

## Metal-bodied limit switches

### ENM 2

Standard switch according to DIN EN 50041  
Protection class IP 65



- Increased number of switching functions for safety applications
- Galvanically separated contacts
- Forced disconnection of NC contacts (type dependant)
- Person-protection function → (depending on model)
- Protection class IP 65
- Aluminum body and lid
- Operating device: 4 x 90° actuator positions
- Cable entry M 20 x 1.5
- International approvals

#### Mounting

- 2 x M 5 screws, adjustment via elongated holes
- 2 x M 5 screws for safety applications without additional attachment

#### Mounting advantages

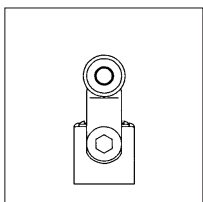
- Increased wiring space
- Earthing surface on same level as switching system
- Turret  
Lever: 7.5° / 15° adjustable
- Contact made independent of direction
- Screw terminals with self lifting clamps for easy wiring
- Fine adjustment of switching point via adjusting screw
- Captive lid screws

#### Options

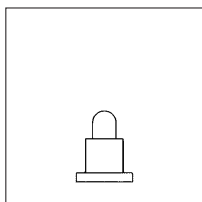
- Latching with contact locking (strain lock-release for safety reasons)
- LED indication of switching status
- EEx certificated versions available acc. ATEX 100 a guideline 94/9/EG  
⊕ II 2 G EEx d II C T6  
TÜV 03 ATEX 2043 X



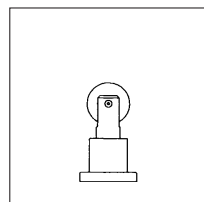
#### Standard actuating element DIN EN 50041



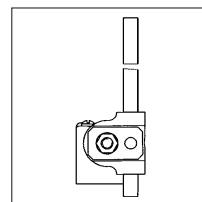
Form A



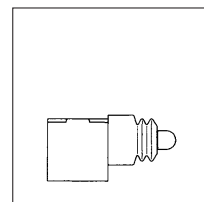
Form B



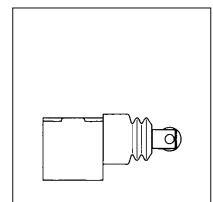
Form C



Form D



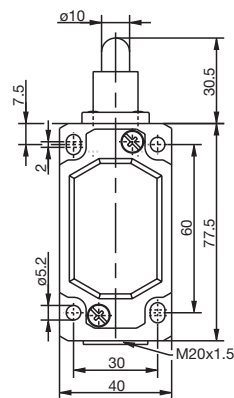
Form F  
(available upon request)



Form G  
(available upon request)

**Standard contact configuration**

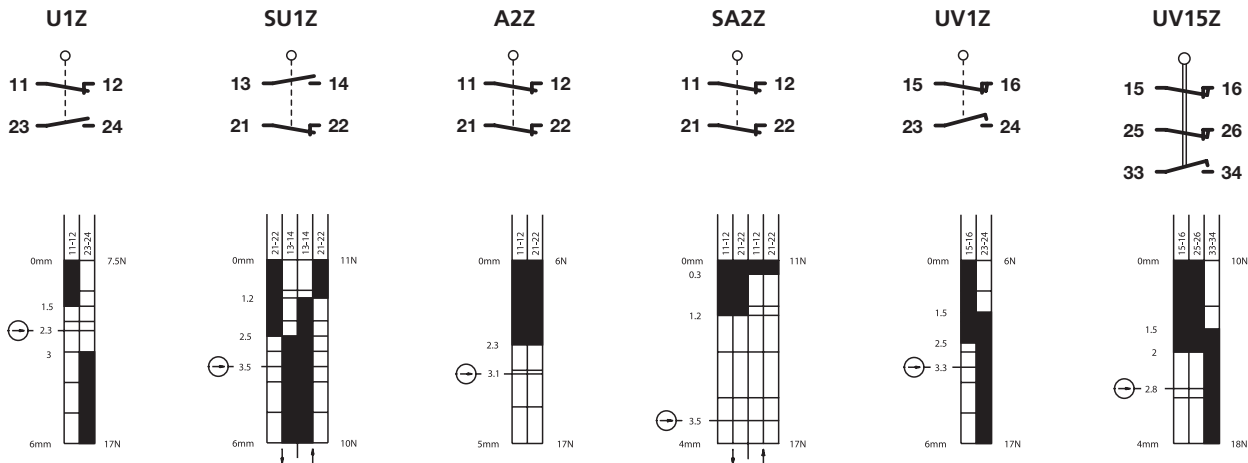
Switching element	Switch function	Switch contact	Designation	Voltage	Continuous current
Slow-action	changeover	1NC/1NO	U1/U1Z	400 V	10 A
Snap-action	changeover	1NC/1NO	SU1/SU1Z	400 V	10 A
Slow-action	normally-closed	2NC	A2/A2Z	400 V	10 A
Snap-action	normally-closed	2NC	SA2/SA2Z	250 V	10 A
Slow-action	changeover	1NC/1NO	UV1/UV1Z	400 V	10 A
Slow-action (overlapping)	changeover	2NC/1NO	UV15/UV15Z	400 V	5 A



