

# Safety Switches with Separate Actuator

## Switch with VTW, VTU, VT actuator



These position switches of the tried-and-tested switch families I88, ENK, ENM2 and GC correspond to Type 2.

This means that you can use Type 1 and Type 2 position switches corresponding to your applications while using one family of switches.

This results in many advantages:

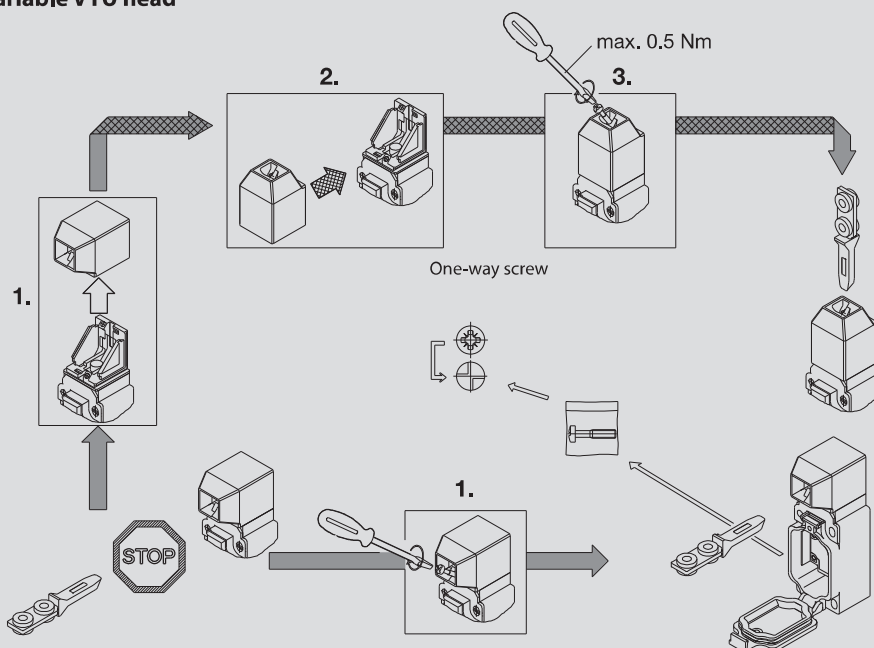
- **Standardisation:**

Switches of one family have the same mounting dimensions and the same electrical properties.

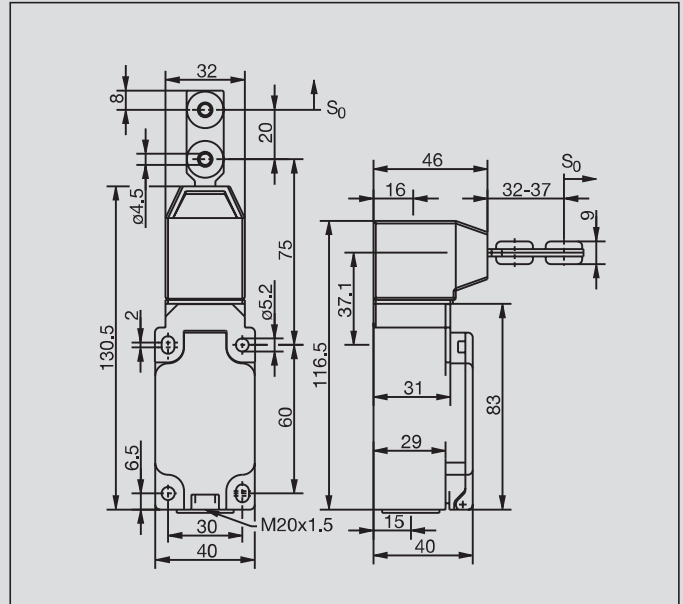
- **Reduced costs:**

I188, ENK, ENM2 and GC are used in large quantities. This not only reflects the quality of the products but also means lower prices compared to special designs used in small quantities.

