

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

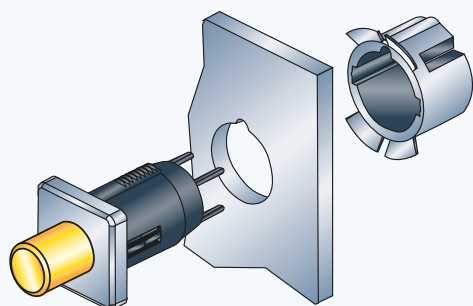
		LDT	LDS
Electrical data			
Switching voltage	[mV] [V]	min. 100 AC / DC max. 60 AC / 50 DC	min. 100 AC / DC max. 60 AC / 50 DC
Switching current max.	[mA]	200	200
Lifetime (at rated breaking capacity 1.2W)		>10 ⁵	>10 ⁵
Initial contact resistance, new	[mΩ]	< 20	< 20
Initial contact resistance, after lifetime	[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			
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]	-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 5µm Ag	CuZn 37, mit 5µm Ag
Contact spring		CuBe 37, mit 5µm Ag	CuBe 37, mit 5µm Ag
Terminals		CuZn 37, mit 4µm SN Pb 40	CuZn 37, mit 4µm SN Pb 40

LED see page 29

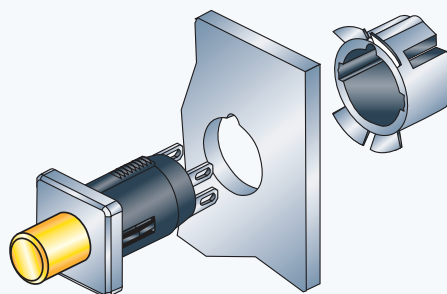
* Data refers to hand soldering only, not to be used for wave soldering

DIMENSIONS LDT, LDS SWITCHES – MOMENTARY AND LATCHING ACTION

CONSTRUCTION

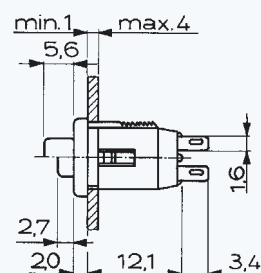
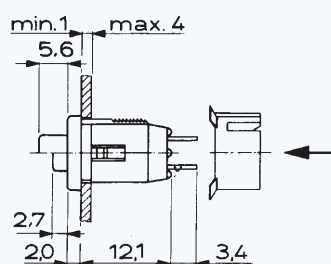


LDT / LDS, small button

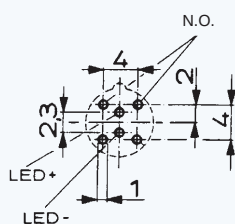


LDT / LDS, small button with solder terminal

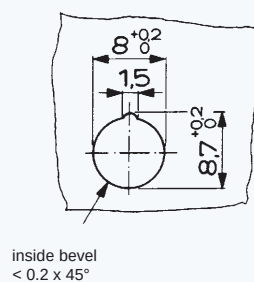
DIMENSIONS



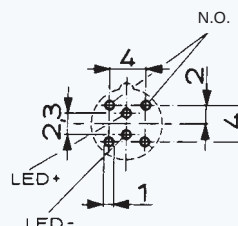
OTHER DATA



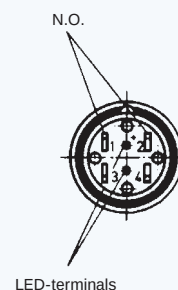
Wiring diagram



Front panel drilling



Drilling diagram

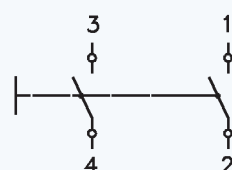


Solder terminal version

CIRCUIT DIAGRAM



NO 1 pole

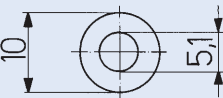
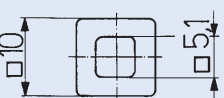


NO 2 pole

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

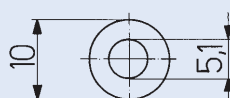
illumination	non-illuminated					illuminated				
Models	small button with solder terminal					small button with solder terminal				
PART NUMBER *										
LDT NO 1 pole	0041.8841.	x	x	0	x	0041.8846.	x	x	x	x
LDT NO 2 pole	0041.8842.	x	x	0	x	0041.8847.	x	x	x	x
LDS NO 1 pole	0041.8851.	x	x	0	x	0041.8856.	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									

0850.9242

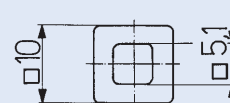
Securing clip:



Round bezel/ button:



square bezel/ button:



FRONT PANEL
MEDIUM STROKE

* 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

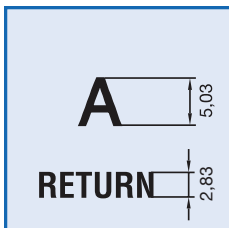


LETTERING

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

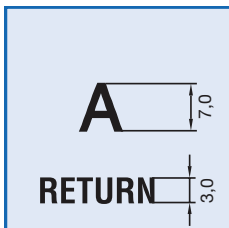
ORDER INDEX LETTERING

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

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_f max. [mA]	40	30	40	30	40	30
Power dissipation P_{tot} max. [mW]	130	100	130	100	130	100
2. Characteristics (typ. At $T_u = 25^\circ\text{C}$)						
Forward Voltage at $I_f = 10\text{mA}$, U_f typ. [V]	2.0 (<2.6)	2 at 20mA	2.0 (<2.6)	2.4 at 20mA	2.0 (<2.6)	2.4 at 20mA
Luminous intensity at $I_f = 10\text{mA}$, I_v typ. [mcd]	11.2 - 28	6.3 to...	18 - 45	6.3 to...	11.2 - 28	6.3 to...
Viewing angle typ. [degree]	50	60	50	60	50	60
Peak wave length typ. [nm]	635	635	565	565	586	585
Reverse voltage U_r typ. [V]	5	6	5	6	5	6