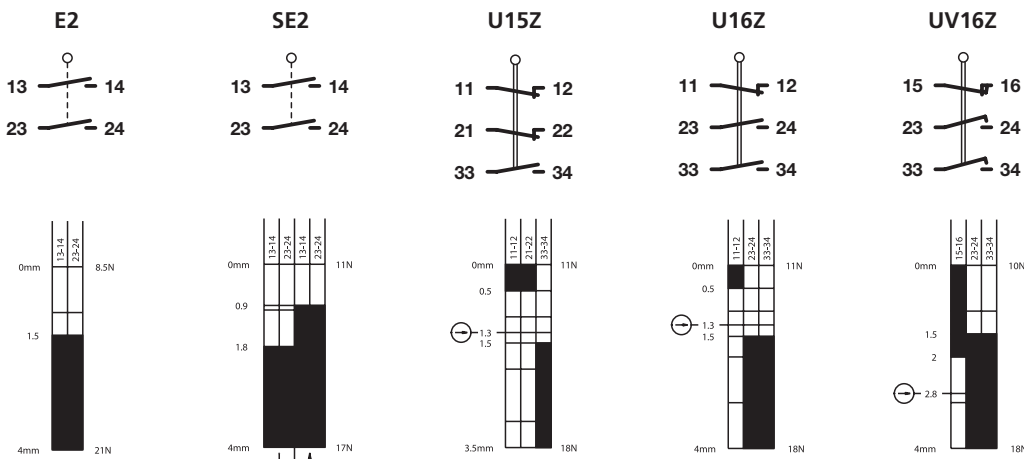
**Optional contact configuration**

Switching element	Switch function	Switch contact	Designation	Voltage	Continuous current
Slow-action	normally-open	2NO	E2	250 V	10 A
Snap-action	normally-open	2NO	SE2	250 V	10 A
Slow-action	changeover	2NC/1NO	U15/U15Z	400 V	5 A
Slow-action	changeover	1NC/2NO	U16/U16Z	400 V	5 A
Slow-action (overlapping)	changeover	1NC/2NO	UV16/UV16Z	400 V	5 A

**Contact travel diagrams and graphic symbols**



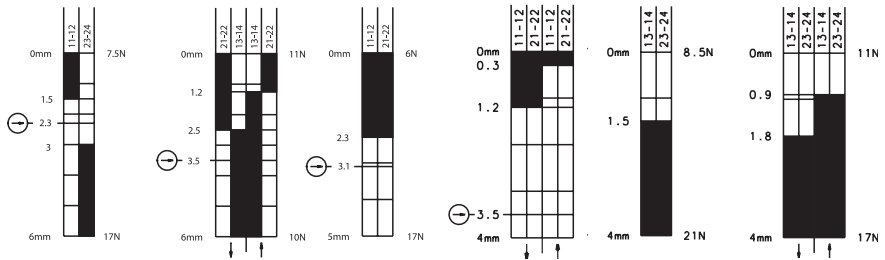
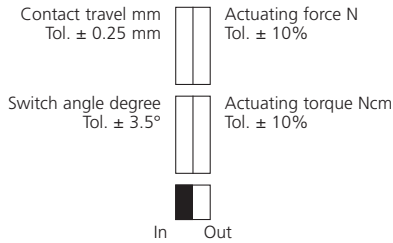
**On request**





