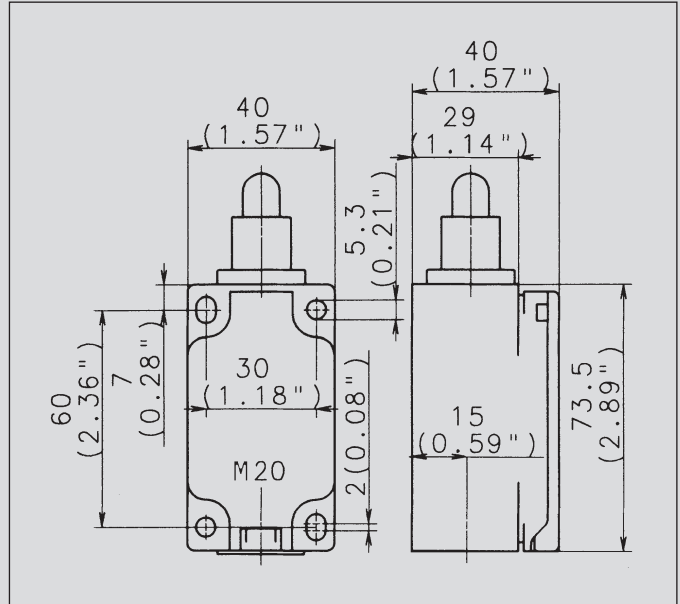


# Insulation-Enclosed Limit Switches

## ENK



### Recommended use

Thanks to its design and its metal actuator, the ENK limit switch is particularly suitable for applications requiring a sturdy safety switch made of plastic.

### Product advantages

- Standard switch conforming to DIN EN 50041
- Standard actuator conforming to DIN EN 50041 (see page 16)
- Protection class IP 65 to VDE 0470 T1
- Enclosure and cover PA 6, (UL-94-V0)
- Actuator can be repositioned by 4 x 90°
- Cable entry M20 x 1.5
- Connection designation conforming to DIN EN 50013
- Metal actuators for high loads

### Options

- Available with M12 connector
- AS interface variants available
- Preassembled with customer-specific cables and connectors on request

### Design layout

- Slow-action and snap-action contacts
- Versions: 1 NC / 1NO, 2 NC, 3 NC, overlapping contacts
- Latching function on request
- All NC contacts with  $\ominus$  in the circuit diagram are positively opening contacts
- Type: Zb (galvanically isolated changeover contact)

### Mounting

- 2 adjustment slots for M5 screws
- 2 holes for M5 mounting screws in safety applications

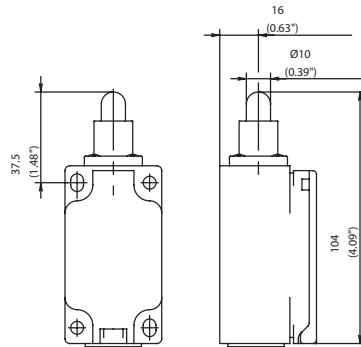
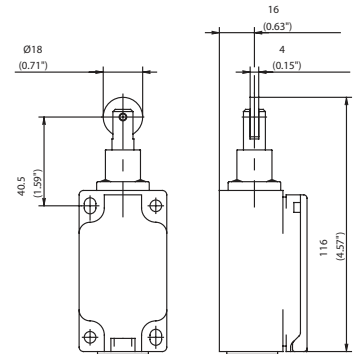
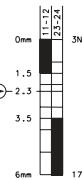
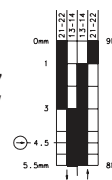
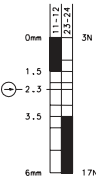
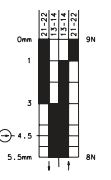
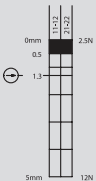
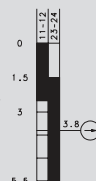
### Installation advantages

- Snap-on cover can be released with screwdriver
- Cover opening range 150° (cover can also be detached from hinge)
- Cover protects switching element during installation
- Screw connections with self-lifting clamping plates
- Easy-action cover lock (close and press)

