

## Plastic-bodied limit switches

### I88

Euronorm standard switch to  
DIN EN 50047  
Protection class IP 65  
Hinged snap lid



- Standard actuators to DIN EN 50047 type A, B, C, E
- Large range of actuators
- Snap action or slow make & break contacts
- Galvanically separated contacts
- Forced disconnection of NC contacts
- Protection class IP 65
- Body and lid PA 6 which is self extinguishing
- 4 x 90° actuator positions
- Cable entry M 20 x 1.5
- Terminals numbered in accordance with DIN EN 50013
- International approvals

#### Mounting

- Adjustable – Two slots for M 4 screws (22 mm centres)
- Fixed – Two holes for M 5 screws for safety applications without additional fixings (fig. 1)
- Additional positive location with guide discs (fig. 2)
- Front mounting (type dependant) (fig. 3)

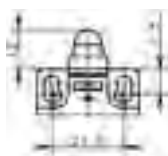


Fig. 1

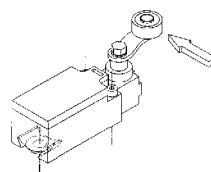


Fig. 2

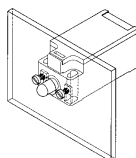


Fig. 3



#### Benefits

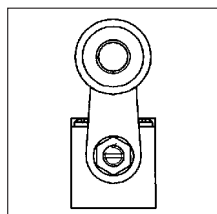
- Hinged snap lid for quick and easy access (screwdriver release)
- Lid hinges open to 135° (can also be easily detached)
- Internal cover protects the contacts during mounting
- Screw terminals with self-lifting clamps for easy wiring
- Transparent cover for easy adjustment and inspection

#### Options

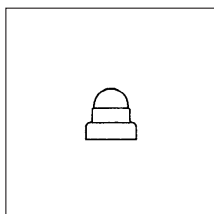
- Contact lock (safety pull button reset)
- Contact LED display (LED protected within terminal chamber)
- Cable entry M 16 x 1.5
- Additional lid security with fixing screw

Accessory equipment page 53

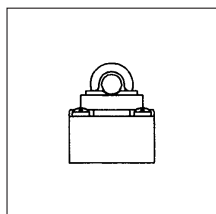
#### Standard actuators DIN EN 50047



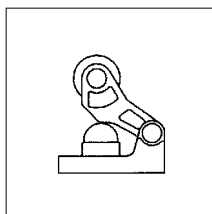
Type A



Type B



Type C



Type E

#### 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	1NC/1NO	UV1Z	500 V	10 A
Slow make & break	Changeover	2NC/1NO	UV15Z	400 V	6 A
Slow make & break	Changeover	1NC/2NO	UV16Z	400 V	6 A



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)

l88-U1Z w	l88-SU1Z w	l88-A2Z w	l88-E2 w
<b>608.6103.008</b>	<b>608.6153.012</b>	<b>608.6803.013</b>	<b>608.6803.014</b>
⊕ Zb	⊕ Zb	⊕ Zb	-
●/-	-/●	●/-	●/-
w	w	w	w

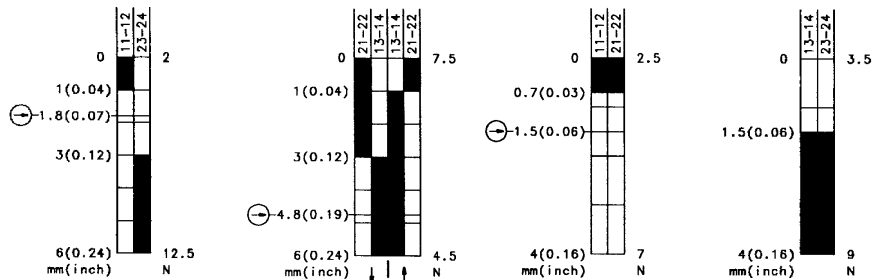
Contact travel mm (inch)  
 Tol. ± 0.25 mm

