## DATA LDT, LDS SWITCHES – MOMENTARY (LDT) AND LATCHING (LDS) ACTION

### BENEFITS

- Absolute reliability and simple assembly
- Compact design with very small mounting depth
- Excellent price/performance ratio
- Suitable for front and print-mounting
- Good illumination
- Many different application fields

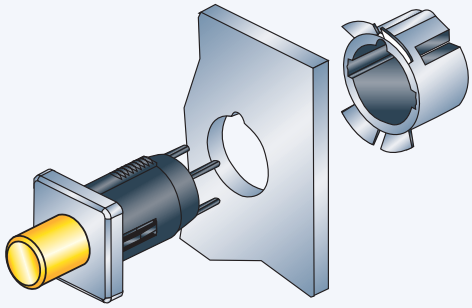
| | | LDT | LDS |
|---|---|---|---|
| **Electrical data** | | | |
| **Switching voltage** | [mV] | min. 100 AC / DC | min. 100 AC / DC |
| | [V] | max. 60 AC / 50 DC | max. 60 AC / 50 DC |
| **Switching current max.** | [mA] | 200 | 200 |
| **Lifetime (at rated breaking capacity 1.2 W)** | | $>10^5$ | $>10^5$ |
| **Initial contact resistance, new** | [mΩ] | <20 | <20 |
| **Initial contact resistance, after lifetime** | [mΩ] | <25 | <25 |
| **Insulation resistance** | [Ω] | $>10^{10}$ | $>10^{10}$ |
| **Contact bounce time** | [ms] | typ. 0.5 | typ. 0.5 |
| **Mechanical data** | | | |
| **Actuating force** | [N] | 1.2 ± 0.6 | |
| **Contact travel** | [mm] | 1.3 ± 0.5 | |
| **End contact travel** | [mm] | 2.9 ± 0.5 | |
| **End stop strength** | [N] | >50 | >50 |
| **Lifetime** | [operations] | $>10^5$ | $>10^5$ |
| **Other data** | | | |
| **Solderability** | [°C/s] | *235 / 2 | *235 / 2 |
| **Soldering heat resistance** | [°C/s] | *260 / 5 | *260 / 5 |
| **Ambient temperature** | illuminated [°C/s] | -25 – +60 | -25 – +60 |
| | non-illuminated [°C/s] | -25 – +85 | -25 – +85 |
| **Storage temperature** | illuminated [°C/s] | -25 – +60 | -25 – +60 |
| | non-illuminated [°C/s] | -25 – +85 | -25 – +85 |
| **Degree of protection** | | IP 40 | IP 40 |
| **Materials** | | | |
| **Socket** | | Thermoplast PES | Thermoplast PES |
| **Button** | | Thermoplast PC | Thermoplast PC |
| **Contacts** | gold on request | CuZn 37, mit 5 µm Ag | CuZn 37, mit 5 µm Ag |
| **Contact spring** | | CuBe 37, mit 5 µm Ag | CuBe 37, mit 5 µm Ag |
| **Terminals** | | CuZn 37, mit 4 µm SN Pb 40 | CuZn 37, mit 4 µm SN Pb 40 |

LED see page 29

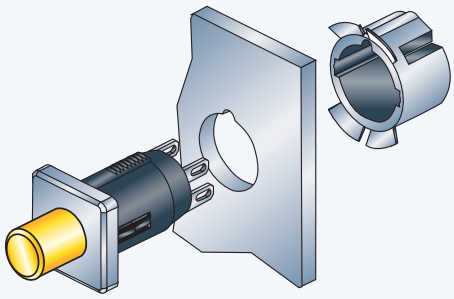
* Data refers to hand soldering only, not to be used for wave soldering

# DIMENSIONS LDT, LDS SWITCHES – MOMENTARY AND LATCHING ACTION

## CONSTRUCTION

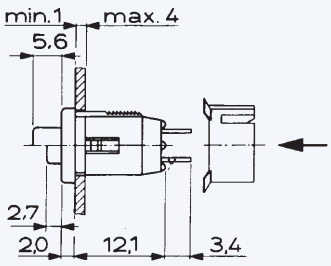


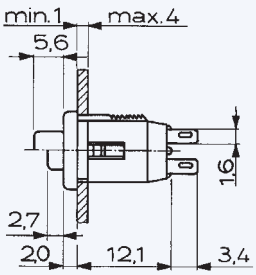
LDT / LDS, small button



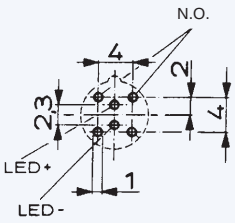
LDT / LDS, small button with solder terminal

