

**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

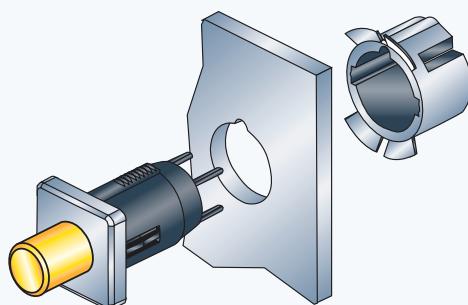
	LDT	LDS
<b>Electrical data</b>		
Switching voltage [mV] [V]	min. 100 AC / DC max. 60 AC / 50 DC	min. 100 AC / DC max. 60 AC / 50 DC
Switching current max. [mA]	200	200
Lifetime (at rated breaking capacity 1.2W)	>10 <sup>5</sup>	>10 <sup>5</sup>
Initial contact resistance, new [mΩ]	<20	<20
Initial contact resistance, after lifetime [mΩ]	<25	<25
Insulation resistance [Ω]	> 10 <sup>10</sup>	> 10 <sup>10</sup>
Contact bounce time [ms]	typ. 0.5	typ. 0.5
<b>Mechanical data</b>		
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 <sup>5</sup>	>10 <sup>5</sup>
<b>Other data</b>		
Soldering method Hand soldering(soldering terminal) or soldering bath(print terminals)		
Soldering heat resistance [°C/s]	* 280/3(soldering)270/5(print terminals)	* 280/3(soldering)270/5(print terminals)
Ambient temperature illuminated [°C/s] non-illuminated [°C/s]	-25 – +60 -25 – +85	-25 – +60 -25 – +85
Storage temperature illuminated [°C/s] non-illuminated [°C/s]	-25 – +60 -25 – +85	-25 – +60 -25 – +85
Degree of protection	IP 40	IP 40
<b>Materials</b>		
Socket	Thermoplast PES	Thermoplast PES
Button	Thermoplast PC	Thermoplast PC
Contacts	gold on request	CuZn 37, mit 5 µm Ag
Contact spring		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

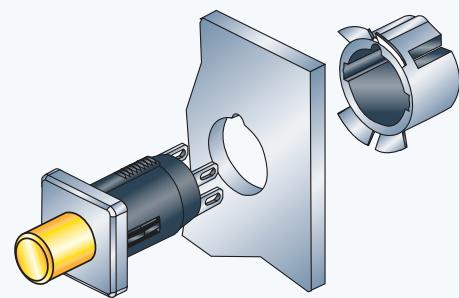
\* Data refers to hand soldering only, not to be used for wave soldering

## DIMENSIONS LDT, LDS SWITCHES - MOMENTARY AND LATCHING ACTION

### CONSTRUCTION

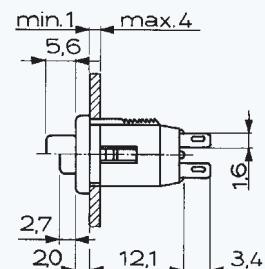
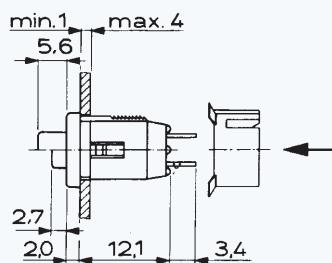


LDT / LDS, small button

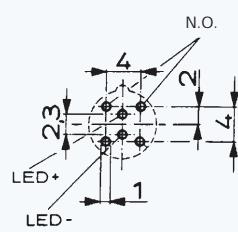


LDT / LDS, small button with solder terminal

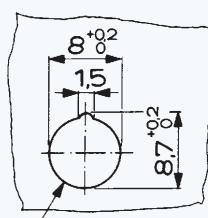
### DIMENSIONS



### OTHER DATA

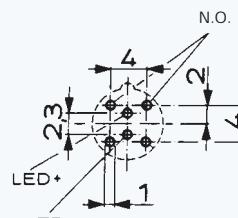


Wiring diagram



inside bevel  
< 0.2 x 45°

Front panel drilling



Drilling diagram

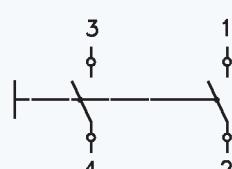


Solder terminal version

### CIRCUIT DIAGRAM



NO 1 pole

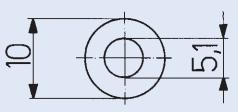
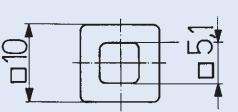


NO 2 pole

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



### FEATURES

ILLUMINATION	non-illuminated				illuminated					
MODELS	small button				small button					
PART NUMBER *	0041.9141.	x	x	0	x	0041.9146.	x	x	x	x
LDT NO 1 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) <b>0850.9242</b>					
					Securing clip:				Round 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



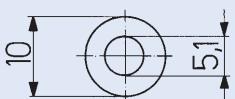
### FEATURES

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
LDT NO 2 pole	0041.8842.	x	x	0	x	0041.8847.	x	x
LDS NO 1 pole	0041.8851.	x	x	0	x	0041.8856.	x	x
LDS NO 2 pole	0041.8852.	x	x	0	x	0041.8857.	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							

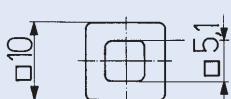
Securing clip:



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

FRONT PANEL  
MEDIUM STROKE



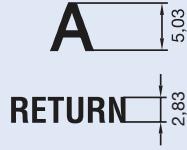
## LETTERING

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

### ORDER INDEX LETTERING

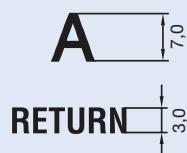
A = 001	P = 016	4 = 031	↑ = 046	EIN = 061
B = 002	Q = 017	5 = 032	→ = 047	AUS = 062
C = 003	R = 018	6 = 033	← = 048	AUF = 063
D = 004	S = 019	7 = 034	↓ = 049	AB = 064
E = 005	T = 020	8 = 035	↑ = 050	ON = 065
F = 006	U = 021	9 = 036	% = 051	OFF = 066
G = 007	V = 022	+ = 037	√ = 052	UP = 067
H = 008	W = 023	- = 038	CTRL = 053	DOWN = 068
I = 009	X = 024	· = 039	RETURN = 054	HIGH = 069
J = 010	Y = 025	× = 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

New specification from 1.7.2011\*

### TECHNICAL DATA LEDs

1. Maximum Ratings	LED old	LED new*	LED old	LED new*	LED old	LED new*
Internal part number	0925.9730		0925.9731		0925.9732	
Light colour	red	red	green	green	yellow	yellow
Forward current DC	I <sub>f</sub> max. [mA]	40	30	40	40	30
Power dissipation	P <sub>tot</sub> max. [mW]	130	100	130	100	130
2. Characteristics (typ. At T <sub>u</sub> =25°C)						
Forward Voltage	at I <sub>f</sub> =10mA, U <sub>f</sub> typ. [V]	2.0 (<2.6)	2 at 20mA	2.0 (<2.6)	2.4 at 20mA	2.0 (<2.6)
Luminous intensity	at I <sub>f</sub> =10mA, I <sub>v</sub> typ. [mcd]	11.2 - 28	6.3 to...	18 - 45	6.3 to...	11.2 - 28
Viewing angle	typ. [degree]	50	60	50	60	50
Peak wave lenght	typ. [nm]	635	635	565	565	586
Reverse voltage	U, typ. [V]	5	6	5	6	5