## Foot-switch

## Series F1



| Electrical Data |  |  |
| :---: | :---: | :---: |
| Rated operational voltage | $\mathrm{U}_{\text {e }}$ | 30 V |
| Utilization category |  | AC-15, $\mathrm{U}_{\mathrm{e}} / \mathrm{I}_{\mathrm{e}} 30 \mathrm{~V} \mathrm{AC/} \mathrm{1,5} \mathrm{~A}$ |
| Direct opening action | $\Theta$ | acc. to IEC/EN 60947-5-1, annex K (pedal stop) |
| Short-circuit protective device |  | Fuse 2 A gG |
| Protection class |  | III, safety extra-low voltage |


| Mechanical data |  |
| :---: | :---: |
| Enclosure | AL, die-cast |
| Protective guard (Accident protection cover UN) | AL, die-cast |
| Actuator | Foot lever (PA) |
| Ambient air temperature | $-30^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$ |
| Contact type (each pedal) | 3 NC, 1 NO. (Zb) |
| Operating force (pedal centre) | 10 N |
| Pressure point (each pedal) | $\approx 460 \mathrm{~N}$ |
| Mechanical life (each pedal) <br> Sequence of the switching position: 1-2-1 <br> or: $1-2-3-1$ | $3 \times 10^{6}$ operating cycles <br> $1 \times 10^{6}$ operating cycles |
| Switching frequency | max. 30/min |
| Assembly | $2 \times \mathrm{M} 8$ |
| Connection | M12 plug connector, 8 poles, A coded |
| Weight | $\approx 1,5 \mathrm{~kg}$ |
| Protection type | IP65 in accordance with IEC/EN 60529 |


| Regulations |  |
| :--- | :--- |
|  | VDE 0660 T100, DIN EN 60947-1, IEC 60947-1 |
|  | VDE 0660 T200, DIN EN 60947-5-1, IEC 60947-5-1 |

## Function

## Three stage safety footswitch with latch

The safety footswitch contacts are wired in series, this allows normal machine operation with the advantage of a safety latched "Emergency stop" if the pedal is fully depressed.

1. Machine start is enabled by depressing pedal to the pressure point, this closed the normally open contacts 13-14 and opened the normally closed contacts 21-22.
2. In an emergency, the pedal is fully depressed (beyond the pressure point). The normally closed contacts 31-32 and 41-42 are force disconnected stopping the machine, simultaneously the latch engages and holds the contacts 31-32 and 41-42 in this "Emergency stop" status, preventing an unauthorised re-start of the machine.
"Safety for man and machine"
3. Only after releasing the latch, by pressing the push button mounted in the side of the footswitch body, do the contacts reset allowing normal operation to resume.

## Notes

The specified protection classification (IP code) applies only when the cover is closed and the use of an equivalent connector. The connector must not be connected or disconnected when voltage is applied.
The mechanical life of the connector is 100 connection cycles.