Actuator force N  
 Tol. ± 10%

Actuator angle °  
 Tol. ± 3.5°

Actuator torque Ncm  
 Tol. ± 10%

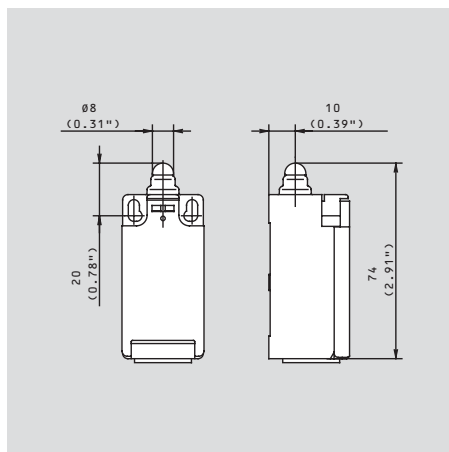
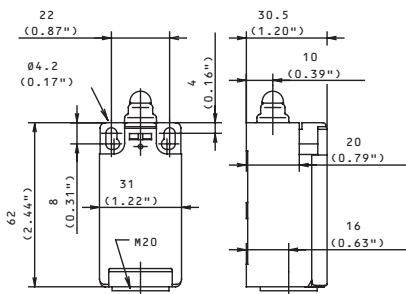
On Off <sup>1)</sup> Latch Point



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.
Standard actuator	form
Approvals	
Weight	
Delivery: ex-stock/built to order	

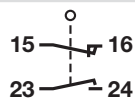
500 V AC	500 V AC	400 V AC	400 V AC
10 A	10 A	5 A	5 A
●	●	●	●
100/min.	100/min.	100/min.	100/min.
10 x 10 <sup>6</sup>	10 x 10 <sup>6</sup>	1 x 10 <sup>6</sup>	1 x 10 <sup>6</sup>
-30 °C/+80 °C	-30 °C/+80 °C	-30 °C/+80 °C	-30 °C/+80 °C
-22 °F/+176 °F	-22 °F/+176 °F	-22 °F/+176 °F	-22 °F/+176 °F
B	B	B	B
UL, CSA	UL, CSA	UL, CSA	UL, CSA
0.06 kg/0.13 lb	0.06 kg/0.13 lb	0.06 kg/0.13 lb	0.06 kg/0.13 lb
●/-	●/-	●/-	●/-

All dimensions in mm (inch)





I88-UV1Z w  
608.6303.011

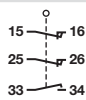


⊖ Zb

●/-

W

I88-UV15Z w  
608.6603.046

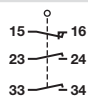


⊖ Zb

●/-

W

I88-UV16Z w  
608.6603.047

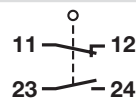


⊖ Zb

●/-

W

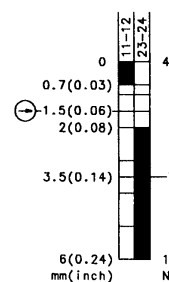
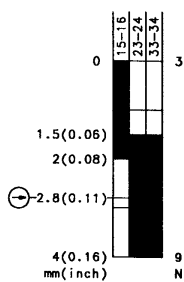
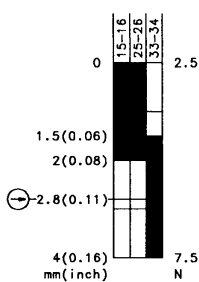
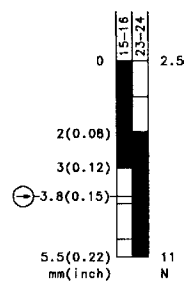
I88-U1Z w Rast  
618.6103.005



⊖ Zb

●/-

W



500 V AC  
10 A

●

400 V AC  
6 A

●

400 V AC  
6 A

●

500 V AC  
10 A

●

100/min.

100/min.

100/min.

60/min.