### Variable VTU head



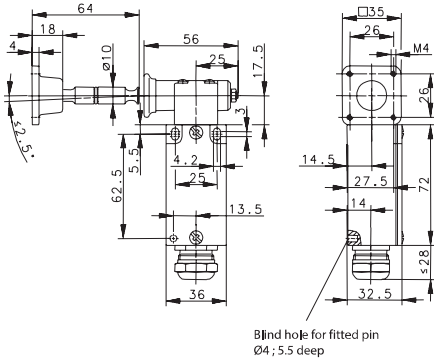
Repositioning the actuator head either in horizontal or vertical direction results in 8 approach actuator directions.


**Technical data**

		I88	ENK	ENM2	GC
<b>Electrical data</b>					
Rated insulation voltage	$U_i$	250 V AC	400 V AC	400 V AC	400 V AC
Conventional thermal current (up to) <sup>①</sup>	$I_{the}$	10 A	10 A	10 A	10 A
Rated operating voltage	$U_e$	240 V	240 V	240 V	240 V
Utilization category (up to) <sup>①</sup>		AC-15, $U_e / I_e$ 240 V / 3 A	AC-15, $U_e / I_e$ 240 V / 3 A	AC-15, $U_e / I_e$ 240 V / 3 A	AC-15, $U_e / I_e$ 240 V / 3 A
Forced disconnection	$\rightarrow$	conforming to IEC/EN 60947-5-1, Addendum K	conforming to IEC/EN 60947-5-1, Addendum K	conforming to IEC/EN 60947-5-1, Addendum K	conforming to IEC/EN 60947-5-1, Addendum K
Short-circuit protection (up to) <sup>①</sup>		Fuse 10 A gL/gG	Fuse 10 A gL/gG	Fuse 10 A gL/gG	Fuse 10 A gL/gG
Protection class		II, Insulated	II, Insulated	I	I
<b>Mechanical data</b>					
Enclosure		Thermoplastic, glass fibre-reinforced (UL 94-V0)	Thermoplastic, glass fibre-reinforced	Aluminium pressure die-casting	Aluminium pressure die-casting
Cover		Thermoplastic, glass fibre-reinforced (UL 94-V0)	Thermoplastic, glass fibre-reinforced	Sheet aluminium	Sheet aluminium
Actuation		Separate actuator, Thermoplastic	Separate actuator, (St/PA), Actuator (PA6 GV/Zn-GD)	Separate actuator, (St / PA)	Separate actuator
Ambient temperature		-30°C to + 80°C	-30°C to + 80°C	-30°C to + 80°C	-30°C to + 80°C
Mechanical service life		1 x 10 <sup>6</sup> switching cycles	1 x 10 <sup>6</sup> switching cycles	1 x 10 <sup>6</sup> switching cycles	1 x 10 <sup>6</sup> switching cycles
B10d		2 mill.	2 mill.	2 mill.	2 mill.
Switching frequency		≤ 50/min.	max. 30/min.	≤ 50/min.	≤ 10/min.
Mounting		2 x M4	4 x M5	4 x M5	2 x M4
Type of connection		Screw connections	Screw connections	Screw connections	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>	Single-wire 0.5 – 1.5 mm <sup>2</sup> or Stranded wire with ferrule 0.5 – 1.5 mm <sup>2</sup>	Single-wire 0.5 – 1.5 mm <sup>2</sup> or Stranded wire with ferrule 0.5 – 1.5 mm <sup>2</sup>	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	1 x M20 x 1.5	1 x M20 x 1.5	1 x M20 x 1.5
Weight		≈ 0.09 kg	≈ 0.23 kg	≈ 0.33 kg	≈ 0.32 kg
Installation position		Any	Any	Any	Any
Protection class		IP 65 conforming to EN 60529	IP 65 conforming to EN 60529	IP 65 conforming to EN 60529	IP 65 conforming to EN 60529
<b>Standards</b>					
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.



**GCVT**

**Standard High actuating force**

**6121100555**  
GC-U1Z VT 90GR

**6116769064**  
GC-A2Z VT 90GR

**Replacement actuator: 3912001275**

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