## DIMENSIONS

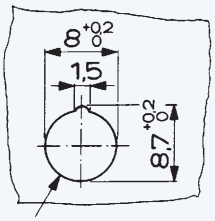



## OTHER DATA

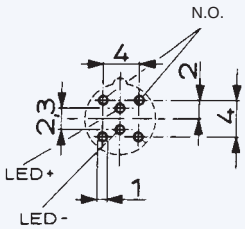



Wiring diagram

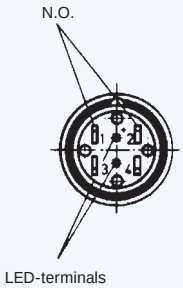



inside bevel
< 0.2 x 45°

Front panel drilling



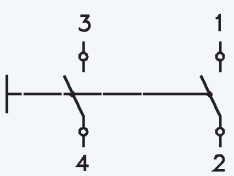

Drilling diagram




Solder terminal version

## CIRCUIT DIAGRAM


NO 1 pole




NO 2 pole

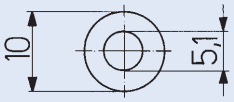
## OVERVIEW LDT, LDS SWITCHES – MOMENTARY (LDT) AND LATCHING (LDS) ACTION

In addition to the versions with the small button, further versions with a large button and switching functions are available on request.

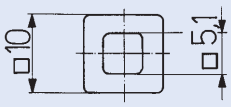
| | LDT/LDS | LDT/LDS |
|---|---|---|
| **FEATURES** | | |
| **Illumination** | non-illuminated | illuminated |
| **Models** | small button | small button |
| **PART NUMBER *** | | |
| **LDT NO 1 pole** | 0041.9141. x x 0 x | 0041.9146. x x x x |
| **LDT NO 2 pole** | 0041.9142. x x 0 x | 0041.9147. x x x x |
| **LDS NO 1 pole** | 0041.9151. x x 0 x | 0041.9156. x x x x |
| **LDS NO 2 pole** | 0041.9152. x x 0 x | 0041.9157. x x x x |
| **Colour of small button **** | | |
| **red** | 3 | 3 |
| **green** | 5 | 5 |
| **black** | 7 | |
| **Shape of bezel/ button** | | |
| **round** | 1 | 1 |
| **square** | 3 | 3 |
| **Colour of LED** | | |
| **red** | | 1 |
| **green** | | 2 |
| **Colour of bezel** | | |
| **black** | 7 | 7 |
| **Mounting accessories** | | |
| **Securing clip*** ** | (necessary for front panel mounting) **0850.9242** | |

Securing clip:

Round bezel/ button :




Square bezel/ button :




* X in the Part No. must be replaced by the desired version
** With the illuminated version, the small button is transparent
***Securing clip must be ordered separately

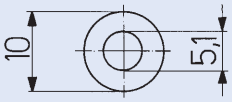
## OVERVIEW LDT, LDS SWITCHES – MOMENTARY (LDT) AND LATCHING (LDS) ACTION

In addition to the versions with the small button, further versions with a large button and switching functions are available on request.

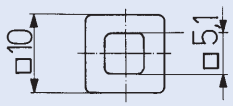
| | LDT / LDS | LDT / LDS |
|---|---|---|
| **FEATURES** | | |
| **Illumination** | non-illuminated | illuminated |
| **Models** | small button with solder terminal | small button with solder terminal |
| **PART NUMBER *** | | |
| **LDT NO 1 pole** | 0041.8841. x x 0 x | 0041.8846. x x x x |
| **LDT NO 2 pole** | 0041.8842. x x 0 x | 0041.8847. x x x x |
| **LDS NO 1 pole** | 0041.8851. x x 0 x | 0041.8856. x x x x |
| **LDS NO 2 pole** | 0041.8852. x x 0 x | 0041.8857. x x x x |
| **Colour of small button **** | | |
| **red** | 3 | 3 |
| **green** | 5 | 5 |
| **black** | 7 | |
| **Shape of bezel/ button** | | |
| **round** | 1 | 1 |
| **square** | 3 | 3 |
| **Colour of LED** | | |
| **red** | | 1 |
| **green** | | 2 |
| **Colour of bezel** | | |
| **black** | 7 | 7 |
| **Mounting accessories** | | |
| **Securing clip***** | 0850.9242 | |