### Technical data

Electrical data		
Rated insulation voltage	U <sub>i</sub> max.	400 V AC
Conventional thermal current (up to) <sup>①</sup>	I <sub>the</sub>	10 A
Rated operating voltage	U <sub>e</sub> max.	240 V
Utilisation category		AC-15, U <sub>e</sub> /I <sub>e</sub> 240 V/3 A
Short-circuit protection (up to) <sup>①</sup>		Fuse 10 A gL/gG
Protection class		II, Insulated
Mechanical data		
Enclosure material		Thermoplastic, glass fibre-reinforced
Ambient temperature		-30 °C to +80 °C
Mechanical service life (up to) <sup>①</sup>		10 x 10 <sup>6</sup> switching cycles
B10d (up to) <sup>①</sup>		20 Mio.
Switching frequency		≤ 100/min.
Type of connection		Screw connections
Conductor cross sections		Single-wire 0.5 – 1.5 mm <sup>2</sup> or Stranded wire with ferrule 0.5 – 1.5 mm <sup>2</sup>
Cable entry		1 x M20 x 1.5 ≈ 0.15 kg
Protection class		IP 65 onforming to EN 60529; DIN VDE 0470 T1
Standards		
VDE 0660 T100, DIN EN 60947-1, IEC 60947-1		
VDE 0660 T200, DIN EN 60947-5-1, IEC 60947-5-1		

① Depending on switching system. See Table on Pages 70 – 73.

**IW (Form B)**

**RIW (Form C)**

**Switching operation**
**1 NC / 1 NO contact**
**Slow-action**
**Snap-action**
**6081102001**  
ENK-U1Z IW

**6081152007**  
ENK-SU1Z IW

**Slow-action**
**Snap-action**
**6081117002**  
ENK-U1Z RIW

**6081167008**  
ENK-SU1Z RIW

**2 NC contacts**
**6081817281**  
ENK-A2Z RIW

**2 NO contacts**
**1 NC / 1 NO contact  
Overlapping**
**6081317307**  
ENK-UV1Z RIW

**Approvals**

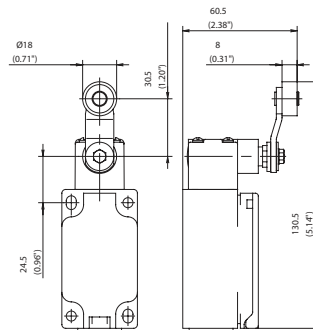
**Replacement actuator: 3918020660**
**Replacement actuator: 3918170661**
**Special features / variants**  
(on request)

- Available with black enclosure and following contacts:  
3 NC contacts

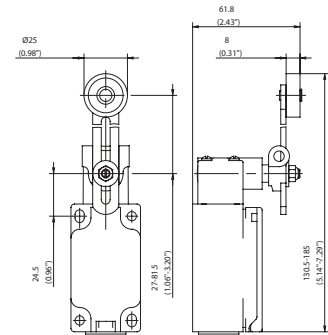
**Special features / variants**  
(on request)

- Available for high temperature range and following contacts:  
3 NC contacts

## AHS-V (Form A)



## AV



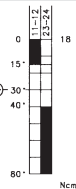
### Switching operation

1 NC / 1 NO contact

### Slow-action

### Snap-action

6081135003  
ENK-U1Z AHS-V



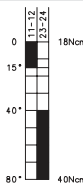
6081185009  
ENK-SU1Z  
AHS-V



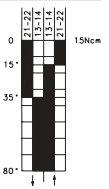
### Slow-action

### Snap-action

6081136012  
ENK-U1 AV

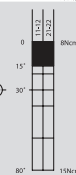


6081186018  
ENK-SU1 AV



2 NC contacts

6081835323  
ENK-A2Z AHS-V

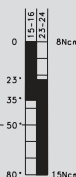


15 Ncm

2 NO contacts

1 NC / 1 NO contact  
Overlapping

6081335006  
ENK-UV1Z  
AHS-V



15 Ncm

### Approvals



Replacement actuator: 3918350737

Replacement actuator: 3918360738

### Special features / variants (on request)

- Available with black enclosure
- With 50 mm diameter rubber roller and following contacts:  
3 NC contacts

### Special features / variants (on request)

- Available with different lever lengths and roller diameters
- With 50 mm diameter rubber roller
- With roller over switch