Designation  
**Part number**  
 Switching diagram  
 ⊕ Positive break according to IEC 947-5-1 Chap. 3  
 Za: changeover contact is not galvanically isolated  
 Zb: changeover contact is galvanically isolated  
 Slow-action contact / snap-action contact  
 Gasket inside (iw)/outside (w)

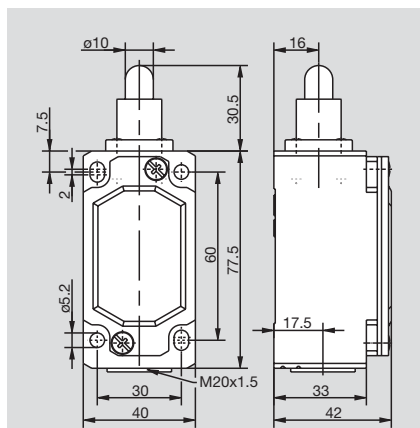
ENM2-U1Z iw 608.7102.001	ENM2-SU1Z iw 608.7352.002	ENM2-A2Z iw 608.7802.003	ENM2-SA2Z iw 608.7852.020	ENM2-E2 iw 608.7802.021	ENM2-SE2 iw 608.7852.022
●/-	-/●	●/-	-/●	●/-	-/●
iw	iw	iw	iw	iw	iw



Voltage	max.	400 V AC
Continuous current	max.	10 A
Making current, acc. to IEC 947-5-1 AC 15/DC 13		●
Switching frequency	max.	100/min.
Mech. operational life – number of switching cycles		10 x 10 <sup>6</sup>
Ambient temperature	min./max.	-30 °C/+80 °C -22 °F/+176 °F
Standard actuating element	Form	B
Approvals (applied for)		UL, CSA
Weight		0.20 kg
Delivery: ex-stock/built to order		●/-

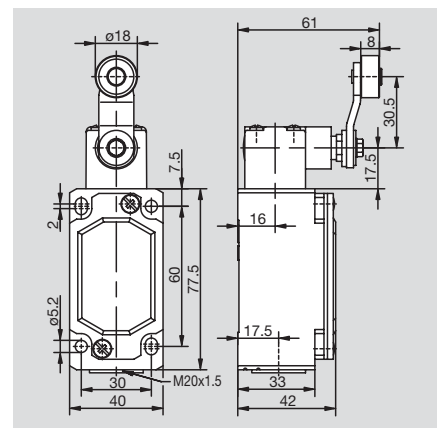
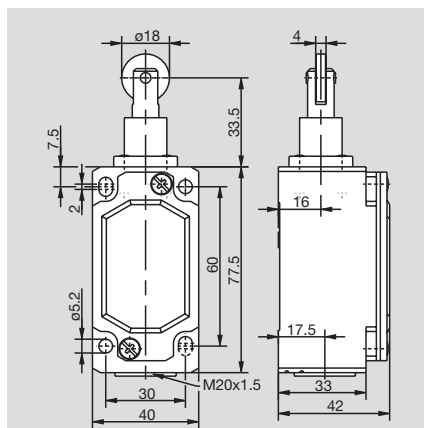
Voltage	max.	400 V AC	400 V AC	400 V AC	250 V AC	250 V AC	250 V AC
Continuous current	max.	10 A	10 A	10 A	10 A	10 A	10 A
Making current, acc. to IEC 947-5-1 AC 15/DC 13		●	●	●	●	●	●
Switching frequency	max.	100/min.	100/min.	100/min.	100/min.	100/min.	100/min.
Mech. operational life – number of switching cycles		10 x 10 <sup>6</sup>	10 x 10 <sup>6</sup>	10 x 10 <sup>6</sup>	3 x 10 <sup>6</sup>	3 x 10 <sup>6</sup>	3 x 10 <sup>6</sup>
Ambient temperature	min./max.	-30 °C/+80 °C -22 °F/+176 °F	-30 °C/+80 °C -22 °F/+176 °F	-30 °C/+80 °C -22 °F/+176 °F	-30 °C/+80 °C -22 °F/+176 °F	-30 °C/+80 °C -22 °F/+176 °F	-30 °C/+80 °C -22 °F/+176 °F
Standard actuating element	Form	B	B	B	C	C	C
Approvals (applied for)		UL, CSA	UL, CSA	UL, CSA	UL, CSA	UL, CSA	UL, CSA
Weight		0.20 kg	0.20 kg	0.20 kg	0.20 kg	0.20 kg	0.20 kg
Delivery: ex-stock/built to order		●/-	●/-	●/-	-/●	●/-	-/●

