## Plastic bodied limit switch

Series 188

## Operating symbol



## Operating diagram



Tolerance:
Operating Point $\pm 3,5^{\circ}$;
Operating torque $\pm 10$ \%


Approach speed / angle

| $\mathrm{m} / \mathrm{s}$ | 0.1 | 0.5 | 1 | 2 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $A$ | - | $45^{\circ}$ | $45^{\circ}$ | $40^{\circ}$ | $30^{\circ}$ |
| $B$ | - | $45^{\circ}$ | $45^{\circ}$ | $40^{\circ}$ | $30^{\circ}$ |

Actuating direction


| Electrical Data |  |  |
| :--- | :--- | :--- |
| Rated insulation voltage | $\mathrm{U}_{\mathrm{i}}$ | 250 V AC |
| Conv. thermal current | $\mathrm{I}_{\text {the }}$ | 10 A |
| Rated operational voltage | $\mathrm{U}_{\mathrm{e}}$ | 240 V |
| Utilization category |  | $\mathrm{AC}^{2}-15, \mathrm{U}_{\mathrm{e}} / \mathrm{I}_{\mathrm{e}} 240 \mathrm{~V} / 3 \mathrm{~A}$ |
| Direct opening action | $\Theta$ | acc.to IEC/EN $60947-5-1$, annex K |
| Short-circuit protective device |  | Fuse 10 A gG |
| Protection class |  | II (totally insulated) |

Technical Data

| Mechanical data |  |
| :--- | :--- |
| Enclosure | Thermoplastic, glass fibre reinforced (UL 94-V0) |
| Cover | Thermoplastic, glass fibre reinforced (UL 94-V0) |
| Actuator | Turret head (Zn-die cast), roller (thermoplastic) |
| Ambient air temperature | $-30^{\circ} \mathrm{C} \ldots+80^{\circ} \mathrm{C}$ |
| Contact type | $1 \mathrm{NC}, 1 \mathrm{NO}$ (Zb) |
| Mechanical life | $10 \times 10^{6}$ operating cycles |
| Switching frequency | $\leq 100 /$ min. |
| Assembly | $2 \times \mathrm{M} 4$ |
| Connection | 4 screw connections (M3,5) |
| Conductor cross-sections | Solid: $0,5 \ldots 1,5 \mathrm{~mm}^{2}$ or |
| Cable entrance | Litz wire with ferrules: $0,5 \ldots 1,5 \mathrm{~mm}^{2}$ |
| Weight | $1 \times$ cable gland $\mathrm{M} 16 \times 1,5$ (clamping range $5-10 \mathrm{~mm})$ |
| Installation position | $\approx 0,11 \mathrm{~kg}$ |
| Protection type | operator definable |

## Actuation

The actuating device is preferably started from 2 sides.
By loosening the 4 screws the actuation assembly can be rotated in 90 degree increments such that 8 actuation directions are possible.
The actuation assembly is to be again fastened to the housing using the 4 screws.

| Standards |  |
| :--- | :--- |
|  | DIN EN 60947-1, IEC 60947-1 |
|  | DIN EN 60947-5-1, IEC 60947-5-1 |

## EU Conformity

acc. to directive 2006/95/EC

## 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.

Cable gland loose, not assembled.

