## Foot-switch

## Series F2 UN



BERNSTEIN AG . Hans-Bernstein-Straße 1.32457 Porta Westfalica . www.bernstein.eu

| Electrical data |  |  |
| :--- | :--- | :--- |
| Rated insulation voltage | $\mathrm{U}_{\mathrm{i}}$ | 250 V AC |
| Conv. thermal current | $\mathrm{I}_{\text {the }}$ | 5 A |
| Rated impulse withstand voltage | $\mathrm{U}_{\mathrm{imp}}$ | $2,5 \mathrm{KV}$ |
| Rated operational voltage | $\mathrm{U}_{\mathrm{e}}$ | 240 V and 24 V DC |
| Utilization category |  | $\mathrm{AC}-15, \mathrm{U}_{\mathrm{e}} / I_{\mathrm{e}} 240 \mathrm{~V} \mathrm{AC} / 1,5 \mathrm{~A} 50-60 \mathrm{~Hz}$ |
| Direct opening action |  | $\mathrm{DC}-13, \mathrm{U}_{\mathrm{e}} / \mathrm{I}_{\mathrm{e}} 24 \mathrm{~V} \mathrm{DC} / 1,0 \mathrm{~A}$ |
| Short-circuit protective device | $\Theta$ | acc. to IEC/EN $60947-5-1$, Annex K |
| Protection class |  | $\mathrm{D}-$ Fuse 4 A gG |


| Mechanical data |  |
| :---: | :---: |
| Enclosure | AL, die-cast |
| Protective guard (Accident protection cover UN) | AL, die-cast (RAL9005) |
| Actuator | Foot lever (PA) |
| Ambient air temperature | Operating temperature range: $-10^{\circ} \mathrm{C}$ to $+50^{\circ} \mathrm{C}$ Storage temperature range: $\quad-25^{\circ} \mathrm{C}$ to $+70^{\circ} \mathrm{C}$ |
| Contact type (left pedal) (right pedal) | $\begin{aligned} & 1 \mathrm{NC}, 1 \mathrm{NO} .(\mathrm{Zb}) \\ & 1 \mathrm{NC}, 2 \mathrm{NO} .(\mathrm{Zb}) \end{aligned}$ |
| Operating force (pedal centre) (left pedal) <br> (right pedal) 1. position <br> 2. position | $\begin{aligned} & 10 \mathrm{~N} \\ & 10 \mathrm{~N} \\ & 25 \mathrm{~N} \end{aligned}$ |
| Pressure point (right pedal) | $\approx 200 \mathrm{~N}$ |
| Mechanical life (left pedal) Sequence of the switching position(right Pedal): 1-2-1 or: 1-2-3-1 | $10 \times 10^{6}$ operating cycles $10 \times 10^{6}$ operating cycles $1 \times 10^{6}$ operating cycles |
| Switching frequency (left pedal) (right pedal) | max. 50/min max. 30/min |
| Assembly | $2 \times \mathrm{M} 8$ |
| Connection | screw connections (M3,5) |
| Number of connection | 10 |
| Protection ground | $2 \times \mathrm{M} 4$ |
| Conductor cross-sections | Solid: 0,5-1,5 mm ${ }^{2}$ <br> Litz wire with ferrules: $0,5-1,5 \mathrm{~mm}^{2}$ |
| Cable entrance | $1 \times \mathrm{M} 20 \times 1,5$ |
| Weight | $\approx 2,3 \mathrm{~kg}$ |
| Protection type | IP67 in accordance with IEC/EN 60529 |

ID for safety engineering
B10d
$1 \times 10^{5}$ operating 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 61326-3-1 |  |
|  | DIN EN ISO 13849-1 |

## EU Conformity

acc. to directive 2006/95/EC

| Approvals |  |
| :---: | :---: |
|  | ${ }_{\text {c }} \mathrm{UL}_{\text {us }}$ |

## Function (right pedal)

Normally open contacts: $23-24,33-44$; Signalling contact: 11 - 12

- Position 1: OFF position of the operating contacts (the pedal is not actuated)
- Position 2: ON position of the operating contacts (the pedal is actuated to as far as the pressure point)
- Position 3: OFF position of the operating contacts (the pedal is fully actuated)

If the three-stage enable switch is actuated in position 2 , it returns to position 1 when it is released. The three-stage enable switch changes from position 2 to position 3 , if it gets further pressed unter after the resistance of the pressure point. The actuation of the operating contacts is made by a positive opening.
Once the pedal is not pressed, the three-stage enable switch returns to position 1.
The operating contacts are opened in the return stroke.

## Notes

The specified protection classification (IP code) applies only when the cover is closed and the appropriate cable is used, in accordance with the clamping range of the above mentioned cable gland.

