## Limit Switches

Limit Switch for Bypass Level Indicator

## Features / Description

All GK switches have bi-stable reed contacts. They can be mounted in any position around the tube of a magnet-controlled level indicator with stainless steel clamps, however the cable direction should preferably be downward. The magnet system in the float will switch over the contact whenever the switch is passed. This permits an arbitrary arrangement of many switches on the tube surface without the switches disturbing each other. The switch position must be checked before installation; it can be set with a ring magnet or the float. The switch hysteresis depends on the distance to the magnet system in the float and is smallest when the switches are installed closely along the indication rail.

## Applications

Limit value measuring on magnetically controlled level indicators

## Technical Data

| Housing: GK03/GK03L/GK03EXI: | 1,4305 and M16 $\times 1,5$ cable gland |
| :---: | :---: |
| Cable: GK03: GK03-EXI: GK03L: | Silicone $3 \times 0,5 \mathrm{~mm}^{2}$ or <br> PVC $3 \times 0,34 \mathrm{~mm}^{2}$, length 1,3 or 5 m <br> PVC $3 \times 0,34 \mathrm{~mm}^{2}$, length 1,3 or 5 m <br> PVC $4 \times 0,55 \mathrm{~mm}^{2}$, length 2 mother lengths or versions on request |
| Protection class: | IP 65 |
| Switching power: <br> GK03: <br> GK03-EXI: <br> GK03L: | $\begin{aligned} & 230 \mathrm{~V} \mathrm{AC} / \mathrm{DC} / 1,0 \mathrm{~A} / 60 \mathrm{VA} / \mathrm{W} \\ & \mathrm{U}_{\mathrm{i}}=28 \mathrm{~V} \\ & \mathrm{I}_{\mathrm{i}}=50 \mathrm{~mA} \\ & \mathrm{C}_{\mathrm{i}}=40 \mathrm{pF} \\ & \mathrm{~L}_{\mathrm{i}}=4 \mu \mathrm{H} \\ & 24 \mathrm{~V} \mathrm{DC} / 1,0 \mathrm{~A} / 40 \mathrm{~W} \end{aligned}$ |
| Temperature range: GK03: GK03-EXI: GK03L: | for Si cable: for PVC cable: <br> $-55^{\circ} \mathrm{C} \ldots+140^{\circ} \mathrm{C}$ $-10^{\circ} \mathrm{C} \ldots+80^{\circ} \mathrm{C}$ <br> $-40^{\circ} \mathrm{C} \ldots+75^{\circ} \mathrm{C}$ $-10^{\circ} \mathrm{C} \ldots+75^{\circ} \mathrm{C}$ <br>  $-10^{\circ} \mathrm{C} \ldots+80^{\circ} \mathrm{C}$ |
| Option: <br> GK03: | Grounding clip (incl. in case of GK03-EXI) |
| Approvals: GK03-EXI: | - ISSeP08ATEX016X II G Ex ia IIC T6 <br> - Il1GD Ex iaD 2D T100 |

When larger contact ratings are needed than the reed contacts allow, suitable relays must be used
When frequently changing process requirements make a permanent contact position difficult to handle we recommend to order our transmitters with 4 ... 20 mA output and separate trip amplifier UAS 3, which enables set point changes by touching a keypad and many additional features.

## Order Numbers

| Order No. | Limit Switch |
| :--- | :--- |
| $0303-031$ | GK03 1 m PVC cable |
| $0303-028$ | GK03 1 m Si cable |
| $0303-032$ | GK03 3 m PVC cable |
| $0303-029$ | GK03 3 m Si cable |
| $0303-033$ | GK03 5 m PVC cable |
| $0303-030$ | GK03 5 m Si cable |
| $0303-035$ | GK03-EXI 1 m PVC cable |
| $0303-027$ | GK03-EXI 3 m Si cable |
| $0303-036$ | GK03-EXI 5 m PVC cable |
| $0303-038$ | GK03L-EXI 2 m PVC cable |



Dimensions (mm / inch)


Circuit diagram


Figure 1: Schematic diagram GK03/GK03-EXI


RD (red LED) = full GN (green LED) = empty

Figure 2: Schematic diagram GKO3L

