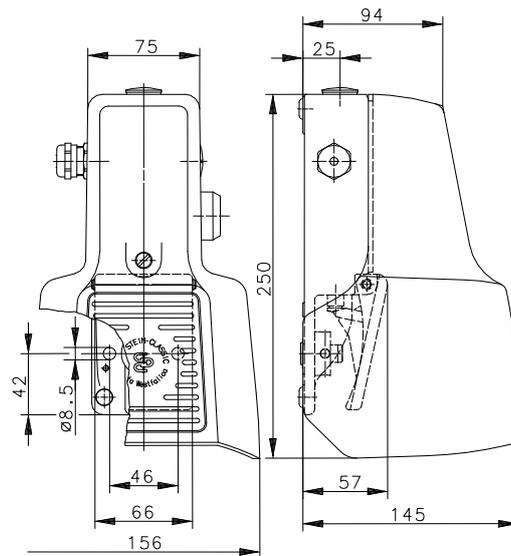


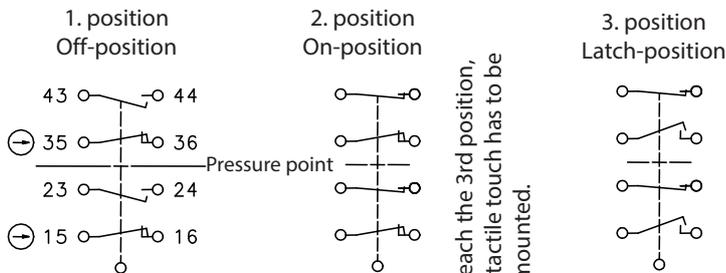
# Foot-switch Series F1 UN

Description **F1-UV1Z/UV1ZD UN**

Article number **6161000451**

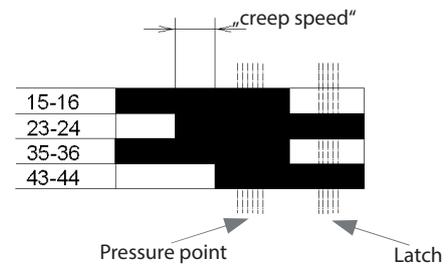


### Switching symbol (Three-Step-Safety Switch with latch „Off-On-OFF“)



To reach the 3rd position, the tactile touch has to be surmounted.

### Operating diagramme



### Electrical Data

Rated insulation voltage	$U_i$	400 V AC
Conv. thermal current	$I_{the}$	10 A
Rated operational voltage	$U_e$	240 V
Utilization category		AC-15, $U_e / I_e$ 240 V AC / 3 A
Direct opening action	$\ominus$	acc. to IEC/EN 60947-5-1, annex K
Short-circuit protective device		Fuse 10 A gG
Protection class		I

Mechanical data	
Enclosure	AL, die-cast
Protective guard (Accident protection cover UN)	AL, die-cast
Actuator	Foot lever (PA)
Ambient air temperature	-30 °C to +80 °C
Contact type	2 NC, 2 NO. (Zb)
Operating force (pedal centre)	≈ 10 N (pedal centre)
Pressure point	≈ 200 N
Mechanical life	10 x 10 <sup>6</sup> operating cycles
Switching frequency	max. 50/min
Assembly	2 x M8
Connection	screw connections (M3,5)
Number of connections	8
Protection ground	2 x M4
Conductor cross-sections	Solid: 0,5 ... 1,5 mm <sup>2</sup> Litz wire with ferrules: 0,5 ... 1,5 mm <sup>2</sup>
Cable entrance	2 x M20 x 1,5 ; 1 x cable gland M20 x 1,5 (clamping-range 6 – 12 mm);
Weight	≈ 1,5 kg
Protection type	IP65 in accordance with IEC/EN 60529

ID for safety engineering	
B10d	20 x 10 <sup>6</sup> cycles

Regulations	
	VDE 0660 T100, DIN EN 60947-1, IEC 60947-1
	VDE 0660 T200, DIN EN 60947-5-1, IEC 60947-5-1
	DIN EN ISO 13849-1

EU Conformity	
	acc. to directive 2006/95/EG

Approvals	
	cCSA <sub>US</sub> A300 (same polarity)

**Function**

Three-stage safety switch with latching

The safety contact element consists of two adjoining switching systems which guarantee a normal work flow and in the case of an emergency the safety function "emergency-stop".

1. The normal work flow is initiated by pressing down the pedal to the pressure point, whereby the contacts 23 – 24 and 43 – 44 are closed in succession.
2. In the case of an emergency, the pedal is pressed as far as it will go beyond the pressure point. The NC contacts (15 – 16 and 35 – 36) are force-opened and thereby the work process stops. At the same time, the automatic latching function is activated and holds the contacts (15 – 16 and 35 – 36) in "emergency-stop position". This reliably prevents uncontrolled restart of the machine or moving parts.

Safety for man and machine!

3. Only after the release of the pushbuttons on the side of the enclosure, the contacts will be released again and can be closed again by pressing the pedal beyond resistance of the pressure point.

The working process continues.

**Notes**

The degree of protection specified (IP code) applies only to a properly closed protective guard and the appropriate cable is used, in accordance with the clamping range of the above mentioned cable gland.