10 x 10<sup>6</sup>

1 x 10<sup>6</sup>

1 x 10<sup>6</sup>

1 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

B  
UL, CSA

B  
UL, CSA

B  
UL, CSA

B  
UL, CSA

0.06 kg/0.13 lb

●/-

0.06 kg/0.13 lb

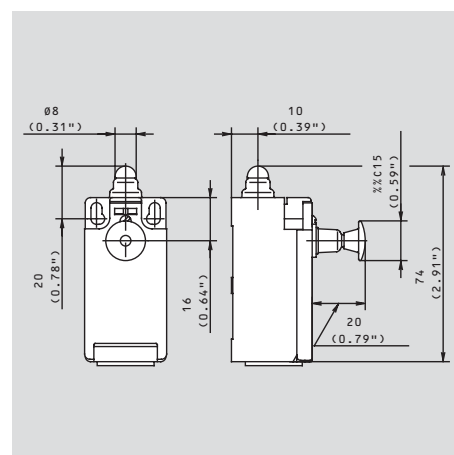
●/-

0.06 kg/0.13 lb

●/-

0.06 kg/0.13 lb

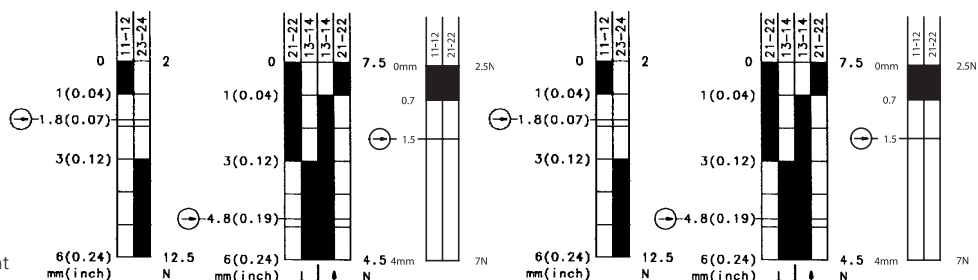
●/-





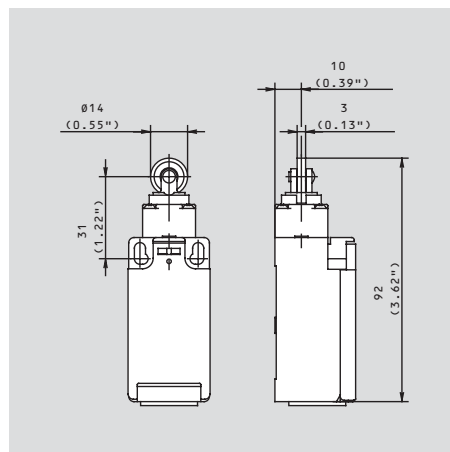
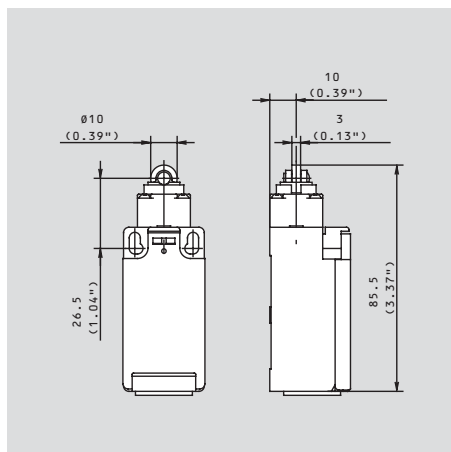
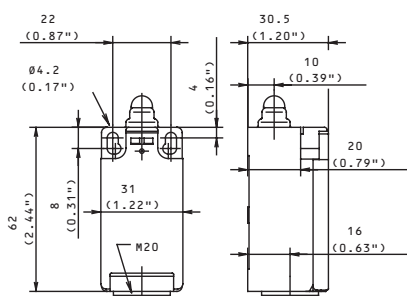
Designation	I88-U1Z Riw K	I88-SU1Z Riw K	I88-A2Z Riw K	I88-U1Z Riw L	I88-SU1Z Riw L	I88-A2Z Riw L
<b>Part number</b>	<b>608.6117.017</b>	<b>608.6167.018</b>	<b>608.6817.087</b>	<b>608.6117.050</b>	<b>608.6167.051</b>	<b>608.6817.072</b>
Circuit diagram						
⊕ Forced disconnect to IEC 947-5-1 chapter 3						
Za: not galvanically separated contacts						
Zb: galvanically separated contacts						
Slow make & break/snap-action						
Internal seal (iw)/external seal (w)						

