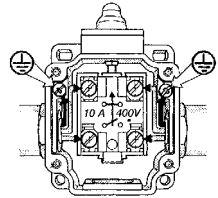


Fig. 3

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



Options

- Contact status display with LED (LED protected within terminal chamber)
- Three contact slow make & break 2NC/1NO, U15, 400 V, 6 A (fig. 4)
- Three contact slow make & break 1NC/2NO, U16, 400 V, 6 A (fig. 4)

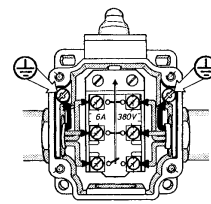


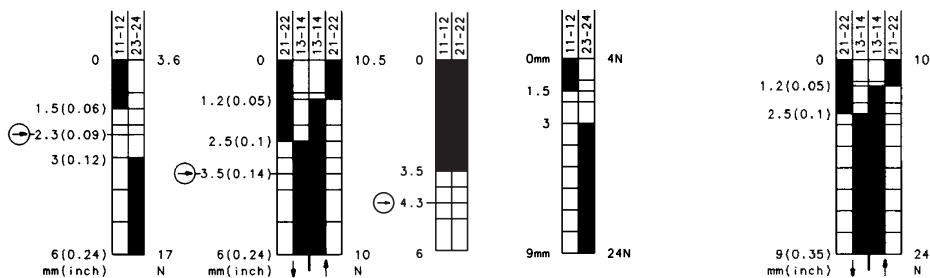
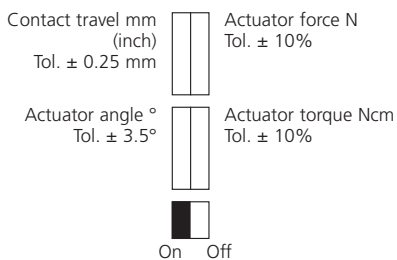
Fig. 4

Contact configuration

Contact type	Switch function	Switch contacts	Reference	Max. voltage	Max. constant current
Slow make & break	Changeover	1NC/1NO	U1/U1Z	400 V	10 A
Slow make & break	Changeover	1NC/1NO	SU1/SU1Z	400 V	10 A
Slow make & break	NC	2NC	A2/A2Z	400 V	10 A
Slow make & break	Changeover overlapping	1NC/1NO	UV1Z	400 V	10 A

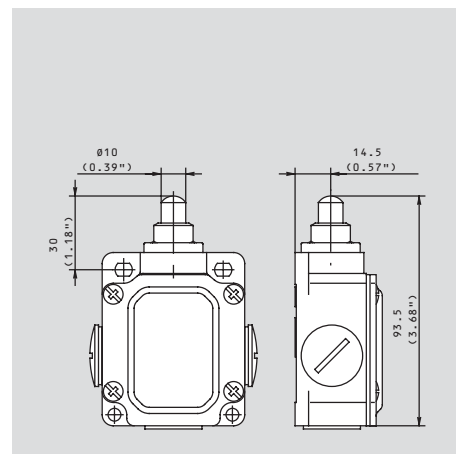
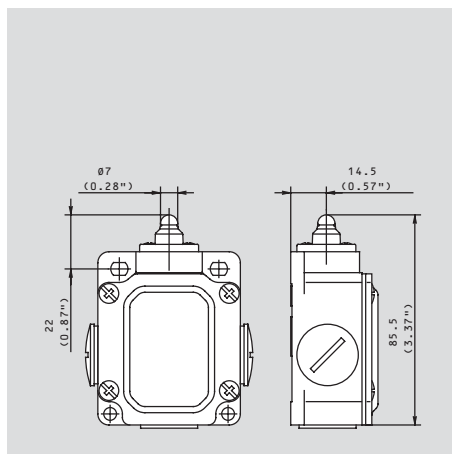
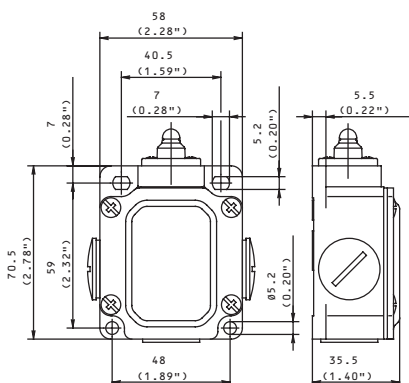