All dimensions in mm



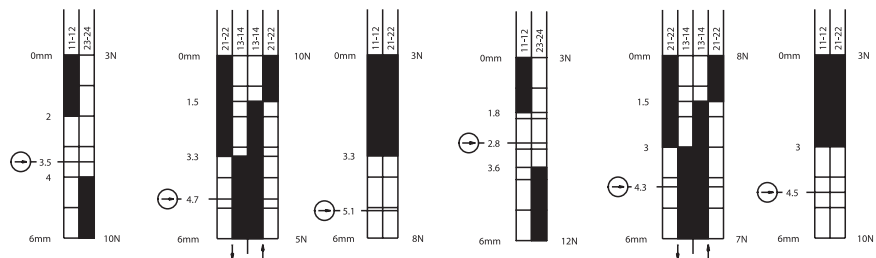
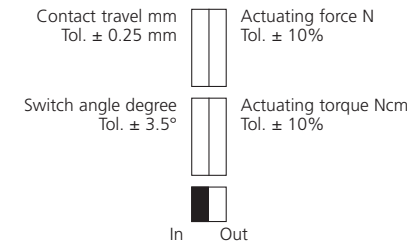


ENM2-UV1Z iw 608.7302.027	ENM2-UV15Z iw 608.7602.024	ENM2-UV16Z iw 608.7602.026	ENM2-U1Z Riww 608.7117.004	ENM2-SU1Z Riww 608.7367.005	ENM2-A2Z Riww 608.7817.006	ENM2-U1Z AHS-V 608.7135.013	ENM2-SU1Z AHS-V 608.7385.014	ENM2-A2Z AHS-V 608.7835.015
⊕ Zb	⊕ Za	⊕ Za	⊕ Zb	⊕ Zb	⊕ Zb	⊕ Zb	⊕ Zb	⊕ Zb
●/-	●/-	●/-	●/-	-/●	●/-	●/-	-/●	●/-
iw	iw	iw	iw	iw	iw	iw	iw	iw
400 V AC	400 V AC	400 V AC	400 V AC	400 V AC	400 V AC	400 V AC	400 V AC	400 V AC
10 A	5 A	5 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.	100/min.	100/min.
10 x 10 <sup>6</sup>	1 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>	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	-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	-22 °F/+176 °F	-22 °F/+176 °F
C	C	C	C	C	C	A	A	A
UL, CSA	UL, CSA	UL, CSA	UL, CSA	UL, CSA	UL, CSA	UL, CSA	UL, CSA	UL, CSA
0.20 kg	0.20 kg	0.20 kg	0.21 kg	0.21 kg	0.21 kg	0.28 kg	0.28 kg	0.28 kg
●/-	●/-	●/-	●/-	●/-	●/-	●/-	●/-	●/-