Securing clip:

Round bezel/ button:




square bezel/ button:



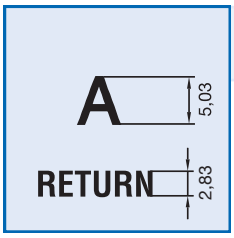

* X in the Part No. must be replaced by the desired version
** With the illuminated version, the small button is transparent
***Securing clip is included

## LETTERING

**Depending on the application and font,** there are various lettering possibilities. The following standards can be used for key letterings:

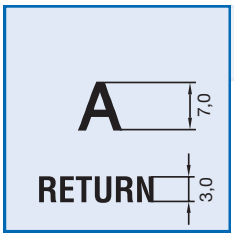
### ORDER INDEX LETTERING

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| A = | 001 | P = | 016 | 4 = | 031 | ↕ = | 046 | EIN = | 061 |
| B = | 002 | Q = | 017 | 5 = | 032 | → = | 047 | AUS = | 062 |
| C = | 003 | R = | 018 | 6 = | 033 | ← = | 048 | AUF = | 063 |
| D = | 004 | S = | 019 | 7 = | 034 | ↓ = | 049 | AB = | 064 |
| E = | 005 | T = | 020 | 8 = | 035 | ↑ = | 050 | ON = | 065 |
| F = | 006 | U = | 021 | 9 = | 036 | % = | 051 | OFF = | 066 |
| G = | 007 | V = | 022 | + = | 037 | √ = | 052 | UP = | 067 |
| H = | 008 | W = | 023 | - = | 038 | CTRL = | 053 | DOWN = | 068 |
| I = | 009 | X = | 024 | · = | 039 | RETURN = | 054 | HIGH = | 069 |
| J = | 010 | Y = | 025 | x = | 040 | SHIFT = | 055 | LOW = | 070 |
| K = | 011 | Z = | 026 | ÷ = | 041 | LOCK = | 056 | ON/OFF = | 071 |
| L = | 012 | 0 = | 027 | ✳ = | 042 | STOP = | 057 | START = | 072 |
| M = | 013 | 1 = | 028 | = = | 043 | ENTER = | 058 | | |
| N = | 014 | 2 = | 029 | # = | 044 | BACK = | 059 | | |
| O = | 015 | 3 = | 030 | ↔ = | 045 | LINE = | 060 | | |




## MCS 18, LETTER HEIGHTS AND FONTS

- Single characters, Univers 65
- Legends max. 6 characters in line, Univers 65
- Insert label and front foil anthracite, RAL 7016
- Characters and symbols light grey, RAL 7035




## SSM 27, LETTER HEIGHTS AND FONTS

- Single characters, Univers 65
- Legends max. 6 characters in line, Akzident-Grotesk condensed bold type
- Front foil anthracite, RAL 7016
- Characters and symbols light grey, RAL 7035

## LIGHTING TECHNOLOGY

| TECHNICAL DATA LEDs | | | | |
|---|---|---|---|---|
| **1. Maximum ratings** | | | | |
| **Part number** | | 0925.9730 | 0925.9731 | 0925.9732 |
| **Light colour** | | red | green | yellow |
| **Forward current, DC** | $I_F$ max. [mA] | 40 | 40 | 40 |
| **Power dissipation** | $P_{tot}$ max. [mW] | 130 | 130 | 130 |
| **2. Characteristics** (typ. at $T_U$ = 25 °C) | | | | |
| **Forward voltage** | at $I_F$ =10mA, $U_F$ typ. [mA] | 2.0 (< 2.6) | 2.0 (< 2.6) | 2.0 (< 2.6) |
| **Luminous intensity** | at $I_F$ =10mA, $I_V$ typ. [mcd] | 11.2 - 28 | 18 - 45 | 11.2 - 28 |
| **Viewing angle** | $\pm$typ. [Dergree] | 50 | 50 | 50 |
| **Peak wave length** | $\lambda_{peak}$ typ. [nm] | 635 | 565 | 586 |
| **Reverse voltage** | $U_R$ typ. [V] | 5 | 5 | 5 |