Designation	SN2-U1Z w	SN2-SU1Z w	SN2-A2Z w	SN2-U1 Liw	SN2-SU1 Liw
Part number	603.3103.023	603.3353.016	603.3803.041	603.3144.024	603.3194.022
Circuit diagram					
⊕ Forced disconnect to IEC 947-5-1 chapter 3	⊕ Zb	⊕ Zb	⊕ Zb	Zb	Zb
Za: not galvanically separated contacts	●/-	-/●	●/-	●/-	-/●
Zb: galvanically separated contacts					
Slow make & break/snap-action					
Internal seal (iw)/external seal (w)	w	w	w	iw	iw



Voltage	max.	400 V AC	400 V AC	400 V AC	400 V AC	400 V AC
Permanent current	max.	10 A	10 A	10 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	10 x 10 ⁶	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		0.17 kg/0.37 lb	0.17 kg/0.37 lb	0.17 kg/0.37 lb	0.19 kg/0.42 lb	0.19 kg/0.42 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)

SN2-U1Z Riw	SN2-SU1Z Riw	SN2-A2Z Riw	SN2-U1Z AHS	SN2-SU1Z AHS
603.3117.025	603.3367.017	603.3818.038	603.3135.002	603.3385.018
⊕ Zb	⊕ Zb	⊕ Zb	⊕ Zb	⊕ Zb
●/-	-/●	●/-	●/-	-/●
iw	iw	iw	iw	iw

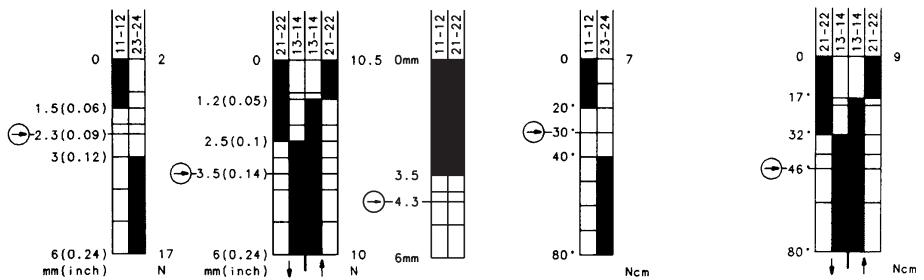
Contact travel mm (inch)
 Tol. ± 0.25 mm

Actuator force N
 Tol. ± 10%

Actuator angle °
 Tol. ± 3.5°

Actuator torque Ncm
 Tol. ± 10%

On Off



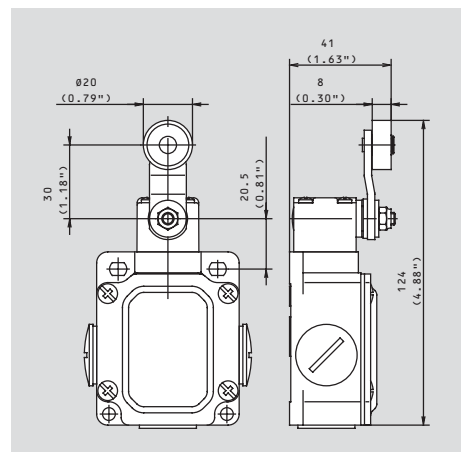
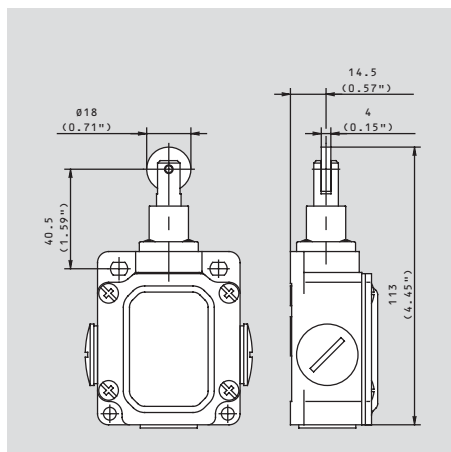
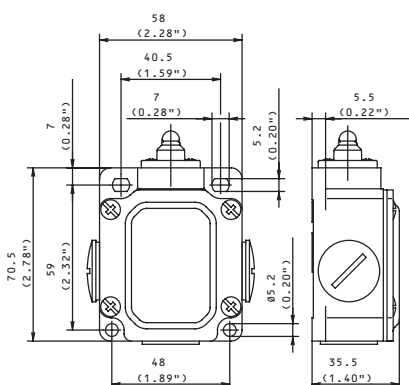
Voltage max.
 Permanent current max.
 In-rush current complies with standards
 IEC 947-5-1 AC 15/DC 13
 Switching frequency max.
 Mechanical life – number of switching actions
 Operating temperature min./max.

