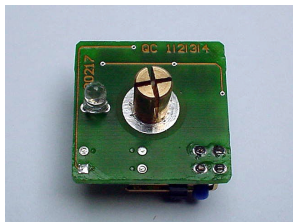
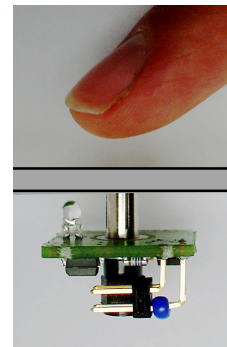



## Capacitive Sensorbutton LM-KT



PCB view approx. 1:1  
Sensor and LED function indicator view



Application example: sensor operation through glass  
by touch with a finger

- Sensorbutton based on capacitive technology especially designed for LM series-tableaus
- Problem-free installation: no boring and screwing in the panel / mother board
- Durabel against environmental influences, the button lies behind the panel, protected against contamination and sabotage
- Maintenance-free optocoupler output, corrosion and bounce-free.
- Function indicator
- Adaptive procedure guarantees reliable operation; maximum switch-on time up to the recalibration 12 s
- 12 Vdc - 24 Vdc supply voltage also pole protected, low quiescent current
- Also Several buttons insertable into a tableau
-  Living/business and trade range

### Function

The sensorbutton reacts to capacitive change of the environment e.g. by approximation of a finger. Slow changes of the site conditions are faded out by its adaptive behavior and thus a safe switch-on behavior is ensured. For safety reasons the button accomplishes a recalibration also in the switched state after 10 s and switches output off.

The integrated LED works as direct function indicator. With the output optocoupler output can be switched small currents directly.

### Installation

Put the sensorbutton with the metalsensor and the function LED backlaterally via the slit foil into the drilled plate, build up connection with the jumpercable. Attention: Do not wire further cables directly across the sensors. Keep a distance of 20 mm to further energized parts.

### Capacitive sensor tracer LM-KT

Supply voltage +Ub: 12 - 24 Vdc  
Power input (stand by): 4.2 mA (24 Vdc)  
Power input (max.): 6.2 mA (24 Vdc)  
Ub-voltage raising tmax:  $\leq 100$  ms <sup>1)</sup>

#### Inputs

+Ub / GND 2-pole on bent pin terminal

#### Outputs

collector / emitter 2-pole on bent pin terminal

#### Output optocoupler

Maximum stress (max.): 24 Vdc / 18 mA  
Collector emitter Voltage:  $U_{ce} = 2.5$  Vdc  
Energy dissipation (max.): 50 mW

#### Indicator

LED 3 mm red

**Switch on time to recalibration** 10 s - 12 s

**Temperature range** 0 - 50 °C

**Humidity**  $\leq 75$  % r.H.,  
not condensing

**Dimensions (B x H x T):** 21 x 21 x 7 mm  
plus metalsensor, 5 mm  $\varnothing$ , 8 mm length

#### Supply schedule

with 4-pol. jumpercable with cube socket; length 750 mm

#### Accessories

Driver pcb for higher contact rating;  
4-pole extension line

1) When supply voltage is connected to the LM-KT, the optocoupler-output switched on for at least 100  $\mu$ s. Avoid spikes (power break-downs) on the power supply and place – if necessary - an emergency power supply.

#### Operational areas tableau

In tableaus of the LM series in combination with the indicator pcbs VK-16 and VMC-16 or also Nips bus system as lamp test-, buzzer-reset and memory –reset button.

00728.1 (July 00)

## Building Groups