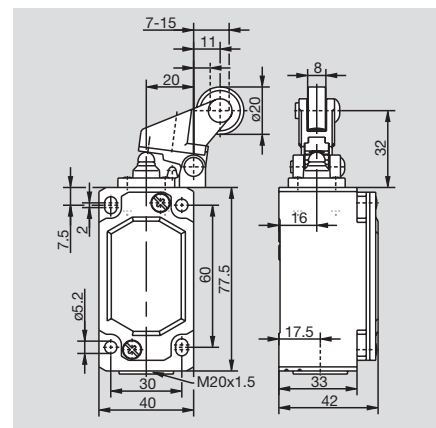
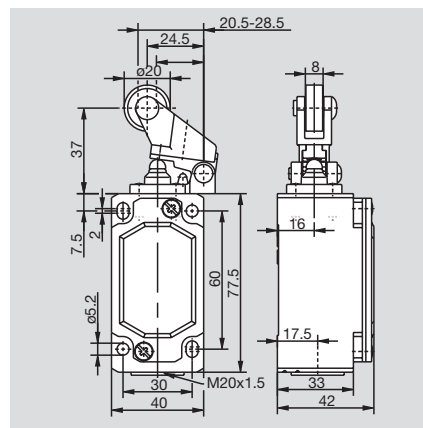
Designation	ENM2-U1Z DGHW	ENM2-SU1Z DGHW	ENM2-A2Z DGHW	ENM2-U1Z DGKW	ENM2-SU1Z DGKW	ENM2-A2Z DGKW
Part number	608.7121.007	608.7371.008	608.7821.009	608.7127.010	608.7377.011	608.7827.012
Switching diagram						
⊕ Positive break according to IEC 947-5-1 Chap. 3						
Za: changeover contact is not galvanically isolated						
Zb: changeover contact is galvanically isolated						
Slow-action contact / snap-action contact	●/-	-/●	●/-	●/-	-/●	●/-
Gasket inside (iw)/outside (w)	w	w	w	w	w	w



Voltage	max.	400 V AC	400 V AC	400 V AC	400 V AC	400 V AC	400 V AC
Continuous current	max.	10 A	10 A	10 A	10 A	10 A	10 A
Making current, acc. to IEC 947-5-1 AC 15/DC 13		●	●	●	●	●	●
Switching frequency	max.	100/min.	100/min.	100/min.	100/min.	100/min.	100/min.
Mech. operational life – number of switching cycles		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>
Ambient 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 actuating element	Form	-	-	-	-	-	-
Approvals (applied for)		UL, CSA	UL, CSA	UL, CSA	UL, CSA	UL, CSA	UL, CSA
Weight		0.23 kg	0.23 kg	0.23 kg	0.23 kg	0.23 kg	0.23 kg
Delivery: ex-stock/built to order		-/●	-/●	-/●	-/●	-/●	-/●

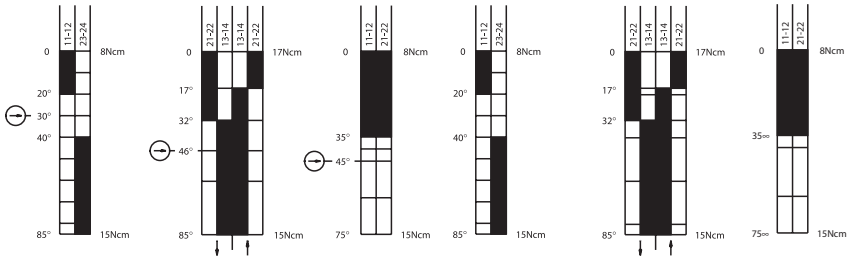
All dimensions in mm

(\* ) Adjustable operating devices are not recommended for safety applications.





ENM2-U1 AD 608.7137.018	ENM2-SU1 AD 608.7387.019	ENM2-A2 AD 608.7837.029	ENM2-U1 AV 608.7136.016	ENM2-SU1 AV 608.7386.017	ENM2-A2 AV 608.7836.028
(*)Zb	(*)Zb	(*)Zb	(*)Zb	(*)Zb	(*)Zb
●/-	-/●	●/-	●/-	-/●	●/-
iw	iw	iw	iw	iw	iw



400 V AC	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	10 A
●	●	●	●	●	●
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>
-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
D	D	D	-	-	-
UL, CSA	UL, CSA	UL, CSA	UL, CSA	UL, CSA	UL, CSA
0.29 kg	0.29 kg	0.29 kg	0.30 kg	0.30 kg	0.30 kg
I/-	●/-	-/●	●/-	●/-	-/●

