

# Illuminated Pushbutton Switches

## Specifications:

|                        |                                                                                                                                        |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Contacts:              | LTR = rubber contact<br>LTM = metal contact                                                                                            |
| Contact rating:        | LTR 12 V DC, 10 mA<br>LTM 48 V DC, 50 mA max. 1 W                                                                                      |
| Contact resistance:    | LTR < 500 $\Omega$ at 2 V DC, 1 mA, at 1.5 N operating force<br>LTM < 100 m $\Omega$ at 200 $\mu$ V AC, 1.5 mA, at 2 N operating force |
| Insulation resistance: | > 100 M $\Omega$                                                                                                                       |
| Dielectric strength:   | 250 V, 50 Hz for the duration of 1 minute                                                                                              |
| Operating temperature: | -25 °C to +70 °C                                                                                                                       |
| Mechanical life:       | LTR minimum 100 000 operations<br>LTM minimum 300 000 operations                                                                       |
| Contacts:              | LTR rubber contact bridge<br>fixed contact phosphor bronze, gold-plated<br>LTM stainless steel, silver-plated                          |
| Terminals:             | LTR gold-plated<br>LTM silver-plated                                                                                                   |
| Travel:                | LTR 1 mm<br>LTM 0.25 mm                                                                                                                |
| Material:              | case: PBT meets UL 94 V-0<br>caps: LTR/LTM 1: ABS<br>LTR/LTM 2: polycarbonat                                                           |
| Soldering conditions:  | LTR: wave-soldering – max.: 3 sec, 245 °C $\pm$ 10 °C<br>LTM: wave-soldering – max.: 5 sec, 300 °C                                     |

## Models:

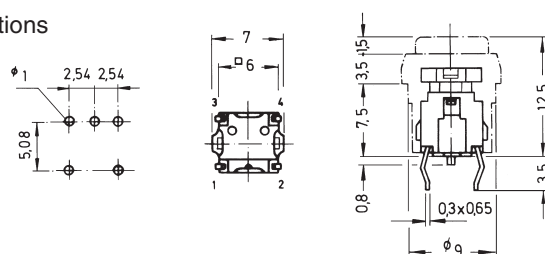
### Switching functions

without LED

LTR 1

LTM 1

off – mom



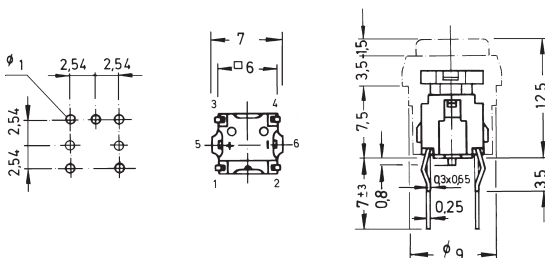
with LED

LTR 2 – L.

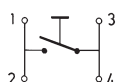
LTM 2 – L.

off – mom

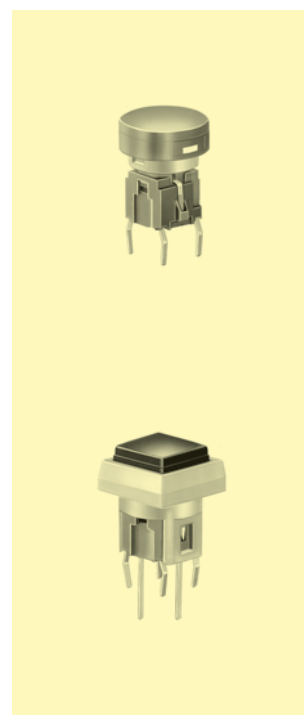
- LR (LED red)
- LG (LED green)
- LY (LED yellow)



Circuit diagram:



LTR/LTM 2-LR:  $I_F = 20$  mA;  $U_F = 2.0$  V  
LTR/LTM 2-LG:  $I_F = 10$  mA;  $U_F = 1.95$  V  
LTR/LTM 2-LY:  $I_F = 10$  mA;  $U_F = 1.90$  V

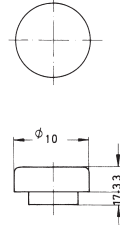
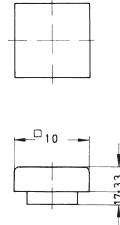
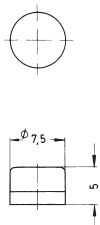
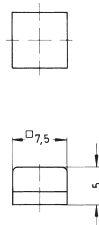


# Illuminated Pushbutton Switches

## Accessories:

### Caps

#### LTR 1/LTM 1



dark grey  
grey  
light grey  
red

KT 7317  
KT 7307  
KT 7327  
KT 7309

KT 7217  
KT 7207  
KT 7227  
KT 7209

KT 8317  
KT 8307  
KT 8327  
KT 8309

KT 8217  
KT 8207  
KT 8227  
KT 8209

#### LTR 2/LTM 2

### transparent:

clear  
red  
green  
yellow

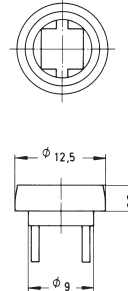
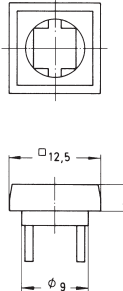
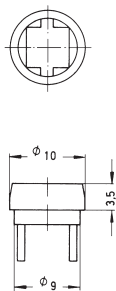
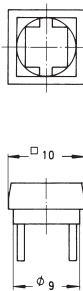
KT 7390  
KT 7399  
KT 7396  
KT 7398

KT 7290  
KT 7299  
KT 7296  
KT 7298

KT 8390  
KT 8399  
KT 8396  
KT 8398

KT 8290  
KT 8299  
KT 8296  
KT 8298

### Bezels\*



dark grey  
grey

FM 7317  
FM 7307

FM 7217  
FM 7207

FM 8317  
FM 8307

FM 8217  
FM 8207

\* further colours on request