400 V AC	400 V AC	400 V AC	400 V AC	400 V AC
10 A	10 A	10 A	10 A	10 A
●	●	●	●	●
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
-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	UL, CSA
0.20 kg/0.44 lb	0.20 kg/0.44 lb	0.20 kg/0.44 lb	0.25 kg/0.55 lb	0.25 kg/0.55 lb
-/●	-/●	-/●	●/-	●/-

All dimensions in mm (inch)





SN2-U1Z DGHw
603.3121.005

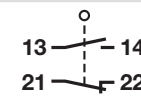
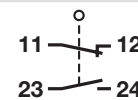
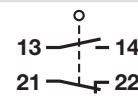
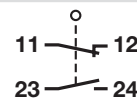
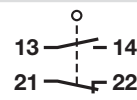
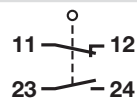
SN2-SU1Z DGHw
603.3371.004

SN2-U1Z DGKw
603.3127.010

SN2-SU1Z DGKw
603.3377.011

SN2-U1Z Hw
603.3121.007

SN2-SU1Z Hw
603.3371.006



⊖ Zb

⊖ Zb

⊖ Zb

⊖ Zb

⊖ Zb

⊖ Zb

●/-

-/●

●/-

-/●

●/-

-/●

W

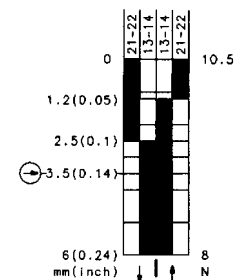
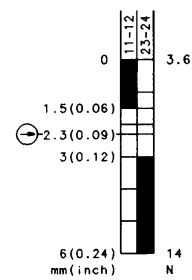
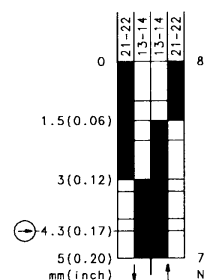
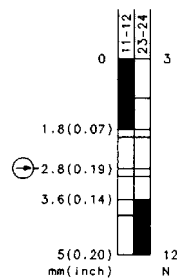
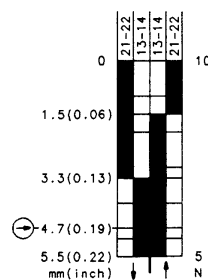
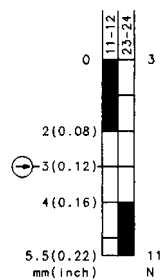
W

W

W

W

W



400 V AC
10 A

400 V AC
10 A

400 V AC
10 A

400 V AC
10 A

400 V AC
10 A

400 V AC
10 A

●

●

●

●

●

●

100/min.

100/min.

100/min.

100/min.

100/min.

100/min.

10 x 10⁶

10 x 10⁶

10 x 10⁶

10 x 10⁶

10 x 10⁶

10 x 10⁶

-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

UL, CSA

UL, CSA

UL, CSA

UL, CSA

UL, CSA

UL, CSA

0.23 kg/0.51 lb

0.23 kg/0.51 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

-/●

●/-

-/●

-/●

●/-

●/-

