## Plastic bodied limit switch

Series 188

## Operating symbol



## Operating diagram



Tolerance:
Operating point $\pm 0,25 \mathrm{~mm}$;
Operating torque $\pm 10 \%$


| 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 |  | $\mathrm{AC}-15, \mathrm{U}_{\mathrm{e}} / \mathrm{I}_{\mathrm{e}} 240 \mathrm{~V} / 3 \mathrm{~A}$ |
| Direct opening action | $\Theta$ | acc. to IEC/EN 60947-5-1, annex K |
| Short-circuit protective device |  | Fuse 2 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 | Lever with roller (thermoplastic) |
| Ambient air temperature | $-30^{\circ} \mathrm{C}$... $+80^{\circ} \mathrm{C}$ |
| Contact type | 1 N.C., 1 N.O. (Zb) |
| Mechanical life | $10 \times 10^{6}$ operating cycles |
| Switching frequency | $\leq 100 / \mathrm{min}$. |
| Assembly | $2 \times \mathrm{M} 4$ |
| Connection | 4 screw connections (M3,5) ( $3-4$ threads screwed) |
| Conductor cross-sections | Solid: $0,5 \ldots 1,5 \mathrm{~mm}^{2}$ or <br> Litz wire with ferrules: $0,5 \ldots 1,5 \mathrm{~mm}^{2}$ |
| Cable entrance | $1 \times \mathrm{M} 20 \times 1,5$ |
| Weight | $\approx 0,07 \mathrm{~kg}$ |
| Installation position | operator definable |
| Protection type | IP65 acc. to IEC/EN 60529; DIN VDE 0470 T1 |

ID for safety engineering
B10d
$20 \times 10^{6}$ cycles

## 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 4 actuation directions are possible. The actuation assembly is to be again fastened to the housing using the 4 screws.

| Standards |  |
| :--- | :--- |
| 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 2014/35/EU

| Approvals |  |
| :--- | :--- |
|  | ${ }_{\mathrm{CUL}}^{U S}$ |
|  | ${ }^{\mathrm{CSA}}$ |
|  |  |

## Notes

The degree of protection (IP code) specified applies solely to a property closed cover and the use of an equivalent cable gland with adequate cable.

The cover from the switch insert is glued with the enclosure.