Contact travel mm (inch)		Actuator force N	
Tol. ± 0.25 mm		Tol. ± 10%	
Actuator angle °		Actuator torque Ncm	
Tol. ± 3.5°		Tol. ± 10%	
On		Off	
		1) Latch Point	



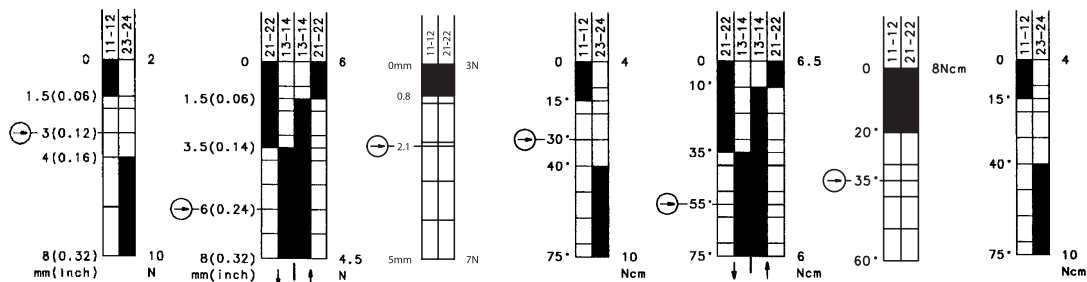
Voltage	max.	500 V AC	500 V AC	400 V AC	500 V AC	500 V AC	400 V AC
Permanent current	max.	10 A	10 A	5 A	10 A	10 A	5 A
In-rush current complies with standards		●	●	●	●	●	●
IEC 947-5-1 AC 15/DC 13							
Switching frequency	max.	100/min.	100/min.	100/min.	100/min.	100/min.	100/min.
Mechanical life – number of switching actions		10 x 10 <sup>6</sup>	10 x 10 <sup>6</sup>	1 x 10 <sup>6</sup>	10 x 10 <sup>6</sup>	10 x 10 <sup>6</sup>	1 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	-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
Standard actuator	form	C	C	C	-	-	-
Approvals		UL, CSA	UL, CSA	UL, CSA	UL, CSA	UL, CSA	UL, CSA
Weight		0.07 kg/0.15 lb	0.07 kg/0.15 lb	0.07 kg/0.15 lb	0.07 kg/0.15 lb	0.07 kg/0.15 lb	0.07 kg/0.15 lb
Delivery: ex-stock/built to order		●/-	●/-	●/-	●/-	●/-	●/-

All dimensions in mm (inch)





I88-U1Z Hw 608.6121.021	I88-SU1Z Hw 608.6171.022	I88-A2Z Hw 608.6821.099	I88-U1Z AH 608.6135.033	I88-SU1Z AH 608.6185.034	I88-A2Z AH 608.6835.059	I88-U1 AV 608.6136.037
⊖ Zb	⊖ Zb	⊖ Zb	⊖ Zb	⊖ Zb	⊖ Zb	Zb
●/-	-/●	-/●	●/-	-/●	●/-	●/-
w	w	w	iw	iw	iw	iw



500 V AC	500 V AC	400 V AC	500 V AC	500 V AC	400 V AC	500 V AC
10 A	10 A	5 A	10 A	10 A	5 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>	1 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
E	E	E	A	A	A	-
UL, CSA	UL, CSA	UL, CSA	UL, CSA	UL, CSA	UL, CSA	UL, CSA
0.07 kg/0.15 lb	0.07 kg/0.15 lb	0.07 kg/0.15 lb	0.10 kg/0.22 lb	0.10 kg/0.22 lb	0.10 kg/0.22 lb	0.11 kg/0.24 lb
●/-	●/-	●/-	●/-	●/-	-/